## COAL MINE COMPENSATION RATING BUREAU OF PENNSYLVANIA

COMMERCE BUILDING – SUITE 403 300 NORTH SECOND STREET HARRISBURG, PENNSYLVANIA 17101

CHARLES A. ROMBERGER EXECUTIVE DIRECTOR **TELEPHONE/FAX** 717-238-5020

November 21, 2017

The Honorable Jessica K. Altman Acting Insurance Commissioner Pennsylvania Insurance Department 1311 Strawberry Square Harrisburg, PA 17120

Attention: Mark Lersch, Director Bureau of Property & Casualty

RE: Proposal CM-1-2017

Revised Loss Costs for Traumatic, State Occupational Disease
And Federal Occupational Disease

To Be Effective: April 1, 2018

#### Dear Commissioner Altman:

Enclosed for your review and approval is the annual filing of Loss Costs by the Coal Mine Compensation Rating Bureau of Pennsylvania ("Bureau"). This filing is made in accordance with Article VII of the Pennsylvania Workers' Compensation Act.

Exhibit I-A-M displays the proposed changes by classification and by coverage. Overall, the proposed change in Manual Loss Costs is -2.1%. By coverage, the proposal requests a change of -0.2% for Traumatic, a change of -11.5% for State Occupational Disease ("SOD") and a change of -7.2% for Federal Occupational Disease ("FOD").

The Proposed Traumatic Loss Costs are decreasing overall by \$0.01 from \$5.15 to \$5.14. The overall experience is being driven by the following considerations:

- Indemnity Loss Development Factors changed modestly
  - o Increasing about 1% for Accident Years for 2012 to 2014, but
  - o Decreasing 2.1% for 2015 and 5.4% for 2016.
- Indemnity Loss Trend Annual Factor increased from -1.1% to -0.9%. Consequently, Indemnity Loss Trend Factors increased from 0.6% to 1.4%.
- Medical Loss Development Factors decreased for all years ranging from -4.3% for Accident Year 2012 to -7.1% for Accident Year 2016.
- Medical Loss Trend Annual Factor decreased from -1.2% to -2.0%. Consequently, Medical Loss Trend Factors decreased from -2.2% to -5.3%.
- The replacement of Accident Year 2011 experience with Accident Year 2016 experience in the five (5) year Traumatic Loss Cost analysis.
  - o For the April 1, 2017 filing, the Accident Year 2011 Loss Cost was estimated to be \$4.40.
  - o For the April 1, 2018 filing, the Accident Year 2016 Loss Cost is estimated to be \$6.04 with most of the change in the estimated Indemnity Loss Cost.

Commissioner Altman November 21, 2017 CM-1-2017

The Indemnity estimates for each of the five (5) years in the Traumatic Loss Cost analysis have been increased by 13.37% as an adjustment for the Protz decision.
 See Appendix B to the Actuarial Report for additional information on this decision and the related loss adjustment.

The Proposed SOD Loss Costs are decreasing overall by \$0.07 from \$0.61 to \$0.54. The overall experience is being driven by the following considerations.

- For all classes combined, claim frequency changed by +3%.
- For all classes combined, claim severity changed by -19%.

The Proposed FOD Loss Costs are decreasing overall by \$0.06 from \$0.83 to \$0.77. The overall experience is being driven by the following considerations.

- For all classes combined, Basic claim frequency changed by -12%.
- For all classes combined, Excess claim frequency changed by +1%.
- For all classes combined, Basic claim severity changed by +1%.
- For all classes combined, Excess claim severity changed by +11%.

This Proposal consists of this cover letter, the enclosed Actuarial Report with Appendices A and B and Filing Exhibits. The Filing Exhibits were prepared for the Bureau by Mr. Peter A. Bennett who has extensive experience in this regard. This cover letter and Actuarial Report follow the organization that was used in last year's filing, except that Appendix B was added to the Actuarial Report. The Filing Exhibits are unchanged from last year's filing, except where noted in the Summary of Significant Changes section of the Actuarial Report.

We ask for your approval of this filing on or before February 1, 2018. An approval in this timeframe facilitates the required notices and advanced issuance of revised employer rate cards, noting the applicable loss costs and rating plan values.

The Bureau and its consultants will be pleased to discuss any issues raised by the Department. Please feel free to contact me if additional information or discussion is necessary.

Sincerely,

Charles A. Romberger Executive Director

Challe A Rockey

#### **Enclosures:**

- 1) Three (3) printed copies of the filing (Cover letter, Actuarial Report and Filing Exhibits)
- 2) One (1) electronic copy of the filing on CD in PDF file format
- 3) One (1) electronic copy of the filing Exhibits on CD in Excel file format

# Actuarial Report Regarding the CMCRB's April 1, 2018 Loss Cost Filing

#### Introduction

I, Charles A. ("Chuck") Romberger, am the Executive Director of the Coal Mine Compensation Rating Bureau of Pennsylvania ("CMCRB"). I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. I offer this report in support of the CMCRB's proposed April 1, 2018 Loss Cost Filing. In this filing, the CMCRB proposes revisions to Loss Costs for Traumatic, State Occupational Disease ("SOD") and Federal Occupational Disease ("FOD") classifications under the CMCRB's jurisdiction to be effective April 1, 2018.

This report and the associated filing exhibits present information that demonstrate the fairness and reasonability of the proposed loss costs and show the CMCRB's continued use of accepted actuarial procedures and application of sound actuarial judgment.

I note that Mr. Peter A. Bennett participated in the preparation of this report and the associated Filing Exhibits. Mr. Bennett has extensive experience in this regard.

The remainder of this report consists of the following sections:

- The Executive Summary provides a discussion about the overall changes in Loss Costs and the sources of those changes contained in this filing by coverage (i.e., Traumatic, SOD and FOD). It also identifies "Other Items" that are typically of interest (e.g., the Employer Assessment Factor).
- The Summary of Significant Changes identifies and briefly discusses the significant changes in methods and assumptions from the CMCRB's prior loss cost filing.
- The Discussion of Filing Exhibits addresses the content of all of the Filing Exhibits and is arranged in Filing Exhibit order.
- The Disclosures section identifies and briefly discusses topics that broadly apply to all areas of this report and that present considerations or limitations related to the use of these findings.
- Appendix A provides a discussion about and exhibits in support of the CMCRB's adjustments for House Bill 1846 of 2014 (HB 1846).
- Appendix B provides a discussion about and exhibits in support of the CMCRB's adjustment concerning the Pennsylvania Supreme Court's decision in Protz v. WCAB.

Sincerely,

Charles A. Romberger, ACAS, MAAA, CPCU, ARM

Executive Director, CMCRB

Challe A Rockey

#### **Executive Summary**

This report and the associated filing exhibits provide the CMCRB's proposal for loss costs to be effective on April 1, 2018, which is twelve (12) months from the last approved loss costs. The proposed loss costs are based on the annual review of data by coverage (i.e., Traumatic, SOD, and FOD – Basic and Excess) and by classification for the ten (10) coal mine classifications under the CMCRB's jurisdiction.

For all classifications combined, this filing proposes the following changes in loss costs by coverage and in Total (i.e., all coverages combined). This information can also be found on Exhibit I-A-M, Page 2 (Grand Total section).

	Current Loss Cost	Proposed Loss Cost	Change in Loss Costs
Traumatic	\$ 5.15	\$ 5.14	-0.2%
SOD	0.61	0.54	-11.5%
FOD (Basic & Excess)	<u>0.83</u>	<u>0.77</u>	<u>-7.2%</u>
Total	\$6.59	\$6.45	-2.1%

The remainder of this Executive Summary provides a discussion section for each type of coverage and a discussion section for "Other Items".

## Traumatic Loss Costs

The Current Traumatic Loss Cost for all classes combined is \$5.15 based on 2016 payroll distribution. The Proposed level is \$5.14 or a change of -0.2%.

The key drivers of the change to Traumatic Loss Costs can be identified by comparing Exhibit V-B Page 1 for the April 1, 2018 filing to the April 1, 2017 filing. These drivers include:

- Indemnity Loss Development Factors changed modestly
  - o Increasing about 1% for Accident Years for 2012 to 2014, but
  - o Decreasing 2.1% for 2015 and 5.4% for 2016.
- Indemnity Loss Trend Annual Factor increased from -1.1% to -0.9%. Consequently, Indemnity Loss Trend Factors increased from 0.6% to 1.4%.
- Medical Loss Development Factors decreased for all years ranging from -4.3% for Accident Year 2012 to -7.1% for Accident Year 2016.
- Medical Loss Trend Annual Factor decreased from -1.2% to -2.0%. Consequently, Medical Loss Trend Factors decreased from -2.2% to -5.3%.
- The replacement of Accident Year 2011 experience with Accident Year 2016 experience in the five (5) year Traumatic Loss Cost analysis.
  - o For the April 1, 2017 filing, the Accident Year 2011 Loss Cost was estimated to be \$4.40.
  - o For the April 1, 2018 filing, the Accident Year 2016 Loss Cost is estimated to be \$6.04 with most of the change in the estimated Indemnity Loss Cost.

o The Indemnity estimates for each of the five (5) years in the Traumatic Loss Cost analysis have been increased by 13.37% as an adjustment for the Protz decision. See Appendix B to the Actuarial Report for additional information on this decision and the related loss adjustment.

These drivers generally increase the Indemnity indications and decrease the Medical indications. The Indemnity indication changed by +9.6%, from \$3.11 to \$3.41; while the Medical indication changed by -12.3%, from \$1.71 to \$1.50. The Total Traumatic indication changed by +1.9%, from \$4.82 to \$4.91. The Total indication may not equal the sum of the parts due to rounding.

Credibility and capping procedures are applied on Exhibit V-A Page 1 to the Indicated Unloaded Loss Costs to produce the Proposed Unloaded Loss Costs which are also displayed on Exhibit II. Exhibit II shows the Proposed Unloaded Loss Costs Percent Change (after Credibility and Capping) for all classes combined is -0.8%. This result includes capping the change to the Anthracite Co-Gen class at +25% and the Bituminous Prep Plant Class at +25%.

## State Occupational Disease (SOD) Loss Costs

The Current State Occupational Disease Loss Cost for all classes combined is \$0.61 based on 2016 payroll distribution. The Proposed level is \$0.54 or a change of -11.5%.

The key drivers of this change can be identified by comparing Exhibit III for the April 1, 2018 filing to the April 1, 2017 filing. These drivers include:

- For all classes combined, claim frequency changed by +3%.
  - o Claim frequency increased for each of the Major Four classes and decreased for each of the other six classes.
- For all classes combined, claim severity changed by -19%.
  - Claim severity decreased for all classes, except Anthracite Surface, Co-Gen and Prep Plant.
- The Proposed Loss Cost for Anthracite Underground is capped at +25%. The Proposed Loss Cost for Bituminous Co-Gen is capped at -25%. Also, the net change in Proposed Loss Costs does not equal the product of the claim frequency change and claim severity change because these three values do not all carry the same number of significant digits.

## Federal Occupational Disease (FOD) – Basic/Excess – Loss Costs

The Current Federal Occupational Disease Basic/Excess Loss Cost for all classes combined is \$0.83 based on 2016 payroll distribution. The Proposed level is \$0.77 or a change of -7.2%.

The Federal component of the filing consists of two parts, the Federal Basic and the Federal Excess as follows:

	Current	Proposed	Change in
	Loss Cost	Loss Cost	Loss Costs
Basic	\$ 0.73	\$ 0.66	-9.6%
Excess	<u>0.10</u>	<u>0.11</u>	<u>+10.0%</u>
Total	\$0.83	\$0.77	-7.2%

The Proposed Loss Costs are shown in Column (5) of Exhibit IV-A separately for Basic and Excess and in Total. The Currently Approved Unloaded Loss Costs are shown in Total (i.e., Basic and Excess combined) in Column (2) of Exhibit IV-A. The Total Current Loss Cost is split between Basic and Excess components using the Basic and Excess Loss Costs from Column (5) of Exhibit IV-A from the prior filing as weights.

The key drivers of this change can be identified by comparing Exhibit IV-A for the April 1, 2018 filing to the April 1, 2017 filing. These drivers include:

- For all classes combined, Basic claim frequency changed by -12%.
- For all classes combined, Excess claim frequency changed by +1%.
- For all classes combined, Basic claim severity changed by +1%.
- For all classes combined, Excess claim severity changed by +11%.
- The net change in Proposed Loss Costs does not equal the product of the claim frequency change and claim severity change because these three values do not all carry the same number of significant digits.

#### Other Items

- The Small Business Advocate Assessment Ratio remains at 0.0001. (See Exhibit XI-A.) This amount is loaded into the CMCRB's Manual Loss Costs.
- The Employer Assessment Factor changes from 2.32% (or 0.0232) to 2.18% (or 0.0218). (See Exhibit XI-B.) This amount is not loaded into the CMCRB's Manual Loss Costs, but is treated as a separate calculation in the determination of policy premium. This amount is the estimated provision for Pennsylvania's Administrative Fund, Subsequent Injury Fund, Supersedeas Fund and Uninsured Employer Guaranty Fund.
- The overall Catastrophe Loss Cost provision changes from \$0.09 to \$0.12. (See Exhibit XII-A.) The provision varies by classification. These amounts are loaded into the CMCRB's Manual Loss Costs.
- The Experience Rating Plan parameters require a change to the Off-Balance Factor from 1.0005 to 1.0054. (See Exhibit XIII.) This factor is not included in the CMCRB's Manual Loss Costs, but is incorporated into the Experience Rating Plan's Rating Formula.
- The Merit Rating Plan Off-Balance Factor remains at 1.0002. (See Exhibit XIV-A, Page 1.) This amount is loaded into the CMCRB's Manual Loss Costs.
- The Safety Committee Credit Off-Balance Factor changes from 1.0145 to 1.0149. (See Exhibit XIV-B.) This amount is loaded into the CMCRB's Manual Loss Costs.

## Summary of Significant Changes from Last Year's Filing

Exhibit V-F Summary continues to display the adjustments for HB 1846 of 2014. For the April 1, 2017 filing, the CMCRB proposed adjustment factors that varied by Accident Year and maintains this approach for this proposal. These factors and their derivation are discussed in the section concerning Exhibit V-F of this report and are provided in Appendix A to this report. Note that the adjustment factor for 2016 is unity (i.e., no adjustment) since this entire Accident Year occurred after the effective date of HB 1846 and losses for this year are expected to be incurred and reported on a post-law level.

Exhibit V-F Summary also now includes an adjustment for the Protz decision. This factor and its derivation are discussed in the section concerning Exhibit V-F of this report and are provided in Appendix B to this report.

Concerning Exhibit V-J, for the April 1, 2017 Filing, three claims (i.e., 48371, 48423 and 48542) for Accident Year 2015 individually exceeded the catastrophe limit (\$1,250,000) and were listed on a single Exhibit V-J page. For the April 1, 2018 Filing, these three claims now individually do not exceed the catastrophe limit, so a page for these claims is not included with the filing. The Reported Incurred values remained the same or slightly increased for these claims, but the Loss Development Factors decreased significantly since the values aged from first to second report levels.

On Exhibit V-K, the selected Frequency, Indemnity Severity and Medical Severity trends were set equal to the averages of Estimates 1-4 and 7-10. For the April 1, 2017 Filing, these trends were set equal to the averages of Estimates 7-12. The discussions for each of these decisions are in the section concerning Exhibit V-K of this report.

On Exhibit VIII-B-2 for Anthracite Underground, the Award Ratio was selected to be 0.200 based on the actual Award Ratio calculated for this class in the April 1, 2017 Filing, since this class no longer has sufficient data for an Award Ratio calculation. As in prior filings, the Award Ratios were based on individual class data for the other Four Major classes where sufficient data was available and were based on Grand Total data for the Other Classes.

On Exhibit X-A-1, significant changes in payroll occurred between 2013 and 2016:

- Traumatic and SOD payroll increased by about \$123 million or 41% from 2013 to 2014. However, FOD payroll increased by about \$28 million or 10% from 2013 to 2014.
- Traumatic and SOD payroll decreased by about \$74 million or 17% from 2014 to 2015. FOD payroll decreased by about \$60 million or 19% from 2014 to 2015.
- Traumatic and SOD payroll decreased by about \$97 million or 28% from 2015 to 2016. FOD payroll decreased by about \$46 million or 18% from 2015 to 2016.
- The entities that produced the large Traumatic and SOD increases from 2013 to 2014 remained self-insured for FOD exposures through the first half of 2016, but began insuring their FOD exposures at that time.

On Exhibit X-G, the Class Groups at the bottom of this exhibit were changed by moving Bituminous Co-Generation from the "Bituminous Underground, Co-Generation and Preparation Plant" group to the "All Other Classes" group based on recent data.

Most Filing Exhibits were updated from the CMCRB's prior loss cost filing either by adding the data for the newest available Accident Year and deleting the data for the oldest Accident Year or by just adding the data for the newest available Accident Year.

On all exhibits, a checksum expression is displayed in the bottom right, typically under the label for the Effective Date of the subject filing. The formula that generates these checksums was modified to display only the checksum value. In other words, the term "Checksum" is no longer displayed. Also, the "footer" fields (i.e., File (name), Run Date (and time), Author (PAB) and Effective Date fields) were revised for formatting consistency across all Exhibit pages. These fields are used for internal tracking purposes and comprise a non-substantive part of the filing.

#### **Discussion of Filing Exhibits**

Many of the Filing Exhibits provide various totals and subtotals that are derived using current estimates of Developed Payrolls and/or Miner Years as weights. These totals and subtotals may differ from totals and subtotals shown in prior filings as the weights can and do change.

## Exhibit I – Current and Proposed Loss Costs

The I-A-M pages provide comparisons of the currently Approved Manual Loss Costs and the Proposed Manual Loss Costs by classification.

The I-A-UL pages provide comparisons of the currently Approved Unloaded Loss Costs and the Proposed Unloaded Loss Costs in the same format as the I-A-M pages. However, I-A-UL also includes a third page that presents the loss cost limitations by classification and by coverage.

The I-B pages present the Proposed Unloaded Loss Costs after limitations (see the I-A-UL discussion above), the loading of the Catastrophe Loss Costs, the application of the various Off-Balance factors and the Proposed Loaded Loss Costs (or Proposed Manual Loss Costs).

In addition to providing Loss Costs by classification and by coverage, the pages in Exhibit I also provide various totals and subtotals that are derived using the Developed Payrolls for the most recent Accident Year as weights.

#### Exhibit II – Traumatic Loss Cost Indications

This page presents the currently Approved Unloaded Loss Costs, the Indicated Unloaded Loss Costs and the Proposed Unloaded Loss Costs by classification. Changes from the currently Approved Unloaded Loss Costs to the Indicated Unloaded Loss Costs are capped or limited to +/- 25% to derive the Proposed Unloaded Loss Costs by classification.

This page also displays various totals and subtotals that are derived using the Developed Payrolls for the most recent Accident Year as weights.

#### Exhibit III – State Occupational Disease Loss Cost Indications

This page presents the currently Approved Unloaded Loss Costs, the Indicated Loss Costs (the Indicated Loss Costs are the products of the Indicated Average Frequencies and the Indicated Average Severities) and the Proposed Loss Costs by classification. The Proposed Loss Costs equal the Indicated Loss Costs except where changes are limited to +/-25%.

This page also displays various totals and subtotals that are derived using the Developed Payrolls for the most recent Accident Year as weights.

## Exhibit IV – Federal Occupational Disease Loss Cost Indications

A. This page presents the currently Approved Unloaded Loss Costs, the Indicated Loss Costs (the Indicated Loss Costs are the sums of the products of the Indicated Average Frequencies and the Indicated Average Severities for FOD Basic and FOD Excess) and the Proposed Loss Costs (i.e., Loss Costs w/ Limitation 25%) by classification. The Proposed Loss Costs equal the Indicated Loss Costs except where changes are limited to +/-25%.

This page also displays various totals and subtotals that are derived using the Developed Payrolls for the most recent Accident Year as weights.

B. Page 1 displays the derivation of the FOD Basic Claim Frequencies. This process begins with the Indicated Claim Frequencies on a Miner Year basis developed in Exhibit IV-B Page 3. The Indicated Claim Frequencies are credibility weighted with the currently Approved FOD Basic Claim Frequencies trended (although the trend is 0%) to the current valuation level developed in Exhibit IV-B Page 4. After the application of credibility, the Credibility Weighted Indicated FOD Basic Claim Frequencies are converted to a Developed Payroll basis because the CMCRB publishes Loss Costs on a Payroll basis.

The Total of the Expected Awarded Claims for All Classes is assigned as the full credibility standard. The credibility factor for each classification is obtained as the ratio of the Expected Awarded Claims of a given class to the full credibility standard raised to the ½ power.

Page 2 displays the derivation of the FOD Excess Claim Frequencies. The Indicated Claim Frequencies are developed in Exhibit IV-B Page 5. The currently Approved FOD Excess Claim Frequencies are developed in Exhibit IV-B Page 6. Otherwise, this page works like Page 1.

Page 3 displays the derivation of the FOD Basic Claim Frequencies on a Miner Year Basis. This process involves weighting the Modeled Indications from Exhibit VIII-F with the Experience Indications from Exhibit VIII-B-2. The weights are 25% for the Modeled Indications and 75% for the Experience Indications.

Page 4 displays the conversions of the Approved FOD Basic Claim Frequencies from the prior filing that are on a Payroll basis to a Miner Year basis.

Page 5 displays the derivation of the FOD Excess Claim Frequencies on a Miner Year Basis. This process involves weighting the Modeled Indications from Exhibit VII-L with the Experience Indications from Exhibit VII-B-2. The weights are 25% for the Modeled Indications and 75% for the Experience Indications.

Page 6 displays the conversions of the Approved FOD Excess Claim Frequencies from the prior filing that are on a Payroll basis to a Miner Year basis.

These pages provide various totals and subtotals that are derived using Developed

Payrolls and/or Estimated Miner Years as weights as indicated.

#### Exhibit V – Traumatic Loss Information

This section of the filing produces the Proposed Traumatic Unloaded Loss Costs by classification.

A. Page 1 displays the derivation of the Proposed Traumatic Unloaded Loss Costs by classification. This process begins with the Indicated Traumatic Loss Costs developed in Exhibit V-B. The Indicated Traumatic Unloaded Loss Costs are credibility weighted with the currently Approved Traumatic Unloaded Loss Costs trended to the current valuation level. After the application of credibility, the Indicated Traumatic Unloaded Loss Costs are further limited to changes of +/-25% to produce the Proposed Traumatic Unloaded Loss Costs.

In addition to providing Traumatic Loss Costs by classification, this page also provides various totals and subtotals that are derived using the Developed Payroll shown in the column with these totals and subtotals as weights.

The credibility procedure assigns full credibility (i.e., 100% credibility or 1.00) to three (3) of the Four Major Classifications (i.e., Underground Bituminous, Surface Anthracite and Surface Bituminous). For the six (6) minor classifications, the credibility factor for each classification is obtained as the ratio of the Five Year Expected Losses of a given class to Five Year Expected Losses for Surface Bituminous raised to the ½ power.

The complement of the credibility is assigned to the currently Approved Traumatic Unloaded Loss Cost adjusted or trended to the current valuation level. The adjustment or on-level factor is the weighted average of the Indemnity and Medical Trends contained in this filing, weighted by the five (5) year Indemnity and Medical Ultimate Losses from Exhibit V-B, Page 1.

Page 2 shows the derivation of the Indicated Traumatic Unloaded Loss Cost for the Underground Anthracite classification. This value is derived by a different process since this classification has virtually no experience for the five (5) most recent Accident Years. This is the same procedure that was used in last year's filing.

B. These pages show the derivation of the Indicated Traumatic Unloaded Loss Costs by Classification. This process begins with the Reported Losses separately shown for Indemnity and Medical for the five (5) most recent Accident Years. It applies Loss Development and Trend Factors to adjust Reported Losses to Ultimate Losses. Finally, it compares Ultimate Losses to Developed Payroll to produce indicated Loss Costs by Accident Year and in Total. (Page 1 shows the Total for All Classifications Combined. Pages 2, 6, and 14 show subtotals for the noted classification groupings.)

The inclusion of claims in excess of \$1,250,000 has been limited on these pages. For this filing, Page 3b displays the calculations related to this limitation.

C. These pages show the derivation of the Selected Age-to-Age Loss Development Factors separately for Traumatic Indemnity and Medical Incurred Losses. The Selected Factors are based on the Derived Development Factors which are developed on Pages V-D-2 and V-E-2 for Indemnity and Medical respectively. The Selected Age-to-Age Factors are Accumulated in Column 8 to produce Selected Age-to-Ultimate Loss Development Factors. The Age-to-Ultimate Factors include a "tail" provision for loss development beyond 20<sup>th</sup> report level.

For Indemnity Incurred Losses, the Age-to-Ultimate Factors changed as follows for:

- 1:2 (1<sup>st</sup> report to ultimate) -5.4%,
- 2:3 (2<sup>nd</sup> report to ultimate) -2.1%,
- 3:4 (3<sup>rd</sup> report to ultimate) +0.8%,
- 4:5 (4<sup>th</sup> report to ultimate) +1.1% and
- $5^{th}$  report to ultimate and beyond in the range of +0.1% to +0.9%.

For Medical Incurred Losses, the Age-to-Ultimate Factors changed as follows for:

- 1:2 (1<sup>st</sup> report to ultimate) -7.1%,
- 2:3 (2<sup>nd</sup> report to ultimate) -5.9%,
- 3:4 (3<sup>rd</sup> report to ultimate) -4.7%,
- 4:5 (4th report to ultimate) -4.5% and
- 5<sup>th</sup> report to ultimate and beyond in the range of -4.3% to -1.9%.
- D. These pages show the development of the Derived Traumatic Indemnity Loss Development Age-to-Age factors and include the development of the Tail Factor.

Page 1 is the same as VI-A-4. The Age-to-Age factors from this page are used on V-D-2. For additional information, please refer to the discussion for VI-A-4.

Page 2 shows the (Actual) Age-to-Age Factors and the Derived (or Modeled) Age-to-Age Factors for Traumatic Indemnity Incurred Losses. Examination of the Age-to-Age factors suggested that the factors from the first four (4) periods should be accepted without adjustment and that the factors for the remaining periods should be replaced with modeled or derived factors. The same determination was made for last year's filing.

The CMCRB decided that a linear model was reasonable and found to produce acceptable results. Similar to the model fitting approach in last year's filing, several assumptions were used to produce the model.

- The model needed to have a slight downward slope and to accept that loss development beyond some point in time was going to be zero (i.e., that loss development factors beyond some point would be 1.0000).
- The model needed to produce factors such that the upward accumulation of the derived factors would equal the upward accumulation of the actual factors from the experience period (i.e., period 5 through 19). The accumulation of these fifteen (15) factors is 15.01900, producing an average of 1.00127.

- The model would be linear and have the form y(t) = x at.
- The model needed to have a value equal to the average of the experience data at the midpoint of the period that produced the data. Expressed algebraically,

the midpoint of the period is 12 and

the average of the experience period is 1.00127, so

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y(12) = 1.00127.
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• Development beyond 10 years after the end of the experience period would not be expected. Again, expressed algebraically,

the period associated with this assumption is 29 and

the value of the function is 1.0001, so

y(29) = 1.0001. (Beyond period 29, all factors are assumed to be 1.0000.)

• These conditions result in the following system of equations:

$$y (12) = 1.00127 = x - (a) (12)$$
 and  $y (29) = 1.0001 = x - (a) (29)$ .

• The solution for this system of equations was found to be:

a = 0.0000686 and

x = 1.0020902.

- Given these values, y (5) is determined to be 1.0017 = 1.0020902 (0.0000686)(5). (Note that rounding can have a slight impact on the calculations.) This value is entered on Line 5 of Column (5). The following numbers in this column are generated by subtracting 0.0000686.
- The Modeled Factors from periods 20 through 29 in Column (10) are accumulated upward in Column (11) to produce the CMCRB tail factor. The CMCRB tail factor is then averaged with the PCRB tail factor to produce the Selected tail factor.

Page 3 provides the Age-to-Age Indemnity Incurred Loss Development Factors from the most recent PCRB filing. The Tail Factor (or "20 to Ult" Factor) from this page is used on V-D-2. The PCRB Age-to-Age Factors are compared to the CMCRB Age-to-Age Factors on V-C-1.

E. These pages show the development of the Derived Traumatic Medical Loss Development Age-to-Age factors and include the development of the Tail Factor.

Page 1 is the same as VI-B-4. The Age-to-Age factors from this page are used on V-E-2. For additional information, please refer to the discussion for VI-B-4.

Page 2 shows the (Actual) Age-to-Age Factors and the Derived (or Modeled) Age-to-Age Factors for Traumatic Medical Incurred Losses. Examination of the Age-to-Age factors suggested that the factors from the first two (2) periods should be accepted without adjustment and that the factors for the remaining periods should be replaced with modeled or derived factors. The same determination was made for last year's filing.

To begin, the CMCRB's Age-to-Age Factors were averaged with the PCRB's Age-to-Age Factors for the periods 10 to 19 to produce Adjusted Age-to-Age Factors. The CMCRB's Age-to-Age Factors were used for periods 3 through 9.

Next, the CMCRB decided that a model of the form  $y(t) = (x) (a^{t-3})$  was reasonable and found to produce acceptable results. Similar to the model fitting approach in last year's filing, several assumptions were made to derive the fitted model.

- The geometric mean of the product of the Adjusted Age-to-Age Factors from periods 3 through 19 was calculated and found to be 1.0061755. (There are 17 factors from t=3 to t=19 so the geometric mean is (1.0112 x 1.0144 x .... x 1.0112) ^ (1/17)).
- The length of the development period beyond the end of the experience period was chosen to be 19 years. Development is not expected at the 39<sup>th</sup> report level and beyond. Development factors beyond 38<sup>th</sup> report are assumed to be 1.0000. The development factor for period 38 is assumed to be 1.0001.
- The model needed to produce factors such that the upward accumulation of the derived factors would equal the upward accumulation of the actual factors from period 3 through 19. This accumulation is 1.1103.
- The model needed to have a value equal to the geometric average of the experience data at the midpoint of the period that produced the data. Since the data that is being used runs from t=3 to t=19 the midpoint is at t=11. Thus, y (11) = 1.0061755.
- These conditions result in the following system of equations:

$$y (11) = 1.0061755 = (x) (a^8)$$
 and  $y (38) = 1.0001 = (x) (a^{35})$ .

• The solution for this system of equations was found to be:

$$a = 0.9997757$$
 and  $x = 1.00798267$ .

- At this point, the value 1.00798267 (displayed as 1.0080) is entered on Line 3 (for Period 3) of Column 6. The Factor for Period 4 is obtained as (1.00798267) times (0.9997757). The factor 'a' is applied to each of the succeeding Factors until Period 38 is reached. The system is very sensitive to the precision of the parameters. If the initial choices are abbreviated, the goals may not be met (e.g., the accumulated value may not be 1.1103 and/or the last point may not be 1.0001).
- The Modeled Factors from periods 20 through 38 in Column (9) are accumulated upward in Column (10) to produce the CMCRB (derived) tail factor. The CMCRB tail factor is then averaged with the PCRB tail factor to produce the Selected tail factor.

Page 3 provides the Age-to-Age Medical Incurred Loss Development Factors from the most recent PCRB filing. The Tail Factor (or "20 to Ult" Factor) from this page is used on V-E-2. The PCRB Age-to-Age Factors are compared to the CMCRB Age-to-Age Factors on V-C-2.

F. This page shows the selected Traumatic Annual Trend Factors separately for Indemnity and Medical losses that are derived on Exhibit V-K. Since the Annual Trend Factors are applied separately to the five (5) most recent Accident Years, the page also shows the Trend Period for each of those five (5) years and the Trend Factor for each Accident Year.

In addition to traditional trend factors and calculations, this page also allows for adjustments related to other changes. For this filing, other changes include HB 1846 of 2014 and the decision in Protz v. WCAB (Pa. Supreme Court, June 2017).

Concerning HB 1846, the CMCRB applied a uniform savings of 1.32% or a factor of 0.9868 to all Accident Years with the December 16, 2015 revision to the April 1, 2016 filing. For the April 1, 2017 Filing, the CMCRB proposed adjustment factors that varied by Accident Year and maintains that approach for the April 1, 2018 filing. These factors and their derivation are provided in Appendix A to this report.

Concerning Protz v. WCAB (or the Protz Decision), the CMCRB proposes the application of a uniform factor to all Accident Years (i.e., 2012 through 2016) used in the subject filing. Data for each of these Accident Years was incurred and reported prior to the Protz Decision (June 2017). These factors and their derivation are provided in Appendix B to this report.

- G. This page is reserved for future.
- H. Page 1 provides a summary of the Traumatic Indemnity Losses. Page 2 provides a summary of the Traumatic Medical Losses. The data on these pages support calculations on the Exhibit V-I pages.
- I. Exhibit V-I is comprised of six (6) pages. Each page is used to estimate one of the trend parameters that are considered as follows:
  - Page 1 Traumatic Indemnity Loss Severity Trend
  - Page 2 Traumatic Medical and Medical Only Loss Severity Trend
  - Page 3 Traumatic Medical Only Loss Severity Trend
  - Page 4 Traumatic Indemnity Claim Frequency Trend
  - Page 5 Traumatic Indemnity Claim Frequency Trend Net of Wage Trend
  - Page 6 Traumatic Medical excluding Medical Only Loss Severity Trend

Each of these six (6) pages is provided for three (3) different scenarios as follows:

- Summary these pages show the data under consideration for each parameter, the
  result for each parameter from Exhibit V-K which averages the 12 estimates that
  are considered, a graph of the data indicated and an algebraic expression of the
  line of best fit.
- Estimates 01-06 these pages show the data under consideration for each parameter and the following six (6) estimates:
  - o Estimates 01 & 02 are based on the ten (10) most recent Accident Years.
  - o Estimates 03 & 04 are based on the nine (9) most recent Accident Years.
  - o Estimates 05 & 06 are based on the eight (8) most recent Accident Years.
- Estimates 07-12 these pages show the data under consideration for each parameter and the following six (6) estimates:
  - o Estimates 07 & 08 are based on the nine (9) most recent Accident Years before the most recent Accident Year.

- o Estimates 09 & 10 are based on the eight (8) most recent Accident Years before the most recent Accident Year.
- o Estimates 11 & 12 are based on the seven (7) most recent Accident Years before the most recent Accident Year.

The twelve (12) estimates utilize a geometric average, a regression analysis, a 3-year moving average and the various experience periods listed above. These estimates also utilize data with certain extreme values limited as noted on each page.

J. On these pages, individual Traumatic claims that exceed \$1,250,000 after loss development are proportioned based on reported medical and indemnity. The CMCRB believes that limiting these claims helps to stabilize the trend indications.

Page 1 shows data for a large claim for Accident Year 2007 that is limited in the current filing. Page 2 shows data for a large claim for Accident Year 2016.

Each of the three claims previously reported for Accident Year 2015 do not exceed the threshold (\$1,250,000) at this evaluation. The Reported Incurred values remained the same or slightly increased for these claims, but the Loss Development Factors decreased significantly since the values aged from first to second report levels.

K. Exhibit V-K summarizes the twelve (12) estimates of each trend parameter under consideration from the various pages of Exhibit V-I. The three (3) Medical Severity trend indications are averaged by the weighting method noted.

For the April 1, 2017 Filing, the CMCRB selected trend estimates using the Average of Estimates 7-12, noting concern about the estimates through the most recent Accident Year (2015). For the April 1, 2018 Filing, the CMCRB selects trend estimates using the Average of Estimates 1-4 and 7-10. The CMCRB believes that the estimates that begin with Accident Year 2009 involve exceptional variability (especially for Indemnity Severity) and should be excluded from consideration for the subject filing.

## Exhibit VI – Traumatic Loss Development

The CMCRB notes that Act 44 of 1993 and Act 57 of 1996 significantly affected Traumatic Indemnity and Medical benefit levels and claim settlement practices (and consequently Traumatic Loss Development data reported to the CMCRB). The CMCRB calculates and applies adjustments to address these effects to its reported loss development data in the various pages of Exhibit VI and briefly discusses the more significant aspects of its work below.

A. Page 1 displays Reported Traumatic Indemnity Incurred Losses by Accident Year and by Report Level, Act 57 Indemnity Law Adjustment Factors and Reported Traumatic Indemnity Incurred Losses adjusted to Act 57 Law Level.

Page 2 displays Reported Traumatic Indemnity Incurred Losses adjusted to Act 57 Law Level, Claim Settlement Level Additives and Reported Traumatic Indemnity Incurred Losses adjusted to Act 57 Law Level and Claim Settlement Level.

Page 3 displays Reported Traumatic Indemnity Incurred Losses by Accident Year and by Report Level, the Sum of Act 57 Indemnity Law Adjustment Factors and Claim Settlement Level Additives and Reported Traumatic Indemnity Incurred Losses adjusted to Act 57 Law Level and Claim Settlement Level.

Page 4 displays Reported Traumatic Indemnity Incurred Losses adjusted to Act 57 Law Level and Claim Settlement Level by Accident Year and by Report Level. It also shows the report-to-report Development factors, as well as the averaging and selection of report-to-report factors (i.e., the Average of Middle Four).

Pages 5a, 5b and 5c display the summary and derivation of the Traumatic Indemnity Claim Settlement Adjustment Factors.

When calculating loss development factors, the primary premise is that the loss development factors must be in direct relationship with the losses being developed. The CMCRB uses data for the five (5) most recent Accident Years when calculating indicated Traumatic Loss Costs by classification (see Exhibit V-B) and notes that this data (or these five (5) years) are all on a post Act 57 Law and Claim Settlement level. Since the historical Loss Development data is not all consistently on this same level, the adjustments identified above are used to restate the historical Loss Development data to a post Act 57 Law and Claim Settlement level. In this way, both the losses to be developed from the five (5) most recent Accident Years and the loss development factors are on the same level or basis.

The CMCRB notes that Act 57 reduced Indemnity benefits in various ways. The more significant provisions of Act 57 involved changes to the AMA Guidelines, Social Security Offsets, Pension Offsets and Wage Level Offsets. The changes to Indemnity benefits are addressed by the Act 57 Indemnity Law Adjustment factors.

The CMCRB also notes that Act 57 permitted and recommended the settlement of Traumatic claims. The changes in claim settlement practices are addressed by the Claim Settlement Level Additives (or adjustments).

The CMCRB observes that both sets of adjustments seem to be well known and accepted. Furthermore, these adjustments become less relevant each year as more data is reported directly on a post Act 57 basis.

During 2017, the Pennsylvania Supreme Court made a decision in Protz v. WCAB that invalidates a portion of the Act 57 revisions. The previously mentioned law and claim settlement adjustments used in the Exhibit VI series do not address the effect of this decision. Refer to Exhibit V-F, the discussion concerning Exhibit V-F and Appendix B to this report for additional information concerning the treatment of the Protz Decision.

B. Page 1 displays Reported Traumatic Medical Incurred Losses by Accident Year and by Report Level, Act 44 Medical Law Adjustment Factors and Reported Traumatic Medical Incurred Losses adjusted to Act 44 Law Level.

Page 2 displays Act 44 Medical Law Adjustment Factors, Claim Settlement Adjustment Additions and the Sum of these adjustments.

Page 3 displays Reported Traumatic Medical Incurred Losses by Accident Year and by Report Level, the Sum of Act 44 Medical Law Adjustment Factors and Claim Settlement Adjustment Additions and Reported Traumatic Medical Incurred Losses adjusted to Act 44 Law and Claim Settlement Levels.

Page 4 displays Reported Traumatic Medical Incurred Losses adjusted to Act 44 Law and Claim Settlement Levels by Accident Year and by Report Level. It also shows the report-to-report Development factors, as well as the averaging and selection of report-to-report factors (i.e., the Average of Middle Four).

Page 5 provides the derivation of the Medical Claim Settlement Adjustment Factors which are used on Page 2.

When calculating loss development factors, the primary premise is that the loss development factors must be in direct relationship with the losses being developed. The CMCRB uses data for the five (5) most recent Accident Years when calculating indicated Traumatic Loss Costs by classification (see Exhibit V-B) and notes that this data (or these five (5) years) are all on a post Act 44 Law and Claim Settlement level. Since the historical Loss Development data is not all consistently on this same level, the adjustments described above are used to restate the historical Loss Development data to a post Act 44 Law and Claim Settlement level. In this way, both the losses to be developed from the five (5) most recent Accident Years and the loss development factors are on the same level or basis.

Similar to a comment under the Indemnity section above, the CMCRB observes that both sets of adjustments seem to be well known and accepted. Furthermore, these adjustments become less relevant each year as more data is reported directly on a post Act 57 basis.

During 2014, the Pennsylvania legislature passed House Bill 1846. The previously mentioned law and claim settlement adjustments used in the Exhibit VI series do not address the effect of this legislation. Refer to Exhibit V-F, the discussion concerning Exhibit V-F and Appendix A to this report for additional information concerning the treatment of HB 1846 of 2014.

C. Page 1 displays Reported Traumatic Indemnity Incurred Claims by Accident Year and by Report Level. It also shows the report-to-report Claim Count Development factors, the averaging and selection of report-to-report factors, the Cumulative Claim Count Development factors and the estimated Ultimate Claim Counts for each Accident Year.

Page 2 displays Reported Traumatic Medical Only Incurred Claims by Accident Year and by Report Level. Otherwise, the format follows the format of Page 1.

Page 3 displays Reported Traumatic Medical Only Incurred Losses by Accident Year and by Report Level. The format is similar to Pages 1 and 2, except that only ten (10) report levels are displayed.

- D. Page 1 presents the Summary of Adjustments to Traumatic Medical Loss Development Factors related to Act 44. Pages 2 through 13 provide the derivation of these Adjustments by Accident Year. Page 14 provides a sample payment pattern.
- E. This page presents the Traumatic Indemnity and Medical Paid Loss information by Accident Year and Report Level arranged in traditional loss development format. The CMCRB has only collected Paid Loss information for the period displayed.

## Exhibit VII – SOD and FOD Excess Severity and Frequency

A. These five (5) pages show the Average SOD and FOD Excess Severities prior to adjustments for Act 57, adjustments for Act 57 and after adjustments for Act 57. One page is provided for each of the Four Major Classes and for the Other Classes combined.

These pages display severity values (i.e., Average Amounts and/or Totals) that are summaries of the individual claim detail found in Exhibit VII-E, Exhibit IX-A and Exhibit VII-G. These pages average the Base Scenario with the All Permanent Partial Scenario using weights of 100% and 0% respectively, since no claims have been reported as Permanent Partial.

Sections "a" (After AMA Guidelines), "b" (Social Security Offset/Onset) and "c" (Pension Offset/Onset) are addressed in the discussion for Exhibit IX-A. (See Exhibit IX-A for a discussion about these amounts.)

Section "d" (Combined Social Security and Pension Offsets/Onsets) recognizes the condition that the full amount of the pension is available as an Offset to the SOD benefit with the constraint that the SOD benefit minus the Social Security and Private Pension Offsets must not be less than zero.

Section "e" (Wage Level Decrease/Increase) is no longer used.

Section "f" (Combined Social Security, Pension and Wage Level) presents percentages that are equivalent to the percentages in Section "d" since Section "e" is no longer used.

Section "g" (Combined Dollar Effect) summarizes the effect in dollars of the various Offsets and Onsets calculated on these pages.

B-1. Exhibit VII-B-1-A displays the derivation of the SOD Claim Frequencies by Classification on a Developed Payroll basis. This process begins with the Indicated Claim Frequencies on a Miner Year basis developed in Exhibit VII-B-2. The Indicated Claim Frequencies are credibility weighted with the currently Approved SOD Claim Frequencies trended (although the trend is 0%) to the current valuation level developed in Exhibit VII-B-1-B. After the application of credibility, the Credibility Weighted Indicated SOD Claim Frequencies are converted to a Developed Payroll basis because the CMCRB publishes Loss Costs on a Payroll basis.

The Total of the Expected Awarded Claims for All Classes is assigned as the full credibility standard. The credibility factor for each classification is obtained as the ratio of the Expected Awarded Claims of a given class to the full credibility standard raised to the ½ power.

Exhibit VII-B-1-B displays the conversions of the Approved SOD Claim Frequencies from the prior filing that are on a Payroll basis to a Miner Year basis.

Both of these pages provide various totals and subtotals that are derived using Developed Payrolls or Estimated Miner Years as weights as indicated in the Source notes. The totals and subtotals may differ from prior filings as the weights can and do change.

B-2. The objective of these pages is to compare estimates of the Expected Ultimate Awarded Claims to a suitable exposure base. These pages display data on the number of SOD Claims that have been Reported, Awarded or Denied, or that are Pending by Classification and with Subtotals and a Grand Total. Additionally, the IBNR Claim estimates from Exhibit VII-C are also displayed. IBNR and Pending claims are multiplied by an Award Ratio, since all reported claims do not result in payment awards.

For the exposure base, Developed Payrolls are converted to Estimated Miner Years. Subsequently, Claim Frequencies are calculated on a Miner Year (per 100 Miner Years) basis which began with the filing for April 1, 2011.

Converting Developed Payrolls to Estimated Miner Years, the (Wage) Adjustment Factors are needed since our data shows that workers in certain Bituminous Classes (i.e., Underground and Prep Plant) were paid at a higher rate than workers in other classes. (See Exhibit X-G for this analysis.) The use of a single factor for all classes would overestimate the number of Miner Years in the cited classes and underestimate the number of Miner Years in other classes had a single factor been used to adjust the SAWW in the conversion process.

Given the limited number of Denied Claims in this data, each Class was given the Award Ratio based on the Grand Total data.

The totals and subtotals that are displayed are additions of the Classes listed and may slightly differ from the results derived using the formula in the Source notes.

Federal Excess Frequencies are also calculated on these pages as the products of the State Frequencies times a Federal Excess Award Ratio of 40%. This ratio has been used since the April 1, 2004 filing (and possibly earlier) and remains comparable to the ratio of FOD Excess Awarded and Pending Claims to SOD Awarded and Pending Claims.

C. Pages 1 through 4 (i.e., Exhibit VII-C-1 through VII-C-4) display SOD Reported Claims for the Four (4) Major Classifications. Page 5 (i.e., Exhibit VII-C-5) displays SOD Reported Claims for the six (6) Other Classifications combined. Page 6 (i.e., Exhibit VII-C-6) shows SOD Reported Claims for All Classifications combined.

These pages show the procedure used to calculate Incurred But Not Reported (IBNR) Claims. Incremental Changes in Reported Claims are calculated and then converted to a percentage of Developed Payroll (in \$Millions). The actual experience is averaged and then smoothed by ordering the actual data from largest to smallest.

For the six (6) Other Classifications, the All Classifications estimates were used to arrive at the base IBNR. Pages 7 and 8 (i.e., Exhibit VII-C-7 and VII-C-8) show the IBNR calculations for the Other Classifications. Adjustment Factors were used for each of the Other Classifications to lower the expected probability of having a SOD claim since the Other Classifications have produced fewer SOD claims and lower SOD claim frequencies than the All Classifications experience with one exception. The Adjustment Factor for Anthracite Prep Plant was maintained at unity (i.e., no adjustment) because this Class has produced more claims and higher claim frequencies than the rest of the Other Classifications.

- D. Omitted Reserved for Future Use
- E. This exhibit consists of six (6) subsections (i.e., a, b, c, d, e and f). Each subsection consists of five (5) pages (one page for each of the Four Major Classes and one page for the Other Classes combined). The subsections show the following severities or severity adjustments:
  - a SOD Before Act 57
  - b SOD Social Security Offset
  - c SOD Private Pension Offset
  - d Federal Excess OD Before Offsets
  - e Federal Excess OD After Social Security Offset
  - f Federal Excess OD After Social Security and Private Pension Offsets

These pages display the individual claim detail from Exhibit IX-A by status (i.e., Awarded-Permanent, Awarded-Commuted/Compromised, and Pending.) Since Pending claims could be resolved by Commutation or Compromise, the probability of Commutation/Compromise is assigned to the Pending claims based on the mix of Commuted/Compromised claims in the Awarded claims. The severity for the expected Commuted/ Compromised claims within the Pending claims is then adjusted by the difference between the Average Awarded Commuted/Compromised Severity and the

Average Awarded Permanent Severity. This adjustment results in a lower SOD cost and a higher FOD Excess cost.

- F. Omitted Reserved for Future Use
- G. Page 1 displays the Smoothed Average Weekly Wages for the Four Major Classes from Exhibit VII-H and the process to convert these Wages to a post-Act 57 level, where needed. The post-Act 57 Wages are used in the Occupational Disease Severity Model.

The top of Page 2 shows the calculation of the Act 57 Wage Level Offset or the Wage Level decrease associated with Act 57. The Wage Level Changes included in Act 57 are expected to reduce State benefit levels and consequently increase Federal Excess benefit levels. The wage distribution is from the 120 State OD claims provided by CMCRB for the CM-1-1998 filing, with judgmental trending to estimate the distribution of wages among miners during the projected effective period of the loss costs. The average benefit levels before and after the changes were developed by PCRB.

The bottom of Page 2 shows the development of the 12.5% Pension Offset factor. This adjustment is made because not all miners are eligible for a private pension and not all private pension payments are subject to offset.

- H. These pages show the development of the Projected Average SOD Wage Level for each of the Four Major Classes. For each class, an average ratio of the Reported (or Actual) SOD Average Wage to the Statewide Average Weekly Wage is calculated. The product of the ratio for each class and the projected Statewide Average Weekly Wage results in a Projected Average SOD Wage Level for each class. The Wage History for 1990 through 2016 (the most recent year that data is available) is then smoothed for use in the indexation process in Exhibit VII-G.
- I. Omitted Reserved for Future Use
- J. Page 1 shows the historical Social Security Cost of Living Adjustments (COLA), the 3-year, 5-year, 10-year and All-year averages of these amounts and the Selected Annual Change. Page 2 shows the projection of the Monthly Wage Amounts Bend Points and the Annual Social Security Wage Base used to calculate the Primary Insurance Amount (PIA) or Social Security benefit. These amounts are projected to one (1) year past the proposed effective date, which is the average accident date of the proposed loss costs. Page 3 provides examples as to how the bend points and maximum are used.
- K. Omitted Reserved for Future Use.
- L. These pages model changes to Claiming activity (i.e., Claim Awarding and Reopening) for FOD Excess Claims that are related to Federal Black Lung Regulation revisions that were issued on January 19, 2001. Generally, the reasoning for these calculations and assumptions follows the reasoning for Exhibit VIII-F, which is presented later in the

commentary for Exhibit VIII-F. The differences in the calculations and assumptions between Exhibit VII-L and Exhibit VIII-F are discussed as follows.

Exhibit VII-L uses data for the most recent twenty (20) years whereas Exhibit VIII-F only uses data for the most recent ten (10) years. Since the CMCRB believes that different assumptions should apply to the pre-2001 years and the post-2000 year, the different or additional assumptions and calculations on these pages include the following:

- Pending Awarded Ratios the Award Ratio of 30% applies to all years.
- Denied Reopened Ratios
  - o The Reopened Ratio of 5% applies to the post-2000 years.
  - o A Reopened Ratio of 15% applies to the pre-2001 years.
- Denied Awarded
  - o The Award Ratio of 100% applies to the post-2000 years.
  - o An Award Ratio of 20% applies to the pre-2001 years.
- IBNR Award Ratios the IBNR Award Ratios that are shown on each page are the ratios of the Ultimate Awarded Claims (Col. 8) and the Reported Claims (Col. 1) from the Grand Total data on page 13 for the pre-2001 years and post-2000 years respectively.
- All of these assumptions have been maintained since the April 1, 2009 filing.

The IBNR amounts in Column 10 are 40% of the SOD IBNR Amounts from Exhibit VII-C. The reasoning for and history of this assumption was provided under Exhibit VII-B-2 above.

#### Exhibit VIII – FOD Basic Severity and Frequency

- A. This page provides a summary of the individual claim details that are shown in Exhibit IX-B for the Federal Basic Severities separately for each of the Four Major Classes, the Four Major Classes Combined, the Other Classes Combined and All Classes Combined.
- B-1. Omitted Reserved for Future Use.
- B-2. The objective of these pages is to compare estimates of the Expected Ultimate Awarded Claims to a suitable exposure base. These pages display data on the number of FOD Basic Claims that have been Reported, Awarded or Denied, or that are Pending by Classification and with Subtotals and a Grand Total. Additionally, the IBNR Claim estimates from Exhibit VIII-C are also displayed. IBNR and Pending claims are multiplied by an Award Ratio, since all reported claims do not result in payment awards.

For the exposure base, Developed Payrolls are converted to Estimated Miner Years. Subsequently, Claim Frequencies are calculated on a Miner Year (per 100 Miner Years) basis which began with the filing for April 1, 2011.

Converting Developed Payrolls to Estimated Miner Years, the (Wage) Adjustment Factors are needed since our data shows that workers in certain Bituminous Classes (i.e., Underground and Prep Plant) were paid at a higher rate than workers in other classes.

(See Exhibit X-G for this analysis.) The use of a single factor for all classes would overestimate the number of Miner Years in the cited classes and underestimate the number of Miner Years in other classes had a single factor been used to adjust the SAWW in the conversion process.

Each of the Four Major Classes is given its own Award Ratio, except that the data for Anthracite Underground is now incomplete for this purpose. Anthracite Underground was given an Award Ratio of 0.200, based on the actual Award Ratio for this class for the April 1, 2017 Filing. The Other Classes were given the Award Ratio based on the Grand Total data.

The totals and subtotals that are displayed are additions of the Classes listed and may slightly differ from the results derived using the formula in the Source notes.

C. Pages 1 through 4 (i.e., Exhibit VIII-C-1 through VIII-C-4) display FOD Basic Reported Claims for the Four (4) Major Classifications. Page 5 (i.e., Exhibit VIII-C-5) displays FOD Basic Reported Claims for the six (6) Other Classifications combined. Page 6 (i.e., Exhibit VIII-C-6) shows FOD Basic Reported Claims for All Classifications combined. (FOD Excess Reported Claims are addressed in Exhibits VII-B-2 and VII-L.)

These pages show the procedure used to calculate Incurred But Not Reported (IBNR) Claims. Incremental Changes in Reported Claims are calculated and then converted to a percentage of Developed Payroll (in \$Millions). The actual experience is averaged and then smoothed by ordering the actual data from largest to smallest.

For the six (6) Other Classifications, the All Classifications estimates were used to arrive at the base IBNR. Pages 7 and 8 (i.e., Exhibit VIII-C-7 and VIII-C-8) show the IBNR calculations for the Other Classifications. Adjustment Factors were used for each of the Other Classifications to lower the expected probability of having a FOD Basic claim since the Other Classifications have produced fewer FOD Basic claims and lower FOD Basic claim frequencies than the All Classifications experience. The adjustment factors were not changed this year.

- D. This page displays the Table of the Monthly Federal Black Lung Benefits from 1981 to the present. It also shows the changes in benefits from year to year and the selected change rates that were used to project FOD losses to the average accident date anticipated for the proposed filing.
- E. Omitted Reserved for Future Use.
- F. These pages model changes to Claiming activity (i.e., Claim Awarding and Reopening) for Federal Basic OD Claims that are related to Federal Black Lung Regulation revisions that were issued on January 19, 2001. These revisions changed the procedures and criteria for obtaining Federal Black Lung Benefits resulting in the natural expectation that the frequency of Federal Black Lung claims would increase. Some of the regulatory changes involved limiting evidence and time to contest, broadening the definition of

Black Lung disease, weakening the criteria for determining disability, offering new claim status (as opposed to subsequent and reopened status) to claims, and changing attorney and witness fees.

These changes were expected to increase claim frequencies in the post-2000 years to a greater level than had been previously observed and to increase the claim frequencies in the pre-2001 years as well. Most parties agreed that frequencies, severities and costs generally would increase under these revisions. Even the U.S. Department of Labor conceded that costs would rise between 15% and 60%.

For the post-2000 years, the CMCRB believes that Pending claims will be awarded at a higher rate than previously observed, so Pending claims are assumed to have an Award Ratio of 30%. Similarly, the CMCRB also believes that some Denied claims will be reopened and awarded under the more liberal standards of proof, so 5% of Denied claims are assumed to be Reopened with a subsequent Award Ratio of 100%. These assumptions were first included in the April 1, 2009 filing. The derivation and history of these parameters has been discussed in prior filings, so a brief discussion is provided below.

For the years 1989 to 1999 as of August 2000, the following claim statuses were noted: 122 Awarded, 121 Pending, 447 Denied and 690 Reported.

The claim statuses for 121 Pending claims were updated as of August 2007. The following updated claim statuses were noted: 22 Awarded, 21 Pending, 76 Denied and 2 "Other".

This data implies an Award Ratio of 22.45% which is equal to (22) divided by (22+76). This ratio serves as an estimate of the percentage of Pending claims that will be ultimately Awarded.

The claim statuses for the 447 Denied claims were also updated as of August 2007. The following updated claim statuses were noted: 6 Awarded, 12 Pending and 429 Denied.

This data implies an Award Ratio for Denied Claims of about 2% which is equal to (8.7) divided by (447). The numerator of 8.7 is equal to (6) plus (12) x (22.45%). This ratio serves as an estimate of the percentage of Denied claims that will be ultimately Awarded.

The IBNR Award Ratio that is shown on each page is the ratio of the Total Ultimate Awarded Claims (Col. 8) and the Total Reported Claims (Col. 1) from the Grand Total data on page 13.

Exhibit IX – Individual Claim Detail for SOD and FOD Claim Severities

A. These pages display the Individual Claim Detail for State and FOD Excess claim severities separately for the Four Major Classes and for the Other Classes combined. The Individual Claim Details come from the CMCRB's Occupational Disease Severity Model ("Model"). Benefit amounts are accumulated over the lifetime of the miner (and spouse, if applicable) with mortality factors included in the calculation. For SOD and FOD Excess, this Model evaluates claims both on a Permanent Total basis and on a Permanent Partial basis.

To estimate the value of each claim, each claim is assumed to occur during the midpoint of the proposed filing period. This assumption requires that the historical wage amount recorded for each claim be adjusted to the midpoint of the proposed filing period. Details of these adjustments are presented in Exhibit VII-H.

These pages first display claim values (or projected benefits) for a "Base" scenario (i.e., before the impact of Act 57) for SOD (including Medical) and FOD Excess. These values are associated with the Awarded and Pending claims reported to the CMCRB for exposure years 1990 through 2016. For the Base Scenario, all claims are calculated with lifetime SOD Indemnity (Benefit) payments (i.e., Permanent Total basis) except for the Commuted or Compromised claims.

These pages also display claim values for an "All Permanent Partial" scenario. Values for the All Permanent Partial scenario are calculated because the implementation of American Medical Association (AMA) Guidelines to evaluate the percentage of disability was expected to reduce the portion of claims evaluated as Permanent Total. For this scenario, all claims other than Commuted, Compromised, or Widow Only were calculated with only 630 weeks of SOD Indemnity (Benefit) payments.

The 630-week duration was calculated as follows:

The AMA Guidelines do not apply prior to the expiration of an initial 104-week benefit period. With timely filing for review, timely occurrence of the hearing and timely issuance of a decision, a <u>floor</u> of 604 weeks exists (104 + 500). The actual period will be longer than this 604-week floor. It is estimated that the anticipated average benefit period for claims reviewed under the AMA Guidelines will exceed the floor by one-half of a year, or 26 weeks. Therefore, the All Permanent Partial Scenario was based upon 630 weeks (104 +26 +500).

These pages display Social Security Offsets/Onsets. These Offsets/Onsets are based on the Social Security Formulas – Historic Primary Insurance Amounts (PIA) and Projections in Exhibit VII-J. The decrease (or Offset) to SOD benefits is 50% of the miner's Social Security retirement benefit, limited to the amount of the SOD benefit. This adjustment results in a decrease to SOD Indemnity benefits and an increase to FOD Excess Indemnity benefits.

These pages also display Pension Offsets/Onsets. These Offsets/Onsets are based on the Pension Offset percentage calculated in Exhibit VII-G Page 2. The full amount of the

pension is available as an Offset to the SOD benefit, with the constraint that the SOD benefit minus the Social Security and Private Pension Offsets must not be less than zero. This adjustment results in a decrease to SOD Indemnity benefits and an increase to FOD Excess Indemnity benefits.

Four (4) provisions in Act 57 of 1996 were expected to reduce SOD benefits (and Traumatic benefits). These provisions involved the:

- 1. AMA Guidelines
- 2. Social Security Offsets/Onsets
- 3. Pension Offsets/Onsets and
- 4. Wage Level Offsets/Onsets.

Consequently, the CMCRB has annually submitted estimates for SOD Loss Costs that reflect the anticipated savings from these provisions. Correspondingly, but not in the same proportions, the CMCRB has submitted estimates for FOD Excess Loss Costs that reflect the anticipated additional costs from these provisions that would be shifted to Federal secondary claims since the cross-over point for Federal benefits would occur quicker or earlier than under the old law.

This filing continues the process of phasing out some of the SOD Offsets and some of the FOD Excess Onsets.

- AMA Guidelines While the CMCRB continues to calculate both a Permanent Total (or Base) scenario and an All Permanent Partial scenario, the Base scenario now receives 100% of the weight in the averaging of these two values. The weight given to the All Permanent Partial scenario has been reduced to zero since no such claims have emerged.
- Social Security and Pension Offsets/Onsets The CMCRB continues to use the
  original assumptions for these provisions due to the absence of actual claim data
  in this regard.
- Wage Level Offsets/Onsets The CMCRB annually updates the offset/onset amount in Exhibit VII-G Page 1. The SOD Offset percentage decreased from 1.3235% to 1.2745%. Correspondingly, the FOD Excess Onset decreased as shown on Exhibit VII-A.
- B. These pages display the Individual Claim Detail for Federal Basic OD claim severities separately for the Four Major Classes and for the Other Classes. The Individual Claim Details come from the CMCRB's Occupational Disease Severity Model ("Model"). Benefit amounts are accumulated over the lifetime of the miner (and spouse, if applicable) with mortality factors included in the calculation.

These pages (Exhibit IX-A and IX-B) provide a source for the claim severity figures in Exhibits VII and VIII. No changes, except updates, were made in any of the formula used to

run the Model. For example, the input parameters used to calculate the Medical Severities on these pages were updated to reflect inflation considerations.

## Exhibit X – Payrolls – Developments and Adjustments

- A. Developed and Adjusted Payrolls are displayed by year, by coverage and by classification. Payrolls occasionally differ by coverage for the reasons addressed in Exhibit X-C.
- B. Developed Traumatic Payrolls are extended at current loss cost level to calculate on-level Loss Cost Premium by year for eleven (11) years and by classification on Page 1. Rating values from the CMCRB's latest loss cost filing are shown on Pages 2 and 3.
- C. Developed Traumatic Payrolls are first adjusted to obtain Developed SOD Payroll by showing the amount of Anthracite Underground payroll that is assigned to the Bituminous Underground classification related to the UAE decision on Pages 4 and 5. Otherwise, Developed Traumatic Payrolls are equal to Developed SOD Payrolls.
  - Then, Developed SOD Payrolls are adjusted to obtain Developed FOD Payroll on Pages 1 through 3. The Federal Exempt Reported Payroll is the Traumatic Payroll for insureds that purchase State Act coverage (Traumatic and SOD), but that select to self-insure for FOD coverage. Also, Developed SOD Payrolls are further adjusted to obtain Developed FOD Payrolls for Executive Officers, Sole proprietors and Partners of Partnerships that elected not to purchase State Act coverage. These individuals can elect not to purchase State Act coverage, but cannot elect not to purchase FOD coverage.
- D. Reported Payrolls by classification are projected to Developed Payrolls using the Development Factors calculated in Exhibit X-E. Developed Payrolls are the CMCRB's estimated ultimate or final payroll level for each Accident Year.
- E. Payroll Development Factors are calculated first from report-to-report level and then from report-to-ultimate level.
- F. SOD and FOD Claim Frequencies from the CMCRB's latest loss cost filing are shown.
- G. Reported Average Weekly Wages for Coal Classes are indexed to the Statewide Average Weekly Wage (SAWW). These indexes are used in the calculation of SOD and FOD Claim Frequencies.

#### Exhibit XI – Special Assessments

A. The fiscal year budget for the Office of Small Business Advocate is compared to the insurance carrier paid losses to produce the Small Business Advocate Assessment Ratio. This amount is loaded into the CMCRB's Manual Loss Costs.

B. The fiscal year budgets for the listed Funds are compared to the Employer Assessment Premium Base to produce the Employer Assessment Factor. This amount is not loaded into the CMCRB's Manual Loss Costs, but is treated as a separate calculation in the determination of policy premium. This amount is the estimated provision for Pennsylvania's Administrative Fund, Subsequent Injury Fund, Supersedeas Fund and Uninsured Employer Guaranty Fund.

#### Exhibit XII – Catastrophe Provision

The CMCRB caps or limits losses for individual Traumatic claims at \$1,250,000 in the Traumatic Loss Cost Indications by classification in Exhibit V-B which uses data for the five (5) most recent Accident Years. In this exhibit, the CMCRB calculates provisions for these large losses using data for the twenty (20) most recent Accident Years. The CMCRB expresses these considerations as loss costs which provide for potential future catastrophic loss events. These amounts, which vary by classification, are loaded into the CMCRB's Manual Loss Costs.

- A. The overall catastrophe provision (or Loss Costs) is distributed among the ten (10) Traumatic classifications based on the Developed Payrolls for the most recent Accident Year and the noted Hazard Weights.
- B. The Number of Excess Claims and Excess Loss Dollars in excess of \$1,250,000 are summarized by Accident Year. The current Accident Year Developed Payroll is compared to the Average Catastrophe Excess Loss over the twenty (20) most recent Accident Years to develop the Catastrophe Loss Cost.
- C. Information for the individual Traumatic losses that exceed the \$1,250,000 threshold is shown including the trend factor used to bring losses to the current loss level. For the April 1, 2018 filing, all losses in the twenty (20) most recent Accident Years are reported on a Post-Act 44 basis and do not require an Act 44 adjustment. The Statewide Average Weekly Wage Index is used as the Trend factor and is applied to both Indemnity and Medical Losses. The use of this index seems appropriate since Indemnity losses are a direct function of wages and Act 44 restricts changes in Medical costs to the change in the Statewide Average Weekly Wage.
- D. Trend Factors (or factors that are used to bring historical Indemnity and Medical losses to current loss level) for Indemnity and Medical losses are calculated based on the Statewide Average Weekly Wage (SAWW) that is published for Pennsylvania. The CMCRB projects the SAWW to the average accident date associated with the requested effective date for this filing based on the review of the yearly changes that are shown.
- E. The Number of Excess Claims and Excess Loss Dollars in excess of \$1,250,000 are summarized by classification (or Class Code).

Exhibit XIII – Traumatic Experience Rating Plan

The CMCRB proposes to maintain the major features of the Traumatic Experience Rating Plan and to update the associated plan parameters. The major features are:

- The primary limiting value for basic ratable losses remains at \$50,000 per occurrence.
- The secondary limiting value for excess ratable losses remains at \$150,000 per occurrence.
- The eligibility requirement of at least \$300,000 in modified Traumatic payroll during the three (3) year experience is maintained.
- The shape of the Credibility Table is also unchanged.
- A. Page 1 shows the derivation of the Expected Loss Costs (or Values) based on the Unloaded Loss Costs and the Split of Total Losses by Layer. The proposed total limits loss costs were unloaded for loss-based assessments, the Small Business Advocate, Merit Rating Off-Balance, Safety Committee Off-Balance, Catastrophe Loading, loss development and trend to calculate the expected losses by layer. These unloaded, detrended, undeveloped loss costs were then divided into layers based on the six-year average of actual losses by layer at the same maturity (report) level.

Page 2 shows the calculations for the weighted loss development and loss trend factors. These factors are used on page 1.

Page 3 shows the basic and ratable excess credibility amounts by size of risk (i.e., modified 3-year payroll) based on the proposed overall Unloaded Loss Cost. The primary layer table tracks the shape of the PCRB table converted from expected losses to Payroll using the proposed overall Unloaded Loss Cost underlying this filing. The table for the excess ratable layer was also updated based on the proposed overall Unloaded Loss Cost underlying this filing.

- B. These pages provide comparisons of the current Experience Mods (as calculated and released by the CMCRB with last year's filing) to the proposed Experience Mods, by file number. In total, there are few new experience-rated accounts. Some accounts which were experience rated last year were not eligible this year. The Experience Rating Plan's Off-Balance factor was calculated to be 1.0054. Each indicated mod was adjusted by this off-balance factor so that the Plan is revenue neutral.
- C. The CMCRB caps indicated Experience Mod increases and decreases at 0.35. This page shows files that are affected by this capping.

Additionally, the CMCRB plans to continue the capping of Experience Mods for small accounts (which is part of the currently approved Experience Rating Plan) as follows:

Less than \$499,999 in payroll max mod 1.20 \$500,000 to \$749,999 in payroll max mod 1.30 \$750,000 to \$999,999 in payroll max mod 1.40

Exhibit XIV – Merit Rating and Safety Committee Credit Off-Balance Calculations

- A. Page 1 shows the calculation of the Merit Rating Plan Off-Balance Factor, which is equal to the ratio of proposed Unloaded Loss Cost Premium to the proposed Unloaded Loss Cost Premium after Merit Rating Credits and Surcharges. Page 2 shows Developed Payroll for the most recent Accident Year in total and separately for Experience Rated, Merit Rated and Manual Rates risks. For Merit Rated risks, the Payroll is also shown separately for Merit Credit and Merit Surcharged risks.
- B. This page shows the calculation of the Safety Committee Credit Off-Balance Factor. This factor is equal to the ratio of proposed Unloaded Loss Cost Premium to proposed Unloaded Loss Cost Premium after Safety Committee credits.

## **Disclosures**

The CMCRB offers the following disclosures (i.e., potential constraints or limitations) concerning the conclusions in this report specifically related to potential risk and/or uncertainty. The Proposed Loss Costs do not include any provision for the risk and/or uncertainty that may be inherent in these reserve estimates or in these loss cost projections. While the CMCRB understands that the applicable Statements of Principles promulgated by the Casualty Actuarial Society advocate for a provision for uncertainty, the CMCRB believes that its approach is acceptable and reasonable, because individual carriers can decide whether or not to include a provision for uncertainty in the determination of their loss cost multipliers.

Although this report complies with applicable Actuarial Standards of Practice and Statements of Principles, users of this report should be aware that the projections in this report involve estimates that are inherently uncertain. This uncertainty stems from a dependence of the amount of future claims payments on facts and circumstances that are unknown at this time. Some of these unknown facts and circumstances may involve, but may not necessarily be limited to, the following:

- Changes in claim reserving practices or settlement practices,
- Changes in the legal, regulatory, economic or social environments,
- Statistical variation from the projected expected values especially given the fairly modest size of the CMCRB's database and
- Future emergence of new classes of losses or types of losses that are not sufficiently represented in the historical database.

Additionally, the CMCRB believes that the conclusions in this report are consistent with the combined experience of all carriers in the CMCRB's database. However, the CMCRB acknowledges that the experience of the CMCRB's individual members companies may be different (or may be perceived to be different) from the aggregate experience of the CMCRB's total membership.

Please direct any questions concerning this report to:

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## Actuarial Report – Appendix A Consideration of House Bill 1846 of 2014 (HB 1846) Regarding the CMCRB's April 1, 2018 Loss Cost Filing

The CMCRB collects workers compensation medical loss information that is aggregated at the claim level. This information does not include medical bill line item detail. Consequently, the CMCRB maintains its prior assertion that the evaluation of HB 1846 that was prepared by the Pennsylvania Compensation Rating Bureau ("PCRB") is the best analysis of this law that is available to the CMCRB at this time.

For the April 1, 2016 Loss Cost Filing, the CMCRB used the savings approximation of 1.32% (or a factor of 0.9868) that was promulgated by the PCRB in Exhibit 34 to PCRB Proposal C-366 – April 1, 2016. The CMCRB uniformly applied this factor to each of the five Accident Years used in the Traumatic Loss Cost indications (i.e., 2010 – 2014). The PCRB's exhibit is available online at <a href="http://www.pcrb.com/pcrb/filings/c366/Exhibit%2034.pdf">http://www.pcrb.com/pcrb/filings/c366/Exhibit%2034.pdf</a>.

The CMCRB notes that this savings approximation consists of two components:

- 1) A medical savings adjustment factor of approximately 0.9908 and
- 2) An annual medical severity trend deflection factor of approximately 0.9881.

For the April 1, 2017 Loss Cost Filing, the CMCRB utilized these two components to derive unique adjustment factors for each of the five Accident Years used in the Traumatic Loss Cost indications (i.e., 2011 - 2015). For the April 1, 2018 Loss Cost Filing, the CMCRB proposes a similar approach and provides this appendix to describe this process and the attached exhibits in support of these calculations.

Appendix A-1 identifies the components of the data set that the PCRB utilized to calculate the medical savings adjustment factor of approximately 0.9908. The PCRB identifies this data set as the "2013 Dataset". Based on PCRB's description, the 2013 Dataset seems to be a reasonably close approximation of Calendar Year 2013 Paid Losses. So, this medical savings adjustment factor represents the factor that would be applied to *actual* Calendar Year 2013 Paid Losses on a pre-HB 1846 basis to produce *expected* Calendar Year 2013 Paid Losses on a post-HB 1846 basis.

Appendix A-2 shows the application of the annual medical severity trend deflection adjustment to the medical savings adjustment factor. The annual medical severity trend deflection factor is applied on a calendar year basis. This triangle represents that factors that would be applied to the actual Accident Year Incremental Paid Losses on a pre-HB 1846 basis to produce expected Accident Year Incremental Paid Losses on a post-HB 1846 basis. The CMCRB used the following estimations in these calculations:

- 1) Effective date Since HB 1846 became effective December 26, 2014, the CMCRB adopts January 1, 2015 as the estimated effective date to ease the estimation process.
- 2) Transition While HB 1846 was effective December 26, 2014 (estimated as January 1, 2015), the CMCRB believes that a one-year transition to benefits on a post-HB 1846

- basis is reasonable. Consequently, the CMCRB selects the factor for Calendar Year 2015 Paid Losses judgmentally as the average of the Calendar Year 2014 factor and unity.
- 3) Post-transition The CMCRB believes that Calendar Year 2016 Paid Losses and Calendar Year 2016 Outstanding Losses are fully on a post-law basis and select unity as the adjustment factor to these losses.

Appendix A-3 displays the derivation of the CMCRB's Paid Loss Distribution. The CMCRB notes that the Selected Distribution is very close to the Actual Distribution through 8<sup>th</sup> report level. Beyond 8<sup>th</sup> report level, the CMCRB notes that it favored accelerating the distribution for simplicity in subsequent calculations. This distribution is necessary to prepare Accident Year Incremental Paid and Outstanding Losses.

Appendix A-4 distributes the Selected Paid Loss Distribution into an Accident Year loss development triangle. The Outstanding Loss Distribution is also displayed.

- Row 1 represents the portion of ultimate losses that are expected to be paid for each Accident Year based on current report levels.
- Row 2 shows the portion of ultimate losses that are expect to be outstanding for each Accident Year based on current report levels.
- Row 3 shows the sum of Rows 1 and 2 which sums to unity or 100% for each Accident Year.

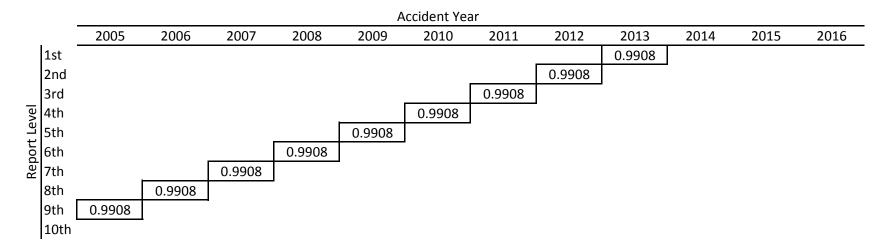
Appendix A-5 shows the derivation of the Accident Year specific adjustment factors for HB 1846. The triangle on this page is the cell-by-cell product of the HB 1846 Medical Savings Adjustment Factors with Medical Trend Deflection Adjustment (A-2) and the Estimated Incremental Paid Losses (A-4). In other words, this triangle represents the Incremental Paid Losses on a post-HB 1846 basis.

- Row 1 represents the portion of ultimate losses that are expected to be paid for each Accident Year based on current report levels after Paid Losses are adjusted to reflect HB 1846 savings.
- Row 2 shows the portion of ultimate losses that are expect to be outstanding for each Accident Year based on current report levels.
- Row 3 shows the HB 1846 savings factor to be applied to outstanding losses.
- Row 4 reflects outstanding losses adjusted to reflect HB 1846 savings.
- Row 5 displays the factor to adjust Ultimate Accident Year losses to reflect HB 1846 savings. This row is also re-displayed in the column to the right.

#### Attachments

1) Appendix A-1 through Appendix A-5

#### Components of the "2013 Dataset" with Medical Savings Adjustment Factor



The PCRB estimated HB 1846 cost savings from Medical Data Call records with dates of service during CY 2013 with payments made through the 1st Q of CY 2014 and referred to these records as the 2013 Dataset. These boxes represent a reasonably close approximation of the data components of the 2013 Dataset filled with the savings estimate of 0.92% or a factor of 0.9908.

Source: PCRB Proposal C-366 - April 1, 2016 Loss Cost Filing - Exhibit 34

http://www.pcrb.com/pcrb/filings/c366/Exhibit%2034.pdf

#### Medical Savings Adjustment Factor with Medical Trend Deflection Adjustment

	_	Accident Year											
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
	1st	1.0000	1.0000	1.0000	1.0000	0.9984	0.9965	0.9946	0.9927	0.9908	0.9889	0.9945	1.0000
t Level	2nd	1.0000	1.0000	1.0000	0.9984	0.9965	0.9946	0.9927	0.9908	0.9889	0.9945	1.0000	
	3rd	1.0000	1.0000	0.9984	0.9965	0.9946	0.9927	0.9908	0.9889	0.9945	1.0000		
	4th	1.0000	0.9984	0.9965	0.9946	0.9927	0.9908	0.9889	0.9945	1.0000			
	5th	0.9984	0.9965	0.9946	0.9927	0.9908	0.9889	0.9945	1.0000				
201	6th 7th	0.9965	0.9946	0.9927	0.9908	0.9889	0.9945	1.0000					
Re	7th	0.9946	0.9927	0.9908	0.9889	0.9945	1.0000						
	8th	0.9927	0.9908	0.9889	0.9945	1.0000							
	9th	0.9908	0.9889	0.9945	1.0000								
	10th	0.9889	0.9945	1.0000									

The PCRB also estimated that the effects of HB 1846 would reduce the growth rate of medical costs at an annual rate of 0.19% or a factor of 0.9981.

CY 2013	Annual	CY	2005-8	1.0000	-5	1.0000 = 0.9908 times (0.9981 ^ -5). Capped at unity.
(Base)	Change	CY	2009	0.9984	-4	0.9984 = 0.9908 times (0.9981 ^ -4)
Adjt.	in Adjt.	CY	2010	0.9965	-3	0.9965 = 0.9908 times (0.9981 ^ -3)
0.9908	0.9981	CY	2011	0.9946	-2	0.9946 = 0.9908 times (0.9981 ^ -2)
		CY	2012	0.9927	-1	0.9927 = 0.9908 times (0.9981 ^ -1)
		CY	2013	0.9908	0	0.9908 = 0.9908 times (0.9981 ^ 0)
		CY	2014	0.9889	1	0.9889 = 0.9908 times (0.9981 ^ 1)
		CY	2015	0.9945	*	
		CY	2016	1.0000	**	
	Outst	anding at:	2016	1.0000		

- \* The Adjustment for Calendar Year 2015 Paid Losses was judgmentally selected to be the average of the last data point and unity to transition to benefits on a post-HB 1846 basis.
- \*\* The Adjustment for Calendar Year 2016 Paid Losses and Outstanding was selected to be unity since data is expected to be reported on a post-HB 1846 basis because HB 1846 became effective in December 2014.

Source: PCRB Proposal C-366 - April 1, 2016 Loss Cost Filing - Exhibit 34

http://www.pcrb.com/pcrb/filings/c366/Exhibit%2034.pdf

#### Derivation of Traumatic Medical Incremental Paid Loss Distribution

Report  1  2  3  4  5  6  7	2007 3,239,013 4,228,737 4,505,191 4,755,842 4,895,811 5,005,959 5,123,649	2008 2,201,565 3,040,747 3,288,243 3,434,618 3,482,499 3,502,704 3,511,257	2009 1,934,714 2,474,907 2,729,947 2,838,307 2,888,987 2,911,117 2,933,165	2010 2,751,976 3,388,757 3,681,854 4,050,370 4,182,550 4,258,152 4,295,252	2011 3,211,934 4,428,864 4,791,312 4,980,927 5,232,645 5,334,986	2012 3,607,221 4,556,072 4,910,148 5,036,044 5,071,629	2013 2,405,205 3,576,391 3,732,065 3,783,913	2014 3,932,999 5,142,203 5,725,513	2015 2,543,986 3,291,985	2016 2,330,259				
8	5,214,054	3,521,293	2,960,275	4,293,232										
9	5,294,667	3,531,557	2,300,273											
10	5,339,901	0,002,007												
Traumati	ic Medical Re	norted Incur	red Losses as	of 04-30-201	7 from Evhih	i+ \/I_R_/I ·								
				4,459,354		_	3,971,009	6,043,218	3,981,666	2 062 201				
	3,019,120	3,008,723	2,980,031	4,439,334	3,034,038	3,319,000	3,971,009	0,043,218	3,981,000	3,903,291				
	ic Medical Inc	curred Loss D	evelopment	Factors from	Exhibit V-C-2	<u>:</u>								
	1.1018	1.1091	1.1167	1.1246	1.1328	1.1413	1.1502	1.1594	1.1600	1.2672				
Ultimate	Traumatic M	ledical Losses	s = Medical In	curred Losse	s times Medi	cal Incurred I	oss Developi	ment Factors	:					
				5,014,990					<del>_</del> '	5,022,282				
	, ,-	, , -	.,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	., . ,	-,,-	,, ,	, ,	,,	-,- , -				
Percent F	Paid = Trauma	atic Medical I	Reported Paid	d Losses divid	led by Ultima	te Traumatic	Medical Loss	ses:				Average	Selected	Selected
Report	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Average	Ex Hi/Lo	Incremental	Cumulative
1	50.52%	55.01%	58.01%	54.88%	50.15%	57.26%	52.66%	56.13%	55.08%	46.40%	53.61%	53.96%	54.00%	54.00%
2	65.96%	75.97%	74.21%	67.57%	69.15%	72.32%	78.30%	73.39%	71.27%		72.02%	71.98%	18.00%	72.00%
3	70.27%	82.16%	81.85%	73.42%	74.81%	77.94%	81.71%	81.72%			77.99%	78.58%	6.00%	78.00%
4	74.18%	85.81%	85.10%	80.77%	77.77%	79.94%	82.85%				80.92%	81.29%	3.00%	81.00%
5	76.36%	87.01%	86.62%	83.40%	81.70%	80.51%					82.60%	83.06%	1.75%	82.75%
6	78.08%	87.51%	87.28%	84.91%	83.30%						84.22%	85.16%	1.50%	84.25%
7	79.91%	87.73%	87.95%	85.65%							85.31%	86.69%	1.00%	85.25%
8	81.32%	87.98%	88.76%								86.02%	87.98%	1.00%	86.25%
9	82.58%	88.24%									85.41%	85.41%	1.00%	87.25%
10	83.29%										83.29%	83.29%	12.75%	100.00%

Notes: The selected distribution is a very close approximation to the actual distribution through 8th report level.

The importance of the selected distribution diminishes beyond 8th report and was accelerated for simplicity.

<u>Traumatic Medical Reported Paid Losses as of 04-30-2017 from Exhibit VI-E:</u>

### Incremental Paid and Outstanding Medical Losses (CMCRB) per Report Level

												Selected		
					Α	ccident Yea	r					Incremental	Cumulative	Outstanding
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Paid Losses	Paid Losses	Losses
1st	0.5400	0.5400	0.5400	0.5400	0.5400	0.5400	0.5400	0.5400	0.5400	0.5400	0.5400	54.00%	54.00%	46.00%
2nd	0.1800	0.1800	0.1800	0.1800	0.1800	0.1800	0.1800	0.1800	0.1800	0.1800		18.00%	72.00%	28.00%
3rd	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600			6.00%	78.00%	22.00%
₹ 4th	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300	0.0300				3.00%	81.00%	19.00%
실 5th	0.0175	0.0175	0.0175	0.0175	0.0175	0.0175	0.0175					1.75%	82.75%	17.25%
Report 6th	0.0150	0.0150	0.0150	0.0150	0.0150	0.0150						1.50%	84.25%	15.75%
₹ 7th	0.0100	0.0100	0.0100	0.0100	0.0100							1.00%	85.25%	14.75%
8th	0.0100	0.0100	0.0100	0.0100								1.00%	86.25%	13.75%
9th	0.0100	0.0100	0.0100									1.00%	87.25%	12.75%
10th	0.1275	0.1275										12.75%	100.00%	0.00%
1)	1.0000	1.0000	0.8725	0.8625	0.8525	0.8425	0.8275	0.8100	0.7800	0.7200	0.5400			
2)	0.0000	0.0000	0.1275	0.1375	0.1475	0.1575	0.1725	0.1900	0.2200	0.2800	0.4600			
3)	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			

#### Notes:

- 1) The anticipated Incremental Paid Losses which equal the sums of the columns above.
- 2) The remaining anticipated Outstanding Losses for each Accident Year.
- 3) The sum of rows 1 and 2.

### Combination - Incremental Paid Losses & Adjustment/Deflection Factors

					Α	.ccident Yea	ar					Selected Incremental	Cumulative	Outstanding
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Paid Losses	Paid Losses	Losses
1st	0.5400	0.5400	0.5400	0.5391	0.5381	0.5371	0.5361	0.5350	0.5340	0.5370	0.5400	54.00%	54.00%	46.00%
2nd	0.1800	0.1800	0.1797	0.1794	0.1790	0.1787	0.1783	0.1780	0.1790	0.1800		18.00%	72.00%	28.00%
3rd	0.0600	0.0599	0.0598	0.0597	0.0596	0.0594	0.0593	0.0597	0.0600			6.00%	78.00%	22.00%
₹ 4th	0.0300	0.0299	0.0298	0.0298	0.0297	0.0297	0.0298	0.0300				3.00%	81.00%	19.00%
플 5th	0.0174	0.0174	0.0174	0.0173	0.0173	0.0174	0.0175					1.75%	82.75%	17.25%
Seport Feve Sth 6th 7th	0.0149	0.0149	0.0149	0.0148	0.0149	0.0150						1.50%	84.25%	15.75%
₹ 7th	0.0099	0.0099	0.0099	0.0099	0.0100							1.00%	85.25%	14.75%
8th	0.0099	0.0099	0.0099	0.0100								1.00%	86.25%	13.75%
9th	0.0099	0.0099	0.0100									1.00%	87.25%	12.75%
10th	0.1268	0.1275										12.75%	100.00%	0.00%
1)	0.9988	0.9993	0.8714	0.8601	0.8486	0.8373	0.8211	0.8027	0.7730	0.7170	0.5400		Accident	HB 1846
2)	0.0000	0.0000	0.1275	0.1375	0.1475	0.1575	0.1725	0.1900	0.2200	0.2800	0.4600		<u>Year</u>	Adjt. Factor
3)	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		2006	0.9988
4)	0.0000	0.0000	0.1275	0.1375	0.1475	0.1575	0.1725	0.1900	0.2200	0.2800	0.4600		2007	0.9993
5)	0.9988	0.9993	0.9989	0.9976	0.9961	0.9948	0.9936	0.9927	0.9930	0.9970	1.0000		2008	0.9989
													2009	0.9976
Note	s:												2010	0.9961
	1) The anticipated Incremental Adjusted/Deflected Paid Losses which equal the sums of the columns above.										2011	0.9948		
	2) The remaining anticipated Outstanding Losses for each Accident Year.										2012	0.9936		
3) The selected Adjustment factor for Calendar Year 2016 Outstanding Losses.										2013	0.9927			
	4) The pro	duct of row	s 2 and 3.										2014	0.9930
	5) The sum	of rows 1	and 4.										2015	0.9970
	The triangle above is the cell-by-cell product of the following two triangles:												2016	1.0000

sle above is the cell-by-cell product of the following two triangles:

Medical Savings Adjustment Factor with Medical Trend Deflection Adjustment (Appendix A-2)

Incremental Paid and Outstanding Medical Losses (CMCRB) per Report Level (Appendix A-4)

### Actuarial Report – Appendix B Consideration of Protz v. WCAB (Derry Area School District) Regarding the CMCRB's April 1, 2018 Loss Cost Filing

The Pennsylvania Supreme Court issued a decision in Protz v. WCAB (Derry Area School District) (the Protz Decision) dated June 20, 2017. In the Protz Decision, the Court ruled that Section 306(a.2) of the Pennsylvania Workers' Compensation Act (the Act) was an unconstitutional delegation of legislative authority. The CMCRB understands that this ruling means that Section 306(a.2) has to be stricken and that impairment rating evaluations are removed from the Act. The CMCRB notes that this ruling eliminated a cost containment provision that was enacted in the Pennsylvania Workers' Compensation system over 20 years ago.

### **Estimating the Impact of the Protz Decision on Indemnity Losses**

The CMCRB's analysis of this issue began with a review of PCRB Filing C-369, Loss Cost Filing to Reflect the Impact of the Protz Decision Effective November 1, 2017, dated August 15, 2017. The CMCRB notes that the estimate of the Impact of the Protz Decision on Indemnity Losses (i.e., 1.1337) included in this filing is based on reasonable methods and data.

To evaluate the appropriateness of this estimate for the purposes of the CMCRB, the CMCRB prepared the exhibits that are attached to this appendix. The basic premise in this work involved the replacement of PCRB data with CMCRB data when available. The CMCRB's efforts focused on PCRB's Exhibit I, especially the impact on Indemnity Losses.

Appendix B-1 provides a reproduction of Exhibit I from PCRB Filing C-369. The CMCRB modified some of the row and column titles to add clarity or simplify certain terms. This exhibit demonstrates the expectation that a portion of claims classified as Major, Minor and Temporary Total ("TT") are now expected to be eligible for Permanent Total ("PT") benefits with PT-level average claim costs or severities.

The CMCRB believes that this methodology and these calculations provide a reasonable basis to determine the impact on Indemnity Loss Costs of the Protz Decision. The CMCRB does note that PCRB's actual data and calculations may involve additional decimal places than those shown because a few calculations needed to be adjusted to match the PCRB's displayed results. The CMCRB finds that these adjustments were well within reasonable rounding conventions (+/-0.0001) and are not a cause for concern.

Despite the CMCRB's acceptance of this methodology and these calculations, the CMCRB also desires to use CMCRB data when available and reliable. While the CMCRB does not have a readily available and reliable source for the data required for the estimates found in Column 2 (i.e., Protz Impact on Frequency or the Impact of Protz Decision on PT Frequency), the CMCRB does have the data required for the estimates found in Columns 1 and 3. The following exhibits provide the CMCRB's work in this regard.

Appendix B-2 provides a reproduction of PCRB Unit Statistical Data from PCRB's Loss Cost Filing for April 1, 2017. (See PCRB Proposal C-368, Exhibit 20b Page 1 – Table III – Total Experience All Industries – Manual Years 2009 – 2013.) Again, the CMCRB took some modest liberties with row and column titles. PCRB utilizes the totals from section C of this exhibit to develop the estimates found in Columns 1 and 3 on Appendix B-1. Note that PCRB's calculations can be found in Exhibit III of Filing C-369.

Appendix B-3 displays Ratios of selected data from PCRB Unit Statistical Data from Appendix B-2. The top section provides the ratios of Section C to Section A from Appendix B-2. The bottom section displays the CMCRB's selected ratios based on the results from the top section. PCRB's work involves development factors for claim counts and incurred losses by Injury Type and by Report Level through the first five report levels that are displayed. Since the CMCRB's data through five years is fairly thin, development factors for the next five report levels (i.e., combined years six through ten) were selected as indicated.

Appendix B-4 provides CMCRB Unit Statistical Data. Section A shows CMCRB Unit Statistical Data for Traumatic claims only on an As Reported Basis by Injury Type by Accident Year for the most recent five Accident Years and aggregated for Accident Years six through ten (or 2011 – 2007). Section B displays the selected development ratios from Appendix B-3. Section C takes the product of Sections A and B, adjusting the data from an As Reported Basis to an Adjusted or Ultimate Basis.

Appendix B-5 provides a Summary of Unit Statistical Data. Section A shows PCRB Data on an Ultimate Basis. (Again, this section is a reproduction of PCRB Exhibit III of Filing C-369.) Section B shows CMCRB Data on an Ultimate Basis. The Ultimate Claim Distributions and Average Cost Ratios were added.

Appendix B-6 reproduces Appendix B-1, except that CMCRB Data on an Ultimate Basis for Columns 1 and 3 replaces PCRB Data. PCRB Data is retained for Column 2 because the CMCRB does not have a readily available and reliable source for the data required for the estimates found in Column 2.

Based on this work, the CMCRB is now aware of two estimates of the Impact of the Protz Decision on Indemnity Losses:

- 1.0784 (or +7.84%) CMCRB's estimate based on ultimate claims and losses and
- 1.1337 (or +13.37%) PCRB's estimate based on ultimate claims and losses.

The CMCRB notes that the crux of each of these estimates is the Average Cost of Permanent Total claims. The PCRB's Permanent Total claim count is 134; the CMCRB's Permanent Total claim count is only 4. The CMCRB believes that its own estimate is statistically unreliable and consequently adopts the PCRB's estimate of the Impact of the Protz Decision on Indemnity Losses of 1.1337 or +13.37%.

### **Medical**

While the Protz Decision is expected to directly impact Indemnity Benefits and Losses, this decision is not expected to directly impact Medical Benefits and Losses. However, as with any significant court decision, the CMCRB notes the potential for changes in claiming activity and behavior. These changes have the potential to increase Medical Benefits and Losses going forward, but the CMCRB is not aware of a reliable means to estimate this potential increase at this time. Consequently, the CMCRB adopts an estimate of the Impact of the Protz Decision on Medical Losses of 1.0000 or 0.0%. The CMCRB notes that the PCRB Filing C-369 proposes the same estimate.

### **Application**

The CMCRB files Loss Costs for three "types" of coverages:

- 1. Traumatic Pennsylvania Workers' Compensation Act coverage,
- 2. State Occupational Disease (SOD) Pennsylvania Occupational Disease Act coverage and
- 3. Federal Occupational Disease (FOD) Federal Mine Safety and Health Act coverage.

The CMCRB generally understands that the settlement of SOD claims has not relied upon the Impairment Rating Evaluation (IRE) process and that adjustments for the Protz Decision for SOD coverage are not necessary. Similarly, the CMCRB knows that the settlement of FOD claims does not rely upon provisions in the Pennsylvania Workers' Compensation Act and that adjustments for the Protz Decision for FOD coverage are not necessary.

The CMCRB also understands that the settlement of Traumatic claims has relied upon the IRE process and that adjustments for the Protz Decision for Traumatic coverage are necessary. Consequently, the CMCRB proposal includes the application of the above indicates adjustment for Traumatic coverage only.

### Retrospective

The CMCRB notes that the above mentioned estimates were prepared exclusively on a prospective basis. The CMCRB analysis and estimates do not include any provisions for the potential for retroactive changes in cost for claims that are currently open or for claims that were previously closed to reopen.

#### **Uncertainty**

The CMCRB notes that actuarial estimates in general involve some degree of uncertainty. The CMCRB believes that this is especially true of the estimates and adjustments mentioned above, since these estimations needed to be prepared before actual experience under the Protz Decision were available.

In addition to the usual uncertainty, the CMCRB also acknowledges that it understands the existence of ongoing legislative activities in the Pennsylvania General Assembly to revise the

Act in light of the Protz Decision. The CMCRB's above mentioned estimates and adjustments do not contain any provisions for potential future legislative measures that might be designed to address the consequences of the Protz Decision. Any subsequent legislative measures would require a separate analysis and appropriate filing activity.

### Attachments

1) Appendix B-1 through Appendix B-6

### Reproduction of PCRB's Indicated Change in Loss Costs Due to the Protz Decision

Type of Injury	Benefit Weight (1)	Protz Impact on Frequency (2)	Protz Impact on Severity (3)	Combined Effect (4)=(1)x(2)x(3)
Death	2.31%		1.0000	0.0231
Permanent Total (PT)	1.11%		1.0000	0.0111
Major (Major Permanent Partial)	49.29%			
Major to Major		92.59%	1.0000	0.4564
Major to Permanent Total		7.41%	2.1140	0.0772
Minor (Minor Permanent Partial)	23.09%			
Minor to Minor		97.67%	1.0000	0.2255
Minor to Permanent Total		2.33%	12.5748	0.0676
Temporary Total (TT)	24.21%			
Temporary Total to Temporary Total		99.71%	1.0000	0.2414
Temporary Total to Permanent Total		0.29%	45.0172	0.0315
Impact on Indemnity Loss Cost				1.1337
Indemnity Weight ***	45.35%			
Medical Weight	54.65%			
Indicated Change				1.0606 6.06%
				0.0070

Source: PCRB Filing No. C-369, Loss Cost Filing to Reflect the Impact of the Protz Decision Effective November 1, 2017 - Exhibit I

http://pcrb.com/pcrb/filings/c369/PA%20Filing%20C-369%20eff%2011-1-17.pdf

Values identified with an outside border indicate a calculation with a slight rounding difference.

PCRB Unit Statistical Data

			De	eath	Perm.	Total	Majo	r Perm.	Minor Perm. Tempo		porary			
Man	Payroll	All		Comp.		Comp.		Comp.		Comp.		Comp.	Medical	Pure
Year	in 1000s	Losses	No.	in 100s	No.	in 100s	No.	in 100s	No.	in 100s	No.	in 100s	in 100s	Premium
	ENCE AS REPOR													
2009	172,802,755	1,889,711,812	91	211,275	32	92,821	2708	5,217,140	7144	2,386,073	26127	2,257,963	8,731,846	1.094
2010	180,127,879	1,955,455,102	89	212,667	27	69,754	2617	5,067,922	7153	2,460,362	27050	2,523,192	9,220,653	1.086
2011	187,304,107	1,932,712,350	100	267,234	18	48,592	2320	4,488,334	7147	2,569,920	26414	2,541,803	9,411,240	1.032
2012	192,389,928	1,752,021,121	89	264,095	21	45,409	1679	3,198,018	6965	2,537,949	25268	2,648,557	8,826,183	0.911
2013	199,039,422	1,515,715,172	79	178,801	21	55,142	808	1,554,471	3887	1,488,165	29005	3,147,278	8,733,295	0.762
All	931,664,091	9,045,615,557	448	1,134,072	119	311,718	10,132	19,525,885	32,296	11,442,469	133,864	13,118,793	44,923,217	0.971
B. TRANSL	ATED PAYROLLS	, TRANSLATED LO	SSES & P	URE PREMIL	IMS (EXCL	UDING IBN	R AND FR	EQUENCY TR	END)					
2009	172,802,755	2,056,011,494	90	226,276	32	135,148	2708	5,436,259	7144	2,381,302	26127	2,269,253	10,111,878	1.190
2010	180,127,879	2,173,707,816	88	225,803	28	114,050	2651	5,413,090	7157	2,451,375	27008	2,549,487	10,983,272	1.207
2011	187,266,646	2,211,281,125	99	291,925	22	103,254	2484	5,199,895	7109	2,524,721	26280	2,595,603	11,397,414	1.181
2012	192,332,211	2,135,037,449	87	289,248	25	105,504	2283	4,941,751	6687	2,415,527	24933	2,711,703	10,886,642	1.110
2013	200,990,008	2,247,888,661	77	199,038	27	138,341	2354	5,382,721	6316	2,445,703	25016	2,701,414	11,611,670	1.118
All	933,519,499	10,823,926,545	441	1,232,290	134	596,297	12,480	26,373,716	34,413	12,218,628	129,364	12,827,460	54,990,876	1.159
C. TRANSL	ATED PAYROLLS	, TRANSLATED LO	SSES & P	URE PREMIL	IMS (INCL	UDING IBNI	R AND FR	EQUENCY TRE	ND)					
2009	172,802,755	2,056,213,732	90	226,276	32	135,148	2708	5,436,259	7144	2,381,302	26127	2,269,253	10,113,900	1.190
2010	180,127,879	2,176,325,740	88	225,803	28	114,050	2652	5,415,391	7169	2,455,376	27055	2,553,988	10,998,649	1.208
2011	187,266,646	2,221,400,379	100	294,722	22	103,254	2490	5,213,323	7159	2,542,642	26451	2,612,500	11,447,562	1.186
2012	192,332,211	2,166,670,925	88	294,051	25	106,037	2308	4,996,183	6843	2,471,927	25442	2,767,077	11,031,435	1.127
2013	200,990,008	2,365,137,911	80	207,619	27	140,629	2460	5,625,253	6842	2,649,014	26869	2,901,636	12,127,228	1.177
All	933,519,499	10,985,748,687	446	1,248,471	134	599,118	12,618	26,686,409	35,157	12,500,261	131,944	13,104,454	55,718,774	1.177

Source: PCRB Proposal C-368 - April 1, 2017 Loss Cost Filing - Exhibit 20b As Filed Corrected-12/1/2016

Table III - Total Experience All Industries - Manual Years 2009 - 2013

http://pcrb.com/pcrb/filings/c368/Exhibit%2020B.pdf

Ratios of PCRB Unit Statistical Data

			Dea	ath	Perm.	Total	Major	Perm.	Mino	Perm.	Temp	orary		
Man	Applied	All		Comp.		Comp.		Comp.		Comp.		Comp.	Medical	Pure
Year	to	Losses	No.	in 100s	No.	in 100s	No.	in 100s	No.	in 100s	No.	in 100s	in 100s	Premium
RATIOS =	[C. TRANSLATED F	PAYROLLS, TRAN	NSLATED L	.OSSES & PU	RE PREMI	IUMS (INCLI	JDING IBN	IR AND FREC	UENCY T	REND)] / [A.	EXPERIEN	ICE AS REPO	RTED]	
Prior				** Dat	a for Prio	r Years is no	t availabl	e from the re	ferenced	source. **				
2009		1.088	0.989	1.071	1.000	1.456	1.000	1.042	1.000	0.998	1.000	1.005	1.158	1.088
2010		1.113	0.989	1.062	1.037	1.635	1.013	1.069	1.002	0.998	1.000	1.012	1.193	1.113
2011		1.149	1.000	1.103	1.222	2.125	1.073	1.162	1.002	0.989	1.001	1.028	1.216	1.150
2012		1.237	0.989	1.113	1.190	2.335	1.375	1.562	0.982	0.974	1.007	1.045	1.250	1.237
2013		1.560	1.013	1.161	1.286	2.550	3.045	3.619	1.760	1.780	0.926	0.922	1.389	1.545
All		1.214	0.996	1.101	1.126	1.922	1.245	1.367	1.089	1.092	0.986	0.999	1.240	1.212
	ELECTED RATIOS		_											
Prior	6th-10th		1.000	1.035	1.000	1.207	1.000	1.021	1.000	1.000	1.000	1.000		
2009	5th		0.989	1.071	1.000	1.456	1.000	1.042	1.000	0.998	1.000	1.005		
2010	4th		0.989	1.062	1.037	1.635	1.013	1.069	1.002	0.998	1.000	1.012		
2011	3rd		1.000	1.103	1.222	2.125	1.073	1.162	1.002	0.989	1.001	1.028		
2012	2nd		0.989	1.113	1.190	2.335	1.375	1.562	0.982	0.974	1.007	1.045		
2013	1st		1.013	1.161	1.286	2.550	3.045	3.619	1.760	1.780	0.926	0.922		

Notes: RATIOS are the ratios of Exhibit 2 Section C. to Exhibit 2 Section A.

CMCRB - SELECTED RATIOS:

For 1st through 5th, PCRB Ratios were selected.

For 6th through 10th, unity was selected, except for the ratios that are identified with an outside border.

For ratios identified with an outside border, the Square Root of the 5th value was selected.

#### **CMCRB Unit Statistical Data**

		De	eath	Perm	ı. Total	Majo	or Perm.	Mino	r Perm.	Tem	porary
Acc.	Applied										
Year	to	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.	No.	Comp.
A. Experienc	e as Reported										
Prior		4	3,073,949	4	1,235,210	119	24,751,373	59	2,773,241	743	5,696,753
2012		0	0	0	0	30	6,811,911	25	1,100,108	145	1,381,654
2013		1	3,000	0	0	28	5,314,040	24	927,256	122	1,216,962
2014		0	0	0	0	44	8,553,403	35	1,080,951	210	2,147,056
2015		3	2,226,410	0	0	23	3,689,265	39	1,642,000	116	1,692,267
2016		1	895,385	0	0	12	1,321,336	27	901,417	100	1,753,817
All		9	6,198,744	4	1,235,210	256	50,441,328	209	8,424,973	1,436	13,888,509
B. CMCRB - S	Selected Ratios										
	Applied to										
6th-10th	Prior	1.000	1.035	1.000	1.207	1.000	1.021	1.000	1.000	1.000	1.000
5th	2012	0.989	1.071	1.000	1.456	1.000	1.042	1.000	0.998	1.000	1.005
4th	2013	0.989	1.062	1.037	1.635	1.013	1.069	1.002	0.998	1.000	1.012
3rd	2014	1.000	1.103	1.222	2.125	1.073	1.162	1.002	0.989	1.001	1.028
2nd	2015	0.989	1.113	1.190	2.335	1.375	1.562	0.982	0.974	1.007	1.045
1st	2016	1.013	1.161	1.286	2.550	3.045	3.619	1.760	1.780	0.926	0.922
C. Adjusted I	Experience										
Prior		4	3,181,537	4	1,490,898	119	25,271,152	59	2,773,241	743	5,696,753
2012		0	0	0	0	30	7,098,011	25	1,097,908	145	1,388,562
2013		1	3,186	0	0	28	5,680,709	24	925,401	122	1,231,566
2014		0	0	0	0	47	9,939,054	35	1,069,061	210	2,207,174
2015		3	2,477,994	0	0	32	5,762,632	38	1,599,308	117	1,768,419
2016		1	1,039,542	0	0	37	4,781,915	48	1,604,522	93	1,617,019
All		9	6,702,259	4	1,490,898	293	58,533,473	229	9,069,441	1,430	13,909,493

Source: A. Experience as Reported is from the CMCRB's Traumatic claim database as of 04/30/2017 - Validated 08/15/2017.

Prior is the combination of Accident Years 2007-2011.

B. CMCRB - Selected Ratios - see Exhibit 2.

C. Adjusted Experience is product of Section A. times Section B.

### Summary of Unit Statistical Data

### A. PCRB Data - Ultimate Basis (from Exhibit 2 - Section C.)

		Distribution			
	Ultimate (III-C)	of Ultimate		Average	PT Avg Cost/
Type of Injury	Claim Amount	Claim Amount	Count	Cost	TOI Avg Cost
Death	124,847,100	2.31%	446	279,926	
Permanent Total	59,911,800	1.11%	134	447,103	
Major	2,668,640,900	49.29%	12,618	211,495	2.1140
Minor	1,250,026,100	23.09%	35,157	35,556	12.5748
Temporary Total	1,310,445,400	24.21%	131,944	9,932	45.0172
Total Indemnity	5,413,871,300	100.00%			

### B. CMCRB Data - Ultimate Basis (from Exhibit 4 - Section C.)

	CMCRB	Distribution			
	Ultimate	of Ultimate		Average	PT Avg Cost/
Type of Injury	Claim Amount	Claim Amount	Count	Cost	TOI Avg Cost
Death	6,702,259	7.47%	9	744,695	
Permanent Total	1,490,898	1.66%	4	372,725	
Major	58,533,473	65.25%	293	199,773	1.8657
Minor	9,069,441	10.11%	229	39,605	9.4112
Temporary Total	13,909,493	15.51%	1,430	9,727	38.3189
Total Indemnity	89,705,564	100.00%			

### CMCRB's Indicated Change in Loss Costs Due to the Protz Decision - Ultimate Basis

	Benefit Weight	Protz Impact on Frequency	Protz Impact on Severity	Combined Effect
Type of Injury	(1)	(2)	(3)	(4)=(1)x(2)x(3)
Death	7.47%		1.0000	0.0747
Permanent Total	1.66%		1.0000	0.0166
Major	65.25%			
Major to Major		92.59%	1.0000	0.6042
Major to Permanent Total		7.41%	1.8657	0.0902
Minor	10.11%			
Minor to Minor		97.67%	1.0000	0.0987
Minor to Permanent Total		2.33%	9.4112	0.0222
Temporary Total	15.51%			
Temporary Total to Temporary Total		99.71%	1.0000	0.1546
Temporary Total to Permanent Total		0.29%	38.3189	0.0172
Impact on Indemnity Loss Cost				1.0784
PCRB's Impact on Indemnity Loss Cost				1.1337

Columns (1) & (3) - see Exhibit 5 - Section B.
Column (2) - PCRB Filing No. C-369 - Exhibit I (or Exhibit 1 of this filing)

### Coal Mine Compensation Rating Bureau Current and Proposed Loss Costs Manual Including Loadings

		2016 Developed Payroll	(1) Approved Loss Cost Manual	(2) Proposed Loss Cost Manual	(3) Percent Change
Underground Anthro					
	Traumatic (1010)	\$163,760	\$20.44	\$19.67	-3.8%
	State O.D. (1011)	163,760	6.59	8.24	25.0%
	*Federal Basic/Ex (0160)	163,760	11.90	10.54	-11.4%
	Total	XX	38.93	38.45	-1.2%
Underground Bitumi	nous:				
	Traumatic (1001)	\$148,894,215	\$6.18	\$6.09	-1.5%
	State O.D. (1002)	148,894,215	0.59	0.44	-25.0%
	*Federal Basic/Ex (0158)	118,883,295	0.72	0.63	-12.5%
	Total	xx	7.49	7.16	-4.4%
Surface Anthracite:					
	Traumatic (1012)	\$20,810,850	\$8.27	\$8.24	-0.4%
	State O.D. (1016)	20,810,850	1.67	1.81	8.4%
	*Federal Basic/Ex (0153)	19,043,330	2.78	2.54	-8.6%
	Total	XX	12.72	12.59	-1.0%
Surface Bituminous:					
2	Traumatic (1014)	\$28,999,042	\$2.45	\$2.28	-6.9%
	State O.D. (1013)	28,999,042	0.14	0.16	14.3%
	*Federal Basic/Ex (0156)	29,758,888	0.63	0.73	15.9%
	Total	XX	3.22	3.17	-1.6%
Four Standard Class	ifications:				
	Traumatic	\$198,867,867	\$5.87	\$5.77	-1.7%
	State O.D.	198,867,867	0.64	0.55	-14.1%
	*Federal Basic/Ex	167,849,273	0.95	0.87	-8.4%
	Total	XX	7.46	7.19	-3.6%

Sources: Payroll from Exhibit X-A

Column (1) Loss Costs (Approved 4/1/2017) - Exhibit X-B-2 Column (2) Proposed - Exhibit I-B, pages 1 and 2 Column (3) Traumatic Column (2) / Column (1) OD Exhibit III and IV-A

OB EXHIBIT III GITG TV 70

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<sup>\*</sup>Federal Basic and Excess are after the Federal Administrative / Law Change

### **Coal Mine Compensation Rating Bureau Current and Proposed Loss Costs Manual Including Loadings**

		2016 Developed Payroll	(1) Approved Loss Cost Manual	(2) Proposed Loss Cost Manual	(3) Percent Change
Coke:					
CORC.	Traumatic (1469) State O.D. (1017) *Federal Basic/Ex (0154)	\$2,313,724 2,313,724 2,313,724	\$4.54 0.12 0.09	\$3.55 0.09 0.09	-21.8% -25.0% 0.0%
	Total	XX	4.75	3.73	-21.5%
Auger:					
	Traumatic (1015) State O.D. (1019) *Federal Basic/Ex (0157)	\$372,496 372,496 392,776	\$16.44 0.24 0.33	\$13.68 0.19 0.36	-16.8% -20.8% 9.1%
	Total	XX	17.01	14.23	-16.3%
Co-Gen Anthracite	:				
	Traumatic (1021) State O.D. (1022) *Federal Basic/Ex (0181)	\$10,847,424 10,847,424 9,784,031	\$3.12 0.30 0.42	\$3.90 0.29 0.40	25.0% -3.3% -4.8%
	Total	xx	3.84	4.59	19.5%
Co-Gen Bituminous	:				
	Traumatic (1023) State O.D. (1024) *Federal Basic/Ex (0182)	\$11,386,837 11,386,837 11,386,837	\$1.14 0.42 0.31	\$1.18 0.32 0.30	3.5% -25.0% -3.2%
	Total	xx	1.87	1.80	-3.7%
Prep Plant Anthraci	to:				
riep ridili Allillidei	Traumatic (1025)	\$6,971,270	\$4.53	\$4.80	6.0%
	State O.D. (1026)	6,971,270	2.19	2.17	-0.9%
	*Federal Basic/Ex (0183)	5,458,272	0.97 7.69	0.94 7.91	-3.1%
	Total	XX	7.69	7.91	2.9%
Prep Plant Bitumino	us:				
	Traumatic (1027)	\$22,131,423	\$1.81	\$2.26	24.9%
	State O.D. (1028) *Federal Basic/Ex (0184)	22,131,423 18,510,111	0.21 0.36	0.16 0.35	-23.8% -2.8%
	Total	xx	2.38	2.77	16.4%
Other Classification					
Oniei Ciassilication	Traumatic	\$54,023,174	\$2.50	\$2.82	12.8%
	State O.D.	54,023,174	0.52	0.48	-7.7%
	*Federal Basic/Ex	47,845,751	0.42	0.41	-2.4%
	Total	XX	3.44	3.71	7.8%
Grand Total:					
	Traumatic	\$252,891,041	\$5.15	\$5.14	-0.2%
	State O.D. *Federal Basic/Ex	252,891,041 215,695,024	0.61 0.83	0.54 0.77	-11.5% -7.2%
	Total	XX	6.59	6.45	-2.1%
					•

<sup>\*</sup>Federal Basic and Excess are after the Federal Administrative / Law Change

Sources: Payroll from Exhibit X-A

Column (1) Loss Costs (Approved 4/1/2017) - Exhibit X-B-2 Column (2) Proposed - Exhibit I-B, pages 1 and 2

Column (3) Traumatic Column (2) / Column (1)

OD Exhibit III and IV-A

### Coal Mine Compensation Rating Bureau Current and Proposed Loss Costs Unloaded Manual

		2016 Developed Payroll	(1) Approved Unloaded Manual	(2) Indicated Unloaded Manual	(3) Proposed Unloaded Manual	(4) Percent Change
Underground Anth	racito:					
	Traumatic (1010)	\$163,760	\$20.01	\$19.20	\$19.20	-4.0%
	State O.D. (1011)	163,760	6.59	10.21	8.24	25.0%
	*Federal Basic/Ex (0160)	163,760	11.90	10.54	10.54	-11.4%
	Total	XX	38.50	39.95	37.98	-1.4%
Underground Bitur	minous:					
-	Traumatic (1001)	\$148,894,215	\$5.96	\$5.82	\$5.82	-2.3%
	State O.D. (1002)	148,894,215	0.59	0.44	0.44	-25.0%
	*Federal Basic/Ex (0158)	118,883,295	0.72	0.63	0.63	-12.5%
	Total	xx	7.27	6.89	6.89	-5.2%
Surface Anthracite	e:					
	Traumatic (1012)	\$20,810,850	\$8.13	\$8.09	\$8.09	-0.5%
	State O.D. (1016)	20,810,850	1.67	1.81	1.81	8.4%
	*Federal Basic/Ex (0153)	19,043,330	2.78	2.54	2.54	-8.6%
	Total	xx	12.58	12.44	12.44	-1.1%
Surface Bituminou	s:					
	Traumatic (1014)	\$28,999,042	\$2.39	\$2.22	\$2.22	-7.1%
	State O.D. (1013)	28,999,042	0.14	0.16	0.16	14.3%
	*Federal Basic/Ex (0156)	29,758,888	0.63	0.73	0.73	15.9%
	Total	XX	3.16	3.11	3.11	-1.6%
Four Standard Cla	ssifications:					
	Traumatic	\$198,867,867	\$5.68	\$5.54	\$5.54	-2.5%
	State O.D.	198,867,867	0.64	0.55	0.55	-14.1%
	*Federal Basic/Ex	167,849,273	0.95	0.87	0.87	-8.4%
	Total	xx	7.27	6.96	6.96	-4.3%

Sources: Payroll from Exhibit X-A

Column (1) Exhibit X-B Page 2

Column (2) Indicated Loss Cost - Exh. II, col(3) (Traumatic); Exh. III, col(5) (State O.D.); Exh. IV-A, col(5) (Federal O.D. After Adm/Law)

Column (3) Proposed Loss Cost - Exh. II, col(4) (Traumatic); Exh. III, col(8) (State O.D.); Exh. IV-A, col(7) (Federal O.D. After Adm/Law)

Column (4) Exhibit II, III or IV-A

<sup>\*</sup>Federal Basic and Excess are after the Federal Administrative / Law Change

### Coal Mine Compensation Rating Bureau Current and Proposed Loss Costs Unloaded Manual

(1) (2) Approved Indicated 2016 Unloaded Unloaded Developed Payroll Manual Manual	(3) Proposed Unloaded Manual	(4) Percent Change
Coke:		
Traumatic (1469) \$2,313,724 \$4.45 \$3.47	\$3.47	-22.0%
State O.D. (1017) 2,313,724 0.12 0.09	0.09	-25.0%
*Federal Basic/Ex (0154) 2,313,724 0.09 0.09	0.09	0.0%
Total xx 4.66 3.65	3.65	-21.7%
Auger:		
Traumatic (1015) \$372,496 \$16.14 \$13.40	\$13.40	-17.0%
State O.D. (1019) 372,496 0.24 0.19	0.19	-20.8%
*Federal Basic/Ex (0157) 392,776 0.33 0.36	0.36	9.1%
Total xx 16.71 13.95	13.95	-16.5%
Co-Gen Anthracite:		
Traumatic (1021) \$10,847,424 \$3.05 \$4.30	\$3.81	25.0%
State O.D. (1022) 10,847,424 0.30 0.29	0.29	-3.3%
*Federal Basic/Ex (0181) 9,784,031 0.42 0.40	0.40	-4.8%
Total xx 3.77 4.99	4.50	19.4%
Co-Gen Bituminous:		
Traumatic (1023) \$11,386,837 \$1.10 \$1.13	\$1.13	2.7%
State O.D. (1024) 11,386,837 0.42 0.30	0.32	-25.0%
*Federal Basic/Ex (0182) 11,386,837 0.31 0.30	0.30	-3.2%
Total xx 1.83 1.73	1.75	-4.4%
Prep Plant Anthracite:		
Traumatic (1025) \$6,971,270 \$4.44 \$4.70	\$4.70	5.9%
State O.D. (1026) 6,971,270 2.19 2.17	2.17	-0.9%
*Federal Basic/Ex (0183) 5,458,272 0.97 0.94	0.94	-3.1%
Total xx 7.60 7.81	7.81	2.8%
Prep Plant Bituminous:		
Traumatic (1027) \$22,131,423 \$1.76 \$2.56	\$2.20	25.0%
State O.D. (1028)       22,131,423       0.21       0.16         *Federal Basic/Ex (0184)       18,510,111       0.36       0.35	0.16 0.35	-23.8%
*Federal Basic/Ex (0184) 18,510,111 0.36 0.35 Total xx 2.33 3.07	2.71	-2.8% 16.3%
Other Classifications:  Traumatic \$54.023.174 \$2.44 \$3.00	¢0.75	10.70
Traumatic \$54,023,174 \$2.44 \$3.00 State O.D. 54,023,174 0.52 0.47	\$2.75 0.48	12.7% -7.7%
*Federal Basic/Ex 47,845,751 0.42 0.41	0.40	-4.8%
Total xx 3.38 3.88	3.63	7.4%
Grand Total:		
Traumatic \$252,891,041 \$4.99 \$5.00	\$4.95	-0.8%
State O.D. 252,891,041 0.61 0.53	0.54	-11.5%
*Federal Basic/Ex 215,695,024 0.83 0.77	0.77	-7.2%
Total xx 6.43 6.30	6.26	-2.6%

<sup>\*</sup>Federal Basic and Excess are after the Federal Administrative / Law Change

Sources: Payroll from Exhibit X-A

Column (1) Exhibit X-B Page 2

Column (2) Indicated Loss Cost - Exh. II, col(3) (Traumatic); Exh. III, col(5) (State O.D.); Exh. IV-A, col(5) (Federal O.D. After Adm/Law)

Column (3) Proposed Loss Cost - Exh. II, col (4) (Traumatic); Exh. III, col (8) (State O.D.); Exh. IV-A, col (7) (Federal O.D. After Adm/Law)

Column (4) Exhibit II, III or IV-A

# Coal Mine Compensation Rating Bureau Current and Proposed Loss Costs Unloaded Manual

#### Calculation of Proposed Unloaded Loss Costs

**Underground Anthracite** 

Traumatic (1010) Indicated Loss Cost.

State O.D. (1011) Indicated unloaded loss cost limited to 25.0%(Exhibit III).

\*Federal O.D. (0160) Basic/Ex Indicated Loss Cost.

**Underground Bituminous** 

Traumatic (1001) Indicated Loss Cost.
State O.D. (1002) Indicated Loss Cost.
\*Federal O.D. (0158) Basic/Ex Indicated Loss Cost.

Surface Anthracite

Traumatic (1012) Indicated Loss Cost.
State O.D. (1016) Indicated Loss Cost.
\*Federal O.D. (0153) Basic/Ex Indicated Loss Cost.

**Surface Bituminous** 

Traumatic (1014) Indicated Loss Cost.
State O.D. (1013) Indicated Loss Cost.
\*Federal O.D. (0156) Basic/Ex Indicated Loss Cost.

Coke

Traumatic (1469) Indicated Loss Cost.
State O.D. (1017) Indicated Loss Cost.
\*Federal O.D. (0154) Basic/Ex Indicated Loss Cost.

Auger

Traumatic (1015) Indicated Loss Cost.
State O.D. (1019) Indicated Loss Cost.
\*Federal O.D. (0157) Basic/Ex Indicated Loss Cost.

Co-Gen Anthracite

Traumatic (1021) Indicated unloaded loss cost limited to 25.0% (Exhibit II).

State O.D. (1022) Indicated Loss Cost. \*Federal O.D. (0181) Basic/Ex Indicated Loss Cost.

Co-Gen Bituminous

Traumatic (1023) Indicated Loss Cost.

State O.D. (1024) Indicated unloaded loss cost limited to -25.0%(Exhibit III).

\*Federal O.D. (0182) Basic/Ex Indicated Loss Cost.

**Prep Plant Anthracite** 

Traumatic (1025) Indicated Loss Cost.
State O.D. (1026) Indicated Loss Cost.
\*Federal O.D. (0183) Basic/Ex Indicated Loss Cost.

Prep Plant Bituminous

Traumatic (1027) Indicated unloaded loss cost limited to 25.0% (Exhibit II).

State O.D. (1028) Indicated Loss Cost. \*Federal O.D. (0184) Basic/Ex Indicated Loss Cost.

### Coal Mine Compensation Rating Bureau Manual Loss Cost Loaded (after Capping) For Catastrophe, Off-Balances, and Assessment Proposed to Become Effective 4-1-2018

		2016	(1) Proposed Loss Cost	(2) Catastrophe	(3) Loss Cost Including	(4) Loss Cost Including	(5) Loss Cost Inc. Off-Balance <sup>(a)</sup>
		Developed Payroll	Before Loading	Loss Cost	Catastrophe	Off-Balance <sup>(a)</sup>	& Assessment <sup>(b)</sup>
Underground Anthrac	ite:						
	matic (1010)	\$163,760	\$19.20	\$0.18	\$19.38	\$19.67	\$19.67
	e O.D. (1011) deral Basic/Ex (0160)	163,760 163,760	8.24 10.54				8.24 10.54
Tota		XX	37.98				38.45
Underground Bituming	ous:						
	matic (1001)	\$148,894,215	\$5.82	\$0.18	\$6.00	\$6.09	\$6.09
	e O.D. (1002) deral Basic/Ex (0158)	148,894,215 118,883,295	0.44 0.63				0.44 0.63
Tota		110,003,293 XX	6.89				7.16
1010	41	~~	0.07				7.10
Surface Anthracite:							
	ımatic (1012)	\$20,810,850	\$8.09	\$0.03	\$8.12	\$8.24	\$8.24
	e O.D. (1016) deral Basic/Ex (0153)	20,810,850 19,043,330	1.81 2.54				1.81 2.54
Tota		17,043,330 XX	12.44				12.59
1010	••	7.00	12.11				12.57
Surface Bituminous:							
	ımatic (1014)	\$28,999,042	\$2.22	\$0.03	\$2.25	\$2.28	\$2.28
	e O.D. (1013) deral Basic/Ex (0156)	28,999,042 29,758,888	0.16 0.73				0.16 0.73
Tota		XX	3.11				3.17
Four Standard Classifi							
	matic	\$198,867,867	\$5.54	\$0.14	\$5.69	\$5.77	\$5.77
	e O.D. deral Basic/Ex	198,867,867 167,849,273	0.55 0.87				0.55 0.87
Tota		XX	6.96				7.19
.0.0		701	2.70				,

**Sources:** Payroll from Exhibit X-A

Column (1) Proposed Loss Cost Before Loading - Exhibit II for Traumatic, Exhibit III for State OD, and Exhibit IV for Federal OD.

Column (2) Catastrophe - Exhibit XII-A

Column (3) (1)+(2)

Columns (4)(a) & (5)(a) Off-balances applied to Traumatic only

 Experience Rating
 1.0000

 Exhibit XIV-A
 Merit Rating
 1.0002

 Exhibit XIV-B
 Safety Rating
 1.0149

 Combined
 1.0151

<sup>\*</sup>Federal Basic and Excess are after the Federal Administrative / Law Change

### Coal Mine Compensation Rating Bureau Manual Loss Cost Loaded (after Capping) For Catastrophe, Off-Balances, and Assessment Proposed to Become Effective 4-1-2018

		2016 Developed Payroll	(1) Proposed Loss Cost Before Loading	(2) Catastrophe Loss Cost	(3) Loss Cost Including Catastrophe	(4) Loss Cost Including Off-Balance <sup>(a)</sup>	(5) Loss Cost Inc. Off-Balance <sup>(a)</sup> & Assessment <sup>(b)</sup>
Coke:							
	Traumatic (1469) State O.D. (1017) *Federal Basic/Ex (0154) Total	\$2,313,724 2,313,724 2,313,724 xx	\$3.47 0.09 0.09 3.65	\$0.03	\$3.50	\$3.55	\$3.55 0.09 0.09 3.73
A							
Auger:	Traumatic (1015) State O.D. (1019) *Federal Basic/Ex (0157) Total	\$372,496 372,496 392,776 xx	\$13.40 0.19 0.36 13.95	\$0.08	\$13.48	\$13.68	\$13.68 0.19 0.36 14.23
Co-Gen Anthro	cite:						
	Traumatic (1021) State O.D. (1022) *Federal Basic/Ex (0181) Total	\$10,847,424 10,847,424 9,784,031 xx	\$3.81 0.29 0.40 4.50	\$0.03	\$3.84	\$3.90	\$3.90 0.29 0.40 4.59
Co-Gen Bitumi	nous:						
	Traumatic (1023) State O.D. (1024) *Federal Basic/Ex (0182) Total	\$11,386,837 11,386,837 11,386,837 xx	\$1.13 0.32 0.30 1.75	\$0.03	\$1.16	\$1.18	\$1.18 0.32 0.30 1.80
Prep Plant Anth	racite:						
	Traumatic (1025) State O.D. (1026) *Federal Basic/Ex (0183) Total	\$6,971,270 6,971,270 5,458,272 xx	\$4.70 2.17 0.94 7.81	\$0.03	\$4.73	\$4.80	\$4.80 2.17 0.94 7.91
Prep Plant Bitun	ninous:						
	Traumatic (1027) State O.D. (1028) *Federal Basic/Ex (0184) Total	\$22,131,423 22,131,423 18,510,111 xx	\$2.20 0.16 0.35 2.71	\$0.03	\$2.23	\$2.26	\$2.26 0.16 0.35 2.77
Other Classifica	utions:						
	Traumatic State O.D. *Federal Basic/Ex Total	\$54,023,174 54,023,174 47,845,751 xx	\$2.75 0.48 0.41 3.64	\$0.03	\$2.78	\$2.82	\$2.82 0.48 0.41 3.71
Grand Total:							
	Traumatic State O.D.  *Federal Basic/Ex Total	\$252,891,041 252,891,041 215,695,024 xx	\$4.95 0.54 0.77 6.26	\$0.12	\$5.07	\$5.15	\$5.14 0.54 0.77 6.45

<sup>\*</sup>Federal Basic and Excess are after the Federal Administrative / Law Change

Sources: Payroll from Exhibit X-A

Column (1) Proposed Loss Cost Before Loading - Exhibit II for Traumatic, Exhibit III for State OD, and Exhibit IV for Federal OD.

Column (2) Catastrophe - Exhibit XII-A

Column (3) (1)+(2)

Columns (4)(a) & (5)(a) Off-balances applied to Traumatic only

 Experience Rating
 1.0000

 Exhibit XIV-A
 Merit Rating
 1.0002

 Exhibit XIV-B
 Safety Rating
 1.0149

 Combined
 1.0151

# COAL MINE COMPENSATION RATING BUREAU TRAUMATIC LOSS COST INDICATIONS Proposed Unloaded Loss Costs

			(1)	(2) Approved	(3)	(4) Proposed	(5)
			2016	Unloaded	Indicated	Unloaded	
			Developed	Loss Cost	Unloaded	Loss Cost	Percent
<u>Classification</u>		<u>Code</u>	Payroll	(Eff 4/01/2017)	Loss Cost	(Exh V-A-1)	<u>Change</u>
Underground:	Anthracite	1010	\$163,760	20.01	19.20	19.20	-4.0%
orraorgrooma.	Bituminous	1001	148,894,215	5.96	5.82	5.82	-2.3%
			.,				
Curtoso	Anthracita	1012	20.010.050	0.12	9.00	9.00	0.597
Surface:	Anthracite Bituminous	1012	20,810,850 28,999,042	8.13 2.39	8.09 2.22	8.09 2.22	-0.5% -7.1%
	DITUTTITIOUS	1014	20,999,042	2.39			/.1%
Four Standard Clas	sses		198,867,867	5.68	5.54	5.54	-2.5%
Other Classes	Coke	1469	2,313,724	4.45	3.47	3.47	-22.0%
	Auger	1015	372,496	16.14	13.40	13.40	-17.0%
Co-Gen:	Anthracite	1021	10,847,424	3.05	4.30	3.81	25.0%
CO COII.	Bituminous	1023	11,386,837	1.10	1.13	1.13	2.7%
			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				,•
Dran Dlanto	Anthracite	1025	/ 071 070	4.44	4.70	4.70	5.9%
Prep Plants:	Bituminous	1025	6,971,270 22,131,423	4.44 1.76	2.56	2.20	25.0%
	טווטווווווטטט	1027	22,131,423				23.0/6
Other Classes			54,023,174	2.44	3.00	2.75	12.7%
All Classes Combin	ned		252,891,041	4.99	5.00	4.95	-0.8%

Sources: Column (1) Exhibit X-A

Column (2) Unloaded Loss Cost-Exhibit X-B,pg.2

Column (3) Exhibit V-A-1 Col.(7) Column (4) Exhibit V-A-1 Col.(10) Column (5) Exhibit V-A-1 Col.(9)

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PAB Effective Date - April 01, 2018 758,685,991.401000

### COAL MINE COMPENSATION RATING BUREAU STATE OCCUPATIONAL DISEASE LOSS COST

	(1)	(2)	(3)	(4) Indicated	(5)	(6)	(7)	(8)
<u>Classification</u>	2016 Developed Payroll	Approved Unloaded Loss Cost	Average Freq. per \$1 mill.	Average <u>Severity</u>	Loss Cost (Rate)	Indicated <u>Change</u>	Proposed <u>Change</u>	Proposed Loss Cost
Underground 1011 Anthracite	\$163,760	\$6.59	0.159092	\$641,539	\$10.21	54.9%	25.0%	\$8.24
1002 Bituminous	\$148,894,215	\$0.59	0.016360	\$266,850	0.44	-25.4%	-25.0%	0.44
Surface 1016 Anthracite	\$20,810,850	\$1.67	0.036950	\$491,032	1.81	8.4%	8.4%	1.81
1013 Bituminous	\$28,999,042	<u>0.14</u>	0.004403	\$356,065	0.16	14.3%	14.3%	0.16
Four Standard Classes	\$198,867,867	\$0.64			\$0.55	-14.1%	-14.1%	\$0.55
1017 Coke 1019 Auger	\$2,313,724 \$372,496	0.12 0.24	0.002640 0.005427	356,065 356,065	0.09 0.19	-25.0% -20.8%	-25.0% -20.8%	0.09 0.19
Co-Gen 1022 Anthracite 1024 Bituminous	\$10,847,424 \$11,386,837	0.30 0.42	0.005863	491,032 356,065	0.29	-3.3% -28.6%	-3.3% -25.0%	0.29
Prep Plant 1026 Anthracite	\$6,971,270	2.19	0.044105	491,032	2.17	-0.9%	-0.9%	2.17
1028 Bituminous	\$22,131,423	0.21	0.004433	356,065	<u>0.16</u>	<u>-23.8%</u>	<u>-23.8%</u>	<u>0.16</u>
Other Classes	\$54,023,174	\$0.52			\$0.47	-9.6%	-7.7%	\$0.48
All Classes Combined	\$252,891,041	\$0.61			\$0.53	-13.1%	-11.5%	\$0.54

Sources: Column (1): Exhibit X-A

Column (2): Exhibit X-B Page 2

Column (3): Exhibit VII-B-1, Column (10)

Column (4): Four Standard Classes - Exhibit VII-A, pages 1 through 4

Coke, Auger, Prep Plant Bituminous and Co-Gen Bituminous = Surface Bituminous

Prep Plant Anthracite, Co-Gen Anthracite = Surface Anthracite

Column (5): [Column (3) times Column (4)] divided by 10,000. Column (6): [Column (5) divided by Column (2)] minus 1.0

Column (7): Column (6) limited to +/- 25%.

Column (8): Column (2) times [1.000+Column(7)] and rounded.

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Run Date: November 02, 2017 - 02:15:51 PM

Effective Date - April 01, 2018 762,847,136.373765

### COAL MINE COMPENSATION RATING BUREAU FEDERAL OCCUPATIONAL DISEASE LOSS COST INDICATION

		(1)	(2)	(3)	(4) Indicated	(5)	(6)		(7)	(8)
<u>Classification</u>		2016 Developed Payroll	Approved Unloaded Loss Cost	Average Freq. per \$1 mill.	Average Severity	Loss Cost (Rate)	Indicated <u>Change</u>	Lim	Cost w/ nitation 25%	% Change w/Limitation <u>25%</u>
Underground						0.47				
Anthracite:	Basic			0.232560	415,903	9.67				
	Excess Total	\$163,760	\$11.90	0.068365	127,663	0.87 10.54	-11.4%	\$	10.54	-11.4%
	TOTAL	\$103,700	\$11.70			10.54	-11.4/0	Φ	10.34	-11.4/0
Bituminous:	Basic			0.012002	389,814	0.47				
5.101110001	Excess			0.006404	242,265	0.16				
	Total	\$118,883,295	\$0.72		_ :=,=	0.63	-12.5%	\$	0.63	-12.5%
Surface		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,							
Anthracite:	Basic			0.074631	328,752	2.45				
	Excess			0.015164	60,970	0.09				
	Total	\$19,043,330	\$2.78			2.54	-8.6%	\$	2.54	-8.6%
Bituminous:	Basic			0.022048	317,672	0.70				
	Excess			0.001551	209,610	0.03				
	Total	\$29,758,888	\$0.63			0.73	15.9%	\$	0.73	15.9%
Four Standard Classes	Basic					0.74				
roui sianaara Ciasses	Excess					0.74				
	Total	\$167,849,273	\$0.95			0.13	-8.4%	\$	0.87	-8.4%
	TOTAL	\$107,047,273	φ0.75			0.67	-0.4/6	Ψ	0.07	-0.4/0
Coke	Basic			0.002353	317,672	0.07				
	Excess			0.001073	209,610	0.02				
	Total	\$2,313,724	\$0.09			0.09	0.0%	\$	0.09	0.0%
		•								
Auger	Basic			0.009834	317,672	0.31				
	Excess			0.002265	209,610	0.05				
	Total	\$392,776	\$0.33			0.36	9.1%	\$	0.36	9.1%
Co-Gen										
Anthracite:	Basic			0.011897	328,752	0.39				
	Excess	fo 70 4 00 1	¢0.40	0.002177	60,970	0.01	4.007	•	0.40	4.007
	Total	\$9,784,031	\$0.42			0.40	-4.8%	\$	0.40	-4.8%
Bituminous:	Basic			0.007678	317,672	0.24				
Diformitioos.	Excess			0.002893	209,610	0.06				
	Total	\$11,386,837	\$0.31			0.30	-3.2%	\$	0.30	-3.2%
Prep Plants		, ,,	,							
Anthracite:	Basic			0.025093	328,752	0.82				
	Excess			0.020048	60,970	0.12				
	Total	\$5,458,272	\$0.97			0.94	-3.1%	\$	0.94	-3.1%
Bituminous:	Basic			0.009624	317,672	0.31				
	Excess	¢10.510.111	to 27	0.001709	209,610	0.04	0.007	•	0.25	0.007
	Total	\$18,510,111	\$0.36			0.35	-2.8%	\$	0.35	-2.8%
Other Classes	Basic					0.36				
Office Classes	Excess					0.05				
	Total	\$47,845,751	\$0.42			0.41	-2.4%	\$	0.41	-2.4%
	# : #::	T , O . O , O !	Ψ01.12			· · · ·	2,0	Ψ		2
All Classes Combined	Basic					0.66				
	Excess					0.11				
	Total	\$215,695,024	\$0.83			0.77	-7.2%	\$	0.77	-7.2%

Sources: Column (1): Exhibit X-A

Column (2): X-B Page 2

Column (3): Exhibit IV-B page 1 col. (10) (Basic) and Exhibit IV-B page 2 col. (10) (Excess)

Column (4): Four Standard Classes - Exhibit VIII-A (Basic) and Exhibit VII-A, Pages 1 through 4 (Federal Excess).

Coke, Auger, Prep Plant Bituminous and Co-Gen Bituminous = Surface Bituminous

Prep Plant Anthracite, Co-Gen Anthracite = Surface Anthracite

Column (5): [Column (3) times Column (4)] divided by 10,000.

Column (6): [Column (5) divided by Column (2)] minus 1.0

Column (7): Column (2) x [1+Column (8)]

Column (8): Column (6) Limited to +-25%

		(1)	(2)	(3)	(4)	(5) Credibility	(6)	(7) Claim	(8)	(9)	(10)
		Estimated	Claim Fred	quency Per 100	Miner Years	Expected		Frequency	Change in		Frequency
	Class	Miner Years	Approved	Trended to	Indicated	Awarded	Credibility	Indicated w/	Indication	Payroll	Per \$1M
<u>Classification</u>	<u>Code</u>	<u>2007-2016</u>	(Eff 4/1/2017)	4/1/2018	(Eff 4/1/2018)	<u>Claims</u>	<u>Factor</u>	Credibility	After Cred.	<u>2007-2016</u>	<u>Payroll</u>
Underground: Anthracite	0160	212.6	1.228191	1.228191	0.488498	2.611	0.214	1.069897	-12.9%	9,780,689	0.232560
Bituminous	0158	18,762.1	0.099503	0.099503	0.070825	18.669	0.574	0.083042	-16.5%	1,298,136,351	0.012002
Surface: Anthracite	0153	3,829.4	0.415718	0.415718	0.313276	15.920	0.530	0.361424	-13.1%	185,450,672	0.074631
Bituminous	0156	13,323.1	0.097424	0.097424	0.112563	12.980	0.478	0.104660	7.4%	632,437,858	0.022048
Four Standard Classifications		36,127.2	0.138896	0.138896	0.114374	50.180		0.126330		2,125,805,570	0.021469
Coke	0154	1,272.4	0.010954	0.010954	0.011194	0.139	0.049	0.010966	0.1%	59,287,880	0.002353
Auger	0157	220.2	0.043473	0.043473	0.109790	0.096	0.041	0.046192	6.3%	10,342,915	0.009834
Co-Gen: Anthracite	0181	1,824.3	0.061594	0.061594	0.030971	1.124	0.141	0.057276	-7.0%	87,824,840	0.011897
Bituminous	0182	2,054.6	0.037985	0.037985	0.030407	0.780	0.117	0.037098	-2.3%	99,272,408	0.007678
Prep Plants: Anthracite	0183	1,280.4	0.128138	0.128138	0.084932	1.641	0.170	0.120793	-5.7%	61.635.944	0.025093
Bituminous	0184	3,837.4	0.072853	0.072853	0.042894	2.796	0.222	0.066202	-9.1%	263,978,506	0.009624
Other Classes		10,489.3	0.062688	0.062688	0.041065	6.576		0.058492		582,342,493	0.010536
Total		46,616.5	0.121749	0.121749	0.097879	56.756		0.111065		2,708,148,063	0.019118

Source: Column (1) – Exhibit VIII-B-2, Pages 1-3

Column (2) – Exhibit IV-B-4, Column (10)

Column (3) - Column (2) trended to 4/1/2018 @ 0.0%

Column (4) – Exhibit IV-B-3, Column (5)

Column (5) = (1) \* (3) / 100

Column (6) =  $[(5) / 56.756] \land (0.5)$ 

Column (7) = (4)\*(6) + ((3)\*(1-(6))

Column (8) = (7) / (2) - 1

Column (9) – Exhibit X-A

Column (10) = (7)\*(1) / [(9) \* 10,000]

Totals and Subtotals for Columns (2), (3), (4) and (7) are weighted using Column (1).

### COAL MINE COMPENSATION RATING BUREAU Federal Excess Occupational Disease Classification Frequency (Excess)

		(1)	(2)	(3)	(4)	(5) Credibility	(6)	(7) Claim	(8)	(9)	(10)
		Estimated	Claim Fred	quency Per 100	Miner Years	Expected		Frequency	Change in		Frequency
	Class	Miner Years	Approved	Trended to	Indicated	Awarded	Credibility	Indicated w/	Indication	Payroll	Per \$1M
<u>Classification</u>	<u>Code</u>	<u>2007-2016</u>	(Eff 4/1/2017)	4/1/2018	(Eff 4/1/2018)	<u>Claims</u>	<u>Factor</u>	Credibility	After Cred.	<u>2007-2016</u>	<u>Payroll</u>
Underground: Anthracite	0160	212.6	0.248253	0.248253	0.593358	0.528	0.192	0.314513	26.7%	9,780,689	0.068365
Bituminous	0158	18,762.1	0.041772	0.041772	0.045210	7.837	0.738	0.044309	6.1%	1,298,136,351	0.006404
Surface: Anthracite	0153	3,829.4	0.072503	0.072503	0.074625	2.776	0.439	0.073435	1.3%	185,450,672	0.015164
Bituminous	0156	13,323.1	0.005931	0.005931	0.012053	0.790	0.234	0.007364	24.2%	632,437,858	0.001551
Four Standard Classifications		36,127.2	0.033027	0.033027	0.039326	11.931		0.035362		2,125,805,570	0.006010
Coke	0154	1,272.4	0.005149	0.005149	0.002968	0.066	0.068	0.005001	-2.9%	59,287,880	0.001073
Auger	0157	220.2	0.010966	0.010966	0.003030	0.024	0.041	0.010641	-3.0%	10,342,915	0.002265
Co-Gen: Anthracite	0181	1,824.3	0.011440	0.011440	0.003520	0.209	0.121	0.010482	-8.4%	87,824,840	0.002177
Bituminous	0182	2,054.6	0.015810	0.015810	0.003608	0.325	0.150	0.013980	-11.6%	99,272,408	0.002893
Prep Plants: Anthracite	0183	1,280.4	0.102085	0.102085	0.083616	1.307	0.302	0.096507	-5.5%	61,635,944	0.020048
Bituminous	0184	3,837.4	0.013409	0.013409	0.004662	0.515	0.189	0.011756	-12.3%	263,978,506	0.001709
Other Classes		10,489.3	0.023308	0.023308	0.013655	2.446		0.021473		582,342,493	0.003868
Total		46,616.5	0.030840	0.030840	0.033550	14.377		0.032237		2,708,148,063	0.005549

Source: Column (1) – Exhibit VIII-B-2, Pages 1-3

Column (2) – Exhibit IV-B-6, Column (10)

Column (3) - Column (2) trended to 4/1/2018 @ 0.0%

Column (4) – Exhibit IV-B-5, Column (5)

Column (5) = (1) \* (3) / 100

Column (6) =  $[(5) / 14.377] \land (0.5)$ 

Column (7) = (4)\*(6) + ((3)\*(1-(6))

Column (8) = (7) / (2) - 1

Column (9) – Exhibit X-A

Column (10) = (7)\*(1) / [(9) \* 10,000]

Totals and Subtotals for Columns (2), (3), (4) and (7) are weighted using Column (1).

### Coal Mine Compensation Rating Bureau

### Federal Basic Occupational Disease Classification Frequency

			(1)	(2)	(3)	(4)	(5)	(6)
			Estimated Miner	Approved Frequency Per 100			Weighted Average	
		Class	Years	Miner Years	Modeled	Experience	of Cols.	Percent
<u>Classification</u>		<u>Code</u>	<u>2016</u>	<u>4/1/2017</u>	<u>Indication</u>	<u>Indication</u>	(3) & (4)	<u>Change</u>
Underground:		0160	3.0	1.228191	0.478776	0.491739	0.488498	-60.23%
	Bituminous	0158	1,553.3	0.099503	0.204043	0.026419	0.070825	-28.82%
Surface:	Anthracite	0153	354.6	0.415718	0.230516	0.340863	0.313276	-24.64%
	Bituminous	0156	554.1	0.097424	0.111163	0.113029	0.112563	<u>15.54%</u>
Four Standard	Classification	S	2,465.0	0.145898	0.187307	0.091688	0.115593	-20.77%
	Coke	0154	43.1	0.010954	0.013589	0.010395	0.011194	2.19%
	Auger	0157	7.3	0.043473	0.164341	0.091606	0.109790	152.55%
Co-Gen:	Anthracite	0181	182.2	0.061594	0.045924	0.025987	0.030971	-49.72%
	Bituminous	0182	212.0	0.037985	0.043666	0.025987	0.030407	-19.95%
D DI I	A 11 '11	0100	101 (	0.100100	0.107000	0.070000	0.00.4000	00.708
Prep Plants:	Anthracite Bituminous	0183 0184	101.6 241.8	0.128138 0.072853	0.127229 0.060466	0.070833 0.037037	0.084932 0.042894	-33.72% -41.12%
			-					
Other Classes			788.0	0.064339	0.059590	0.034915	0.041084	-36.14%
		Total	3,253.0	0.126141	0.156369	0.077935	0.097544	-22.67%

Source: Column (1) – Exhibit VIII-B-2, Pages 1-3

Column (2) – Exhibit IV-B-4, Column (10) Column (3) – Exhibit VIII-F, Pages 1-13 Column (4) – Exhibit VIII-B-2, Pages 1-3 Column (5) = (0.25) \* (3) + (0.75) \* (4)

Column (6) = (5) / (2) - 1

Totals and Subtotals are weighted using Column (1).

### COAL MINE COMPENSATION RATING BUREAU Federal Basic Occupational Disease Classification Frequency

<u>Classification</u>	Class <u>Code</u>	(1) Approved Claim Freq. Per \$1M Payroll 4/1/2017	(2)  Payroll  2006-2015	Estimated Awarded Claims 2006-2015 (1) x (2)	(4) Estimated Miner Years 2007-2016	(5) Estimated Miner Years 2016	(6) Adjustment <u>Factor</u>	(7) Average Weekly Wage 2006	(8) Payroll 2006	(9) Estimated Miner Years 2006-2015	(10) Approved Frequency Equivalent Per 100 Miner Years
Underground: Anthracite	0160	0.271970	11,059,453	3.007839	212.6	3.0	1.056	745	1,442,524	244.9000	1.228191
Bituminous	0158	0.014664	1,249,718,993	18.325879	18,762.1	1,553.3	1.505	745	70,465,937	18,417.4	0.099503
Surface: Anthracite	0153	0.087808	178,472,665	15.671328	3,829.4	354.6	1.056	745	12,065,323	3,769.7	0.415718
Bituminous	0156	0.020945	666,477,472	13.959371	13,323.1	554.1	1.056	745	63,798,502	14,328.5	0.097424
Four Standard Classifications	5		2,105,728,583		36,127.2	2,465.0			147,772,286	36,761	
Coke	0154	0.002421	69,711,550	0.168772	1,272.4	43.1	1.056	745	12,737,394	1,540.7	0.010954
Auger	0157	0.009431	11,016,970	0.103901	220.2	7.3	1.056	745	1,066,831	239.0	0.043473
Co-Gen: Anthracite	0181	0.013164	86,453,336	1.138072	1,824.3	182.2	1.056	745	8,412,527	1,847.7	0.061594
Bituminous	0182	0.008092	97,309,146	0.787426	2,054.6	212.0	1.056	745	9,423,575	2,073.0	0.037985
Prep Plants: Anthracite	0183	0.027242	61,063,554	1.663493	1,280.4	101.6	1.056	745	4,885,882	1,298.2	0.128138
Bituminous	0184	0.010790	262,519,362	2.832584	3,837.4	241.8	1.505	745	17,050,967	3,888.1	0.072853
Other Classes			588,073,918		10,489.3	788.0			53,577,176	10,886.7	
Total			2,693,802,501		46,616.5	3,253.0			201,349,462	47,647.2	

Source: Column (1) – Exhibit X-F

Column (2) – Exhibit X-A-1

Column (3) = (1)\*(2) / 1,000,000

Column (4) – Exhibit VIII-B-2, Pages 1-3

Column (5) – Exhibit VIII-B-2, Pages 1-3

Column (6) – Exhibit X-G Column (7) – Exhibit XII-D

Column (8) – Exhibit X-A-1

Column (9) = (4) - (5) + (8) / ((6)\*(7)\*52)

Column (10) = (3) / (9) \* 100

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Run Date: October 13, 2017 - 06:57:45 AM

PAB Effective Date - April 01, 2018 8,685,804,814.879020

### Coal Mine Compensation Rating Bureau

### Federal Excess Occupational Disease Classification Frequency

			(1)	(2)	(3)	(4)	(5)	(6)
			Estimated Miner	Approved Frequency Per 100			Weighted	
		Class	Years	Miner Years	Modeled	Experience	Average of Cols.	Percent
<u>Classification</u>		<u>Code</u>	<u>2016</u>	<u>4/1/2017</u>	Indication	<u>Indication</u>	(3) & (4)	<u>Change</u>
Underground:		0160	3.0	0.248253	0.160356	0.737692	0.593358	139.01%
	Bituminous	0158	1,553.3	0.041772	0.040703	0.046713	0.045210	8.23%
Surface:	Anthracite	0153	354.6	0.072503	0.076045	0.074152	0.074625	2.93%
	Bituminous	0156	554.1	0.005931	0.002097	0.015372	0.012053	103.22%
Four Standard	Classification	S	2,465.0	0.038387	0.037254	0.044456	0.042655	11.12%
	Coke	0154	43.1	0.005149	0.000194	0.003893	0.002968	-42.36%
	Auger	0157	7.3	0.010966	0.000362	0.003920	0.003030	-72.37%
Co-Gen:	Anthracite	0181	182.2	0.011440	0.002405	0.003892	0.003520	-69.23%
	Bituminous	0182	212.0	0.015810	0.002760	0.003890	0.003608	-77.18%
Prep Plants:	Anthracite	0183	101.6	0.102085	0.119491	0.071657	0.083616	-18.09%
	Bituminous	0184	241.8	0.013409	0.002012	<u>0.005546</u>	0.004662	<u>-65.23%</u>
Other Classes			788.0	0.024559	0.017336	0.013137	0.014186	-42.24%
		Total	3,253.0	0.035037	0.032429	0.036869	0.035759	2.06%

Source: Column (1) – Exhibit VIII-B-2, Pages 1-3

Column (2) – Exhibit IV-B-6, Column (10)

Column (3) – Exhibit VII-L, Pages 1-13

Column (4) – Exhibit VII-B-2, Pages 1-3 (Federal Excess Frequency)

Column (5) = (0.25) \* (3) + (0.75) \* (4)

Column (6) = (5) / (2) - 1

Totals and Subtotals are weighted using Column (1).

### COAL MINE COMPENSATION RATING BUREAU Federal Excess Occupational Disease Classification Frequency

<u>Classification</u>	Class <u>Code</u>	(1)  Approved Claim Freq. Per \$1M Payroll 4/1/2017	(2)  Payroll  2006-2015	Estimated Awarded Claims 2006-2015 (1) x (2)	(4) Estimated Miner Years 2007-2016	(5) Estimated Miner Years 2016	(6) Adjustment <u>Factor</u>	(7) Average Weekly Wage 2006	(8)  Payroll  2006	(9) Estimated Miner Years 2006-2015	(10) Approved Frequency Equivalent Per 100 Miner Years
Underground: Anthrac		0.054973	11,059,453	0.607971	212.6	3.0	1.056	745	1,442,524	244.9000	0.248253
Bitumin		0.006156	1,249,718,993	7.693270	18,762.1	1,553.3	1.505	745	70,465,937	18,417.4	0.041772
Surface: Anthrac		0.015314	178,472,665	2.733130	3,829.4	354.6	1.056	745	12,065,323	3,769.7	0.072503
Bitumin		0.001275	666,477,472	0.849759	13,323.1	554.1	1.056	745	63,798,502	14,328.5	0.005931
Four Standard Classif	ications		2,105,728,583		36,127.2	2,465.0			147,772,286	36,761	
Coke	0154	0.001138	69,711,550	0.079332	1,272.4	43.1	1.056	745	12,737,394	1,540.7	0.005149
Auger	0157	0.002379	11,016,970	0.026209	220.2	7.3	1.056	745	1,066,831	239.0	0.010966
Co-Gen: Anthrac		0.002445	86,453,336	0.211378	1,824.3	182.2	1.056	745	8,412,527	1,847.7	0.011440
Bitumin		0.003368	97,309,146	0.327737	2,054.6	212.0	1.056	745	9,423,575	2,073.0	0.015810
Prep Plants: Anthrac		0.021703	61,063,554	1.325262	1,280.4	101.6	1.056	745	4,885,882	1,298.2	0.102085
Bitumin		0.001986	262,519,362	0.521363	3,837.4	241.8	1.505	745	17,050,967	3,888.1	0.013409
Other Classes			588,073,918		10,489.3	788.0			53,577,176	10,886.7	
Total			2,693,802,501		46,616.5	3,253.0			201,349,462	47,647.2	

Source: Column (1) – Exhibit X-F

Column (2) – Exhibit X-A-1

Column (3) = (1)\*(2) / 1,000,000

Column (4) – Exhibit VIII-B-2, Pages 1-3

Column (5) – Exhibit VIII-B-2, Pages 1-3

Column (6) – Exhibit X-G

Column (7) – Exhibit XII-D Column (8) – Exhibit X-A-1

Column (9) = (4) - (5) + (8) / ((6)\*(7)\*52)

Column (10) = (3) / (9) \* 100

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		(1)		(2) Los	(3) ss Cost/Unl	(4) oaded	(5) Cre	(6) dibility	(7) Indicated v	(8) w/ Credibility	(9) Proposed	(10)	(11) Proposed
					Approved	<del></del>	Five Year		Indicated	<del></del>	Change	Proposed	Change
OL 15 11	0 1	5 Year	2016	Approved	on	Indicated	Expected	Credibility	Loss	Indicated	after	Loss	Excluding
Classification	<u>Code</u>	Payroll	Payroll	(Eff 4/01/2017)	<u>Level</u> [E	ff 04/01/2018)	Losses	<u>Factor</u>	Cost	Change	<u>Limitation</u>	Cost	Trend
Underground: Bituminous	1001	\$940,961,211	\$148,894,215	\$5.96	\$5.89	\$5.82	56,081,288	1.00	5.82	-2.3%	-2.3%	5.82	-1.2%
Surface: Anthracite	1012	\$114,241,435	20,810,850	8.13	8.03	8.09	9,287,829	1.00	8.09	-0.5%	-0.5%	8.09	0.7%
Bituminous	1014	\$261,786,377	28,999,042	2.39	2.36	2.22	6,256,694	1.00	2.22	-7.1%	-7.1%	2.22	-6.0%
Three Major Classifications		1,316,989,023	198,704,107	5.44	5.37	5.30	71,625,811						
Coke	1469	\$21,648,513	2,313,724	4.45	4.40	2.01	963,359	0.39	3.47	-22.0%	-22.0%	3.47	-21.1%
Co-Gen: Anthracite	1021	\$48,993,051	10,847,424	3.05	3.01	5.64	1,494,288	0.49	4.30	41.0%	25.0%	3.81	26.4%
Bituminous	1023	\$54,259,855	11,386,837	1.10	1.09	1.22	596,858	0.31	1.13	2.7%	2.7%	1.13	4.0%
Prep Plants: Anthracite	1025	\$39,749,120	6,971,270	4.44	4.39	4.98	1,764,861	0.53	4.70	5.9%	5.9%	4.70	7.1%
Bituminous	1023	\$167,681,065	22,131,423	1.76	1.74	2.93	2,951,187	0.69	2.56	45.5%	25.0%	2.20	26.5%
5.1011.11.1003	.02,	Ψ107/001/000	22/101/120	0		2.70	2,701,107	0.07	2.00	10.070	20.070	2.20	20.070
Auger	1015	\$3,595,698	372,496	16.14	15.95	7.46	580,346	0.30	13.40	-17.0%	-17.0%	13.40	-16.0%
Subtotal (6)		335,927,302	54,023,174	2.49	2.46	3.28	8,350,899						
Underground: Anthracite	1010	\$1,072,212	163,760	20.01	19.77	18.62 (a)	214,550	0.19	19.20 (	b) -4.0%	-4.0%	(c) 19.20	-2.9%
Subtotal (7)		336,999,514	54,186,934	2.54	2.51	3.33	8,565,449						
Total (Based on 5-year Payroll)		\$1,653,988,537	\$252,891,041	4.85	4.79	4.90	\$80,191,260		4.85				
Total (Based on 2016 Payroll, see Exhibit II)			\$252,891,041	4.99					5.00	0.2%	-0.8%	4.95	

Source: (1) Exhibit V-B

(2) Unloaded Loss Cost Current (Eff 4/01/2017) Exhibit X-B page 2

 $(3) = (2) \times \text{Trend} = (2) \times (0.988)$ 

0.988=Weighted average of 0.980 and 0.991

Weights derived from 5 year Medical (24,840,665) and Indemnity (56,361,956) ultimate losses. Exhibit V-B, pg. 1

(4) Exhibit V-B except Underground Anthracite for which see Ex V-A-

(5) Expected Losses = Column (1) times Column (2) divided by 100

(6) Factor Z = [(5)] divided by 6,256,694  $]^{(1/2)}$ 

(7) [Column (4) times Column (6)] plus [Column (3) times (1.0 minus Column (6))]

(8) Col.(7) / Col.(2) -1.0

(9) Loss costs changes limited to +25% increase , -25% decrease

(10) When Col. (8) equals Col. (9), then Col. (7). Otherwise, Col. (2) \* [1 + (9)].

(11) Col.(10)/.988/Col.(2)-1.000

(a) Underground Anthracite Indicated Loss Cost from V-A-2

(b) Average of Col. (3) and Col. (4).

(c) Average of Col.(3) and Proposed (limited, indicated) Loss Cost from V-A-2

### COAL MINE COMPENSATION RATING BUREAU Traumatic Loss and Classification Credibility

### Calculation of Anthracite Underground Loss Cost

Multiplicative Method (Anthracite: Underground vs. Surface)	<u>Indicated</u>	<u>Proposed</u>
Differential Factor from Study	2.66	2.66
Indicated Anthracite Surface Loss Cost	8.09 *	8.09 *
Indicated Anthracite Underground Loss Cost	21.52	21.52
Comparative Hazard Method #1 (Anthracite vs. Bituminous)		
Differential Factor from Study	2.41	2.41
Indicated Bituminous Underground Loss Cost:	5.82 *	5.82 *
Indicated Anthracite Underground Loss Cost	14.03	14.03
Comparative Hazard Method #2 (Surface vs. Underground)		
Differential Factor from Study	2.51	2.51
Indicated Anthracite Surface Loss Cost:	8.09 *	8.09 *
Indicated Anthracite Underground Loss Cost	20.31	20.31
Average	18.62	18.62

\* Souce: Exhibit V-A-1

Exhibit V-B Page 1

### All Classifications Combined (10 Classes)

	(1)	(2)	(3)	(4)	(5)
Accident	Reported	Loss	Trend	Ultimate	Loss
<u>Year</u>	Losses	<u>Development</u>	<u>Factor</u>	Losses	Cost
Indemnity					
2012	9,293,673	1.0230	1.0666	10,140,621	3.11
2013	7,461,258	1.0542	1.0762	8,465,021	2.81
2014	11,781,410	1.1090	1.0861	14,190,531	3.35
2015	9,249,942	1.2879	1.0959	13,055,456	3.73
<u>2016</u>	4,871,955	* 2.1106	1.1058	10,510,327 *	<u>4.16</u>
5 Years	\$42,658,238			\$56,361,956	3.41
Medical					
2012	5,519,600	1.1413	0.8669	5,461,055	1.67
2012	3,971,009	1.1502	0.8838	4,036,716	1.34
2013	6,043,218	1.1594	0.9021	6,320,570	1.49
2014	3,981,666	1.1600	0.9242	4,268,632	1.22
2015 2016		* 1.2672	0.7242	4,753,692 *	1.88
	<del></del> -	1.2072	0.7400	<del></del>	
5 Years	\$23,478,784			\$24,840,665	1.50
	(6)				
Indemnity &	Developed				
<u>Medical</u>	<u>Payroll</u>				
2012	326,146,817			15,601,676	4.78
2013	300,963,743			12,501,737	4.15
2014	423,814,574			20,511,101	4.84
2015	350,172,362			17,324,088	4.95
<u>2016</u>	252,891,041			15,264,019	6.04
5 Years	\$1,653,988,537			\$81,202,621	4.91

Source: (1) Sum of Exhibit V-B, pages 2 and 6 - column (1)

(2) Exhibit V-C

\* Claim 48759 has been

(3) Exhibit V-F

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capped at \$1,250,000. See V-B, page 3b

(4) (1) times (2) times (3)

(5) (4) divided by (6) times 100

(6) Sum of Exhibit V-B, pages 2 and 6 - column (6)

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Exhibit V-B Page 2

### Three 100% Credibility Classifications (3 Classes)

	(1)	(2)	(3)	(4)	(5)
Accident	Reported	Loss	Trend	Ultimate	Loss
<u>Year</u>	Losses	<u>Development</u>	<u>Factor</u>	Losses	Cost
Indemnity					
2012	7,803,063	1.0230	1.0666	8,514,170	3.31
2013	6,581,302	1.0542	1.0762	7,466,685	3.19
2014	10,929,542	1.1090	1.0861	13,164,469	3.81
2015	8,179,202	1.2879	1.0959	11,544,205	4.10
<u>2016</u>	3,936,374	* 2.1106	1.1058	8,326,773 *	<u>4.19</u>
5 Years	\$37,429,483			\$49,016,302	3.72
Madiaal					
Medical 2012	4 / 40 000	1 1412	0.0770	4 502 041	1 70
	4,642,282	1.1413	0.8669	4,593,041	1.79
2013	3,212,441	1.1502	0.8838	3,265,597	1.40
2014	5,379,594	1.1594	0.9021	5,626,489	1.63
2015	3,357,902	1.1600	0.9242	3,599,912	1.28
<u>2016</u>	0,141,004	* 1.2672	0.9460	3,768,390 *	1.90
5 Years	\$19,733,583			\$20,853,429	1.58
	(6)				
Indemnity &	Developed				
Medical	<u>Payroll</u>				
2012	257,177,479			13,107,211	5.10
2013	233,752,637			10,732,282	4.59
2014	345,747,513			18,790,958	5.44
2015	281,607,287			15,144,117	5.38
<u>2016</u>	198,704,107			12,095,163	6.09
5 Years	\$1,316,989,023			\$69,869,731	5.31

Source: (1) Sum of Exhibit V-B, pages 3,4 and 5 - column (1)

(2) Exhibit V-C

\* Claim 48759 has been

(3) Exhibit V-F capped at \$1,250,000. See V-B, page 3b

(4) (1) times (2) times (3)

(5) (4) divided by (6) times 100

(6) Sum of Exhibit V-B, pages 3,4 and 5 - column (6)

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### Exhibit V-B Page 3

### **Underground Bituminous 1001**

	(1)	(2)	(3)	(4)	(5)
Accident	Reported	Loss	Trend	Ultimate	Loss
<u>Year</u>	Losses	<u>Development</u>	<u>Factor</u>	Losses	Cost
<u>Indemnity</u>					
2012	5,194,310	1.0230	1.0666	5,667,677	3.67
2013	4,324,357	1.0542	1.0762	4,906,113	3.27
2014	9,827,712	1.1090	1.0861	11,837,331	4.36
2015	7,192,549	1.2879	1.0959	10,151,633	4.69
<u>2016</u>	3,166,932	* 2.1106	1.1058	6,530,971 *	4.39
5 Years	\$29,705,860			\$39,093,725	4.15
Medical					
2012	3,659,753	1.1413	0.8669	3,620,934	2.34
2013	2,016,708	1.1502	0.8838	2,050,078	1.37
2014	4,339,171	1.1594	0.9021	4,538,316	1.67
2015	2,689,997	1.1600	0.9242	2,883,870	1.33
<u>2016</u>	2,181,664	* 1.2672	0.9460	2,617,930 *	1.76
5 Years	\$14,887,293			\$15,711,128	1.67
	(6)				
Indemnity &	Developed				
<u>Medical</u>	<u>Payroll</u>				
2012	154,428,761			9,288,611	6.01
2013	149,953,068			6,956,191	4.64
2014	271,230,707			16,375,647	6.03
2015	216,454,460			13,035,503	6.02
<u>2016</u>	148,894,215			9,148,901	<u>6.15</u>
5 Years	\$940,961,211			\$54,804,853	5.82

Source: (1) CMCRB Database as of 04-30-2017

(2) Exhibit V-C

\* Claim 48759 has been

(3) Exhibit V-F

capped at \$1,250,000. See V-B, page 3b

(4) (1) times (2) times (3)

(5) (4) divided by (6) times 100

(6) Exhibit X-D

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### **Underground Bituminous 1001**

### Adjustment for Excess Claim 48759 (Accident Year 2016)

Uncapped Excess Claims Percent of Total Percent x 1,250,000	Indemnity 895,385 98.4% 1,229,404	Medical 15,000 1.6% 20,596	Total 910,385 100.00% 1,250,000
Total Reported Loss as of 04-30-2017	3,166,932	2,181,664	
Uncapped Excess Claims	895,385	15,000	
Reported Loss ex. Excess Claims	2,271,547	2,166,664	
Loss Development Factor	2.1106	1.2672	
Trend Factor	1.1058	0.9460	
Dev & Trended Loss ex. Excess Claims	5,301,567	2,597,334	
Excess Claims Capped at \$1,250,000	1,229,404	20,596	
Dev & Trended Loss w/Excess Claims Capped	6,530,971	2,617,930	

Note: This claim does not exceed the excess threshold of 1,250,000 until development and trending are applied.

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Exhibit V-B Page 4

### **Surface Anthracite 1012**

	(1)	(2)	(3)	(4)	(5)
Accident	Reported	Loss	Trend	Ultimate	Loss
<u>Year</u>	Losses	Development	<u>Factor</u>	Losses	Cost
<u>Indemnity</u>					
2012	1,372,181	1.0230	1.0666	1,497,230	5.69
2013	1,734,001	1.0542	1.0762	1,967,276	8.76
2014	471,075	1.1090	1.0861	567,403	2.77
2015	427,213	1.2879	1.0959	602,973	2.49
<u>2016</u>	662,880	2.1106	1.1058	1,547,097	7.43
5 Years	\$4,667,350			\$6,181,979	5.41
<u>Medical</u>					
2012	439,194	1.1413	0.8669	434,535	1.65
2013	760,965	1.1502	0.8838	773,557	3.45
2014	678,619	1.1594	0.9021	709,764	3.47
2015	355,912	1.1600	0.9242	381,563	1.58
<u>2016</u>	633,605	1.2672	0.9460	759,547	3.65
5 Years	\$2,868,295			\$3,058,966	2.68
	(6)				
Indemnity &	Developed				
<u>Medical</u>	<u>Payroll</u>				
2012	26,295,907			1,931,765	7.34
2013	22,449,824			2,740,833	12.21
2014	20,466,075			1,277,167	6.24
2015	24,218,779			984,536	4.07
<u>2016</u>	20,810,850			2,306,644	11.08
5 Years	\$114,241,435			\$9,240,945	8.09

Source: (1) CMCRB Database as of 04-30-2017

- (2) Exhibit V-C
- (3) Exhibit V-F
- (4) (1) times (2) times (3)
- (5) (4) divided by (6) times 100
- (6) Exhibit X-D

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Exhibit V-B Page 5

## Surface Bituminous 1014

	(1)	(2)	(3)	(4)	(5)
Accident	Reported	Loss	Trend	Ultimate	Loss
<u>Year</u>	Losses	<u>Development</u>	<u>Factor</u>	Losses	Cost
<u>Indemnity</u>					
2012	1,236,572	1.0230	1.0666	1,349,263	1.76
2013	522,944	1.0542	1.0762	593,296	0.97
2014	630,755	1.1090	1.0861	759,735	1.41
2015	559,440	1.2879	1.0959	789,599	1.93
<u>2016</u>	106,562	2.1106	1.1058	248,705	0.86
5 Years	\$3,056,273			\$3,740,598	1.43
Medical					
2012	543,335	1.1413	0.8669	537,572	0.70
2012	434,768	1.1502	0.8838	441,962	0.70
2014	361,804	1.1594	0.9021	378,409	0.70
2015	311,993	1.1600	0.9242	334,479	0.82
<u>2016</u>	326,095	1.2672	0.9460	390,913	1.35
5 Years	\$1,977,995			\$2,083,335	0.80
	(6)				
Indemnity &	Developed				
Medical	Payroll				
2012	76,452,811			1,886,835	2.47
2013	61,349,745			1,035,258	1.69
2014	54,050,731			1,138,144	2.11
2015	40,934,048			1,124,078	2.75
<u>2016</u>	28,999,042			639,618	2.21
5 Years	\$261,786,377			\$5,823,933	2.22

Source: (1) CMCRB Database as of 04-30-2017

- (2) Exhibit V-C
- (3) Exhibit V-F
- (4) (1) times (2) times (3)
- (5) (4) divided by (6) times 100
- (6) Exhibit X-D

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Exhibit V-B Page 6

# Seven Less Than 100% Credibility Classifications (7 Classes)

	(1)	(2)	(3)	(4)	(5)
Accident	Reported	Loss	Trend	Ultimate	Loss
<u>Year</u>	Losses	<u>Development</u>	<u>Factor</u>	Losses	Cost
<u>Indemnity</u>					
2012	1,490,610	1.0230	1.0666	1,626,451	2.36
2013	879,956	1.0542	1.0762	998,336	1.49
2014	851,868	1.1090	1.0861	1,026,062	1.31
2015	1,070,740	1.2879	1.0959	1,511,251	2.20
<u>2016</u>	935,581	2.1106	1.1058	2,183,554	4.03
5 Years	\$5,228,755			\$7,345,654	2.18
Medical					
2012	877,318	1.1413	0.8669	868,014	1.26
2013	758,568	1.1502	0.8838	771,119	1.15
2014	663,624	1.1594	0.9021	694,081	0.89
2015	623,764	1.1600	0.9242	668,720	0.98
<u>2016</u>	821,927	1.2672	0.9460	985,302	1.82
5 Years	\$3,745,201			\$3,987,236	1.18
	(6)				
Indemnity &	Developed				
<u>Medical</u>	<u>Payroll</u>				
2012	68,969,338			2,494,465	3.62
2013	67,211,106			1,769,455	2.63
2014	78,067,061			1,720,143	2.20
2015	68,565,075			2,179,971	3.18
<u>2016</u>	54,186,934			3,168,856	<u>5.85</u>
5 Years	\$336,999,514			\$11,332,890	3.36

Source: (1) Sum of Exhibit V-B, pages 7-13 - column (1)

- (2) Exhibit V-C
- (3) Exhibit V-F

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- (4) (1) times (2) times (3)
- (5) (4) divided by (6) times 100
- (6) Sum of Exhibit V-B, pages 7-13 column (6)

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Exhibit V-B Page 7

## **Coke 1469**

	(1)	(2)	(3)	(4)	(5)
Accident	Reported	Loss	Trend	Ultimate	Loss
<u>Year</u>	Losses	<u>Development</u>	<u>Factor</u>	Losses	Cost
<u>Indemnity</u>					
2012	0	1.0230	1.0666	0	0.00
2013	25,666	1.0542	1.0762	29,119	0.61
2014	8,157	1.1090	1.0861	9,825	0.22
2015	90,452	1.2879	1.0959	127,665	2.94
<u>2016</u>	22,494	2.1106	1.1058	52,499	2.27
5 Years	\$146,769			\$219,108	1.01
Medical					
2012	2,816	1.1413	0.8669	2,786	0.05
2013	35,484	1.1502	0.8838	36,071	0.75
2014	3,386	1.1594	0.9021	3,541	0.08
2015	141,675	1.1600	0.9242	151,886	3.50
<u>2016</u>	17,426	1.2672	0.9460	20,890	0.90
5 Years	\$200,787			\$215,174	0.99
	(6)				
Indemnity &	Developed				
<u>Medical</u>	<u>Payroll</u>			0.707	0.05
2012	5,738,105			2,786	0.05
2013	4,791,910			65,190	1.36
2014	4,464,398			13,366	0.30
2015	4,340,376			279,551	6.44
<u>2016</u>	2,313,724			73,389	<u>3.17</u>
5 Years	\$21,648,513			\$434,282	2.01

Source: (1) CMCRB Database as of 04-30-2017

- (2) Exhibit V-C
- (3) Exhibit V-F
- (4) (1) times (2) times (3)
- (5) (4) divided by (6) times 100
- (6) Exhibit X-D

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Exhibit V-B Page 8

# **Auger 1015**

	(1)	(2)	(3)	(4)	(5)
Accident	Reported	Loss	Trend	Ultimate	Loss
<u>Year</u>	Losses	<u>Development</u>	<u>Factor</u>	Losses	Cost
<u>Indemnity</u>					
2012	38,979	1.0230	1.0666	42,531	5.26
2013	62,225	1.0542	1.0762	70,596	6.88
2014	8,062	1.1090	1.0861	9,711	1.20
2015	31,531	1.2879	1.0959	44,503	7.64
<u>2016</u>	0	2.1106	1.1058	0	0.00
5 Years	\$140,797			\$167,341	4.65
<u>Medical</u>					
2012	66,406	1.1413	0.8669	65,702	8.13
2013	9,542	1.1502	0.8838	9,700	0.95
2014	2,714	1.1594	0.9021	2,839	0.35
2015	21,114	1.1600	0.9242	22,636	3.89
<u>2016</u>	132	1.2672	0.9460	158	0.04
5 Years	\$99,908			\$101,035	2.81
	(6)				
Indemnity &	Developed				
<u>Medical</u>	<u>Payroll</u>				
2012	808,208			108,233	13.39
2013	1,025,399			80,296	7.83
2014	806,976			12,550	1.55
2015	582,619			67,139	11.53
<u>2016</u>	372,496			158	0.04
5 Years	\$3,595,698			\$268,376	7.46

Source: (1) CMCRB Database as of 04-30-2017

- (2) Exhibit V-C
- (3) Exhibit V-F
- (4) (1) times (2) times (3)
- (5) (4) divided by (6) times 100
- (6) Exhibit X-D

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Exhibit V-B Page 9

## Co-Gen Anthracite 1021

	(1)	(2)	(3)	(4)	(5)
Accident	Reported	Loss	Trend	Ultimate	Loss
<u>Year</u>	Losses	<u>Development</u>	<u>Factor</u>	Losses	Cost
Indemnity					
2012	499,138	1.0230	1.0666	544,625	5.30
2013	94,879	1.0542	1.0762	107,643	1.29
2014	206,104	1.1090	1.0861	248,249	2.74
2015	100,480	1.2879	1.0959	141,818	1.35
<u>2016</u>	321,044	2.1106	1.1058	749,285	<u>6.91</u>
5 Years	\$1,221,645			\$1,791,620	3.66
Medical					
2012	173,221	1.1413	0.8669	171,384	1.67
2013	201,976	1.1502	0.8838	205,318	2.46
2014	104,878	1.1594	0.9021	109,691	1.21
2015	68,617	1.1600	0.9242	73,562	0.70
<u>2016</u>	343,130	1.2672	0.9460	411,334	3.79
5 Years	\$891,822			\$971,289	1.98
	(6)				
Indemnity &	Developed				
Medical	<u>Payroll</u>				
2012	10,273,004			716,009	6.97
2013	8,342,651			312,961	3.75
2014	9,060,883			357,940	3.95
2015	10,469,089			215,380	2.05
<u>2016</u>	10,847,424			1,160,619	10.70
5 Years	\$48,993,051			\$2,762,909	5.64

Source: (1) CMCRB Database as of 04-30-2017

- (2) Exhibit V-C
- (3) Exhibit V-F
- (4) (1) times (2) times (3)
- (5) (4) divided by (6) times 100
- (6) Exhibit X-D

Run Date: October 04, 2017 - 10:05:54 AM

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113,294,970.536400

Exhibit V-B Page 10

## Co-Gen Bituminous 1023

	(1)	(2)	(3)	(4)	(5)
Accident	Reported	Loss	Trend	Ultimate	Loss
<u>Year</u>	Losses	<u>Development</u>	<u>Factor</u>	Losses	Cost
Indemnity					
2012	65,117	1.0230	1.0666	71,051	0.79
2013	23,877	1.0542	1.0762	27,089	0.26
2014	27,715	1.1090	1.0861	33,382	0.28
2015	103,899	1.2879	1.0959	146,644	1.25
<u>2016</u>	6,706	2.1106	1.1058	15,651	0.14
5 Years	\$227,314			\$293,817	0.54
<u>Medical</u>					
2012	156,906	1.1413	0.8669	155,242	1.72
2013	33,928	1.1502	0.8838	34,489	0.33
2014	97,026	1.1594	0.9021	101,479	0.87
2015	45,902	1.1600	0.9242	49,210	0.42
<u>2016</u>	23,285	1.2672	0.9460	27,913	0.25
5 Years	\$357,047			\$368,333	0.68
	(6)				
Indemnity &	Developed				
<u>Medical</u>	<u>Payroll</u>				
2012	9,047,745			226,293	2.50
2013	10,355,884			61,578	0.59
2014	11,721,184			134,861	1.15
2015	11,748,205			195,854	1.67
<u>2016</u>	11,386,837			43,564	0.39
5 Years	\$54,259,855			\$662,150	1.22

Source: (1) CMCRB Database as of 04-30-2017

- (2) Exhibit V-C
- (3) Exhibit V-F
- (4) (1) times (2) times (3)
- (5) (4) divided by (6) times 100
- (6) Exhibit X-D

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Exhibit V-B Page 11

# **Prep Plants Anthracite 1025**

	(1)	(2)	(3)	(4)	(5)
Accident	Reported	Loss	Trend	Ultimate	Loss
<u>Year</u>	Losses	<u>Development</u>	<u>Factor</u>	Losses	Cost
Indemnity					
2012	113,881	1.0230	1.0666	124,259	1.43
2013	289,076	1.0542	1.0762	327,965	3.97
2014	56,749	1.1090	1.0861	68,353	0.83
2015	278,332	1.2879	1.0959	392,840	5.16
<u>2016</u>	174,885	2.1106	1.1058	408,164	<u>5.85</u>
5 Years	\$912,923			\$1,321,581	3.32
<u>Medical</u>					
2012	72,640	1.1413	0.8669	71,870	0.83
2013	246,838	1.1502	0.8838	250,922	3.04
2014	65,673	1.1594	0.9021	68,687	0.83
2015	148,554	1.1600	0.9242	159,261	2.09
<u>2016</u>	90,304	1.2672	0.9460	108,254	1.55
5 Years	\$624,009			\$658,994	1.66
	(6)				
Indemnity &	Developed				
Medical	Payroll				
2012	8,671,140			196,129	2.26
2013	8,265,665			578,887	7.00
2014	8,234,771			137,040	1.66
2015	7,606,274			552,101	7.25
<u>2016</u>	6,971,270			516,418	<u>7.40</u>
5 Years	\$39,749,120			\$1,980,575	4.98

Source: (1) CMCRB Database as of 04-30-2017

- (2) Exhibit V-C
- (3) Exhibit V-F
- (4) (1) times (2) times (3)
- (5) (4) divided by (6) times 100
- (6) Exhibit X-D

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Exhibit V-B

Page 12

# Prep Plants Bituminous 1027

	(1)	(2)	(3)	(4)	(5)
Accident	Reported	Loss	Trend	Ultimate	Loss
<u>Year</u>	Losses	<u>Development</u>	<u>Factor</u>	Losses	Cost
Indemnity					
2012	773,495	1.0230	1.0666	843,985	2.47
2013	384,233	1.0542	1.0762	435,924	1.27
2014	545,081	1.1090	1.0861	656,542	1.51
2015	297,177	1.2879	1.0959	419,438	1.25
2016	410,452	2.1106	1.1058	957,955	4.33
5 Years	\$2,410,438			\$3,313,844	1.98
<u>Medical</u>					
2012	405,329	1.1413	0.8669	401,030	1.17
2013	230,800	1.1502	0.8838	234,619	0.68
2014	389,947	1.1594	0.9021	407,844	0.94
2015	125,602	1.1600	0.9242	134,654	0.40
<u>2016</u>	347,650	1.2672	0.9460	416,753	1.88
5 Years	\$1,499,328			\$1,594,900	0.95
	(6)				
Indemnity &	(°) Developed				
Medical	Payroll				
2012	34,211,729			1,245,015	3.64
2013	34,253,697			670,543	1.95
2014	43,520,040			1,064,386	2.45
2015	33,564,176			554,092	1.65
<u>2016</u>	22,131,423			1,374,708	6.21
5 Years	\$167,681,065			\$4,908,744	2.93

Source: (1) CMCRB Database as of 04-30-2017

- (2) Exhibit V-C
- (3) Exhibit V-F
- (4) (1) times (2) times (3)
- (5) (4) divided by (6) times 100
- (6) Exhibit X-D

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Exhibit V-B Page 13

# **Underground Anthracite - 1010**

	(1)	(2)	(3)	(4)	(5)
Accident	Reported	Loss	Trend	Ultimate	Loss
<u>Year</u>	Losses	Development	<u>Factor</u>	Losses	Cost
Indemnity					
2012	0	1.0230	1.0666	0	0.00
2013	0	1.0542	1.0762	0	0.00
2014	0	1.1090	1.0861	0	0.00
2015	168,869	1.2879	1.0959	238,343	93.71
<u>2016</u>	0	2.1106	1.1058	0	0.00
5 Years	\$168,869			\$238,343	22.23
A A o oli o ol					
Medical 2012	0	1.1413	0.8669	0	0.00
2012	0	1.1413	0.8838	0	0.00
2013	0	1.1594	0.9021	0	0.00
2014	72,300	1.1600	0.9021	77,511	30.48
2013 2016	72,300	1.2672	0.9242	77,311	0.00
		1.20/2	0.7400		
5 Years	\$72,300			\$77,511	7.23
	(6)				
Indemnity &	Developed				
Medical	<u>Payroll</u>				
2012	219,407			0	0.00
2013	175,900			0	0.00
2014	258,809			0	0.00
2015	254,336			315,854	124.19
<u>2016</u>	163,760			0	0.00
5 Years	\$1,072,212			\$315,854	29.46

Source: (1) CMCRB Database as of 04-30-2017

- (2) Exhibit V-C
- (3) Exhibit V-F
- (4) (1) times (2) times (3)
- (5) (4) divided by (6) times 100
- (6) Exhibit X-D

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# Five Other Classifications [Page 6 less Pages 8&13] - (5 Classes)

	(1)	(2)	(3)	(4)	(5)
Accident	Reported	Loss	Trend	Ultimate	Loss
<u>Year</u>	Losses	<u>Development</u>	<u>Factor</u>	Losses	Cost
<u>Indemnity</u>					
2012	1,451,631	1.0230	1.0666	1,583,920	2.33
2013	817,731	1.0542	1.0762	927,740	1.41
2014	843,806	1.1090	1.0861	1,016,351	1.32
2015	870,340	1.2879	1.0959	1,228,405	1.81
<u>2016</u>	935,581	2.1106	1.1058	2,183,554	4.07
5 Years	\$4,919,089			\$6,939,970	2.09
Medical					
2012	810,912	1.1413	0.8669	802,312	1.18
2013	749,026	1.1502	0.8838	761,419	1.15
2014	660,910	1.1594	0.9021	691,242	0.90
2015	530,350	1.1600	0.9242	568,573	0.84
<u>2016</u>	821,795	1.2672	0.9460	985,144	1.84
5 Years	\$3,572,993			\$3,808,690	1.15
	(4)				
Indemnity &	(6) Developed				
Medical	Payroll				
2012	67,941,723			2,386,232	3.51
2013	66,009,807			1,689,159	2.56
2014	77,001,276			1,707,593	2.22
2015	67,728,120			1,796,978	2.65
<u>2016</u>	53,650,678			3,168,698	<u>5.91</u>
5 Years	\$332,331,604			\$10,748,660	3.23
3 . 0 0 0	T002,00.,001			Ψ. σ,σ,σσσ	0.20

Source: (1) Exhibit V-B, page 6 minus page 8, column (1) minus page 13, column (1)

- (2) Exhibit V-C
- (3) Exhibit V-F
- (4) (1) times (2) times (3)
- (5) (4) divided by (6) times 100
- (6) Exhibit V-B, page 6 minus page 13 column (6)

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# Coal Mine Compensation Rating Bureau Indemnity & Funeral Traumatic Loss Development Selected Loss Development Factors

(1)	(2) Average	(3)	(4)	(5) Derived	(6)	(7)	(8) Accumulated
Development	of Middle	PCRB	CMCRB vs. PCRB	Development	Selected	Differences	Selected
Period	<u>Four</u>	<u>Factor</u>	<u>Comparison</u>	<u>Factor</u>	<u>Factor</u>	Average vs Selected	<u>Factor</u>
1:2	1.6388	1.3861	0.2527	1.6388	1.6388	0.0000	2.1106
2:3	1.1613	1.1033	0.0580	1.1613	1.1613	0.0000	1.2879
3:4	1.0520	1.0286	0.0234	1.0520	1.0520	0.0000	1.1090
4:5	1.0305	1.0052	0.0253	1.0305	1.0305	0.0000	1.0542
5:6	0.9916	1.0072	-0.0156	1.0017	1.0017	-0.0101	1.0230
6:7	1.0083	1.0027	0.0056	1.0017	1.0017	0.0066	1.0212
7:8	1.0066	1.0015	0.0051	1.0016	1.0016	0.0050	1.0195
8:9	0.9969	1.0007	-0.0038	1.0015	1.0015	-0.0046	1.0179
9:10	1.0066	1.0016	0.0050	1.0015	1.0015	0.0051	1.0163
10:11	1.0008	1.0010	-0.0002	1.0014	1.0014	-0.0006	1.0148
11:12	0.9998	1.0004	-0.0002	1.0014	1.0014	-0.0005	1.0134
12:13	1.0011	1.0004	0.0011	1.0013	1.0013	-0.0013	1.0134
13:14	0.9952	0.9995	-0.0043	1.0013	1.0013	-0.0060	1.0121
14:15	1.0018	1.0001	0.0017	1.0012	1.0012	0.0007	1.0096
15:16	1.0018	1.0001	0.0017	1.0010	1.0011	-0.0006	1.0076
16:17	0.9996	0.9990	0.0002	1.0010	1.0010	-0.0014	1.0003
17:18	1.0017	0.9999	0.0008	1.0009	1.0010	0.0008	1.0064
18:19	1.0053	0.9991	0.0010	1.0007	1.0007	0.0045	1.0055
19:20	1.0033	1.0003	0.0032	1.0008	1.0008	0.0045	1.0033
17.20	1.0000	1.0000	0.0000	1.0000	1.0000	0.0020	1.007/
20:Ult	XX	1.0038	XX	1.0039	1.0039		1.0039

#### Sources:

- (1) Reports spanned by age-to-age factors
- (2) Exhibit V-D Page 1 and VI-A Page 4
- (3) Exhibit V-D-3
- (4) Col.(2) Col.(3)
- (5) Exhibit V-D-2 Col.(6)
- (6) Selected equal to Col.(5) adjusted to balance
- (7) Col.(2) Col.(6)
- (8) Upward accumulation of Col.(6)

## Coal Mine Compensation Rating Bureau Medical Traumatic Loss Development Selected Loss Development Factors

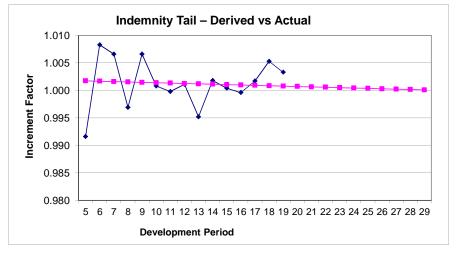
(1)	(2) Average	(3)	(4)	(5) Derived	(6)	(7)	(8) Accumulated
Development	of Middle	PCRB	CMCRB vs. PCRB	Development	Selected	Differences	Selected
<u>Period</u>	<u>Four</u>	<u>Factor</u>	<u>Comparison</u>	<u>Factor</u>	<u>Factor</u>	Average vs Selected	<u>Factor</u>
1:2	1.0924	1.0775	0.0149	1.0924	1.0924	0.0000	1.2672
2:3	1.0005	1.0281	-0.0276	1.0005	1.0005	0.0000	1.1600
3:4	1.0112	1.0038	0.0074	1.0080	1.0080	0.0032	1.1594
4:5	1.0144	1.0113	0.0031	1.0078	1.0078	0.0066	1.1502
5:6	0.9999	1.0029	-0.0030	1.0075	1.0075	-0.0076	1.1413
6:7	1.0006	1.0073	-0.0067	1.0073	1.0073	-0.0067	1.1328
7:8	1.0012	1.0101	-0.0089	1.0071	1.0071	-0.0059	1.1246
8:9	1.0072	1.0091	-0.0019	1.0069	1.0069	0.0003	1.1167
9:10	1.0119	1.0072	0.0047	1.0066	1.0066	0.0053	1.1091
10:11	1.0169	1.0054	0.0115	1.0064	1.0064	0.0105	1.1018
11:12	1.0086	1.0112	-0.0026	1.0062	1.0062	0.0024	1.0948
12:13	1.0036	1.0068	-0.0032	1.0059	1.0059	-0.0023	1.0881
13:14	1.0038	1.0036	0.0002	1.0057	1.0057	-0.0019	1.0817
14:15	1.0087	1.0093	-0.0006	1.0055	1.0055	0.0032	1.0755
15:16	1.0011	1.0019	-0.0008	1.0053	1.0053	-0.0042	1.0696
16:17	0.9938	1.0030	-0.0092	1.0050	1.0050	-0.0112	1.0640
17:18	1.0115	1.0071	0.0044	1.0048	1.0048	0.0067	1.0587
18:19	1.0014	0.9976	0.0038	1.0046	1.0046	-0.0032	1.0536
19:20	1.0129	1.0094	0.0035	1.0044	1.0044	0.0085	1.0488
20:UIt	xx	1.0473	xx	1.0442	1.0442		1.0442

#### Sources:

- (1) Reports spanned by age-to-age factors
- (2) Exhibit V-E Page 1 and VI-B Page 4
- (3) Exhibit V-E-3
- (4) Col.(2) Col.(3)
- (5) Exhibit V-E-2 Col.(6)
- (6) Selected equal to Col.(5) adjusted to balance
- (7) Col.(2) Col.(6)
- (8) Upward accumulation of Col.(6)

# Exhibit V-D-1 is the same as VI-A-4

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Development	Age-to-Age	Derived	Accumulated	Model	Accumulated	Derived	Accumulated	Tail	Model	Accumulated
Period	<u>Factor</u>	<u>Factor</u>	Age-to-Age Fac.	<u>Factors</u>	Model Factors	<u>Factor</u>	<b>Derived Factor</b>	Devel. Period	<u>Factors</u>	Model Factors
1	1.6388	1.6388	2.1024	1.6388	XX	XX	XX			
2	1.1613	1.1613	1.2829	1.1613	XX	XX	XX			
3	1.0520	1.0520	1.1047	1.0520	XX	XX	XX			
4	1.0305	1.0305	1.0501	1.0305	XX	XX	XX			
5	0.9916	1.0017	1.0190	1.0017	1.0190	1.0017	1.0190			
6	1.0083	1.0017	1.0277	1.0017	1.0172	1.0017	1.0172			
7	1.0066	1.0016	1.0192	1.0016	1.0155	1.0016	1.0155			
8	0.9969	1.0015	1.0125	1.0015	1.0139	1.0015	1.0139			
9	1.0066	1.0015	1.0157	1.0015	1.0124	1.0015	1.0124			
10	1.0008	1.0014	1.0090	1.0014	1.0109	1.0014	1.0109			
11	0.9998	1.0013	1.0082	1.0013	1.0095	1.0013	1.0095			
12	1.0011	1.0013	1.0084	1.0013	1.0081	1.0013	1.0081			
13	0.9952	1.0012	1.0073	1.0012	1.0069	1.0012	1.0069			
14	1.0018	1.0011	1.0122	1.0011	1.0057	1.0011	1.0057			
15	1.0004	1.0010	1.0103	1.0010	1.0046	1.0010	1.0046			
16	0.9996	1.0010	1.0099	1.0010	1.0035	1.0010	1.0035			
17	1.0017	1.0009	1.0103	1.0009	1.0025	1.0009	1.0025			
18	1.0053	1.0008	1.0086	1.0008	1.0016	1.0008	1.0016			
19	1.0033	1.0008	1.0033	1.0008	1.0008	1.0008	1.0008			
20		1.0007						20	1.0007	1.0040
21		1.0006						21	1.0006	1.0033
22		1.0006						22	1.0006	1.0026
23		1.0005						23	1.0005	1.0021
24		1.0004						24	1.0004	1.0016
25		1.0004						25	1.0004	1.0011
26		1.0003						26	1.0003	1.0008
27		1.0002						27	1.0002	1.0005
28		1.0002						28	1.0002	1.0002
29		1.0001						29	1.0001	1.0001



Source:

- (1) Development Period: e.g."1" = 12 months to 24 months
- (2) Exhibit V-D-1 and VI-A-4
- (3) 1 thru 4 Col.(2) 5 thru 19 Col. (7)
  - 20 thru 29 Col. (10)
- (4) = Accumulation of Col.(2)
- (5) From Model: Refer to Written Report
- (6) Accumulation of Col.(5)
- (7) Col.(5) adjusted
- (8) Accumulation of Col.(7)
- (9) Tail Development Period
- (10) Final Tail Calculation
- (11) Accumulation of Col. (10)

CMCRB tail factor	1.0040
PCRB tail factor Selected Tail Factor	1.0038
Selected Tail Factor	1.0039

# Coal Mine Compensation Rating Bureau Traumatic Loss Development Indemnity & Funeral Loss Development Tail Factor PCRB Development and Tail Factors

(1)	(2)	(3)	(4)
	Age-to-Age		Cumulative
Span of	Incurred Loss	Span of	Incurred Loss
<u>Maturities</u>	<u>Factors</u>	<u>Maturities</u>	<u>Factors</u>
1 to 2	1.3861	1 to Ult	1.6082
2 to 3	1.1033	2 to Ult	1.1603
3 to 4	1.0286	3 to Ult	1.0516
4 to 5	1.0052	4 to Ult	1.0224
5 to 6	1.0072	5 to Ult	1.0171
6 to 7	1.0027	6 to Ult	1.0098
7 to 8	1.0015	7 to Ult	1.0071
8 to 9	1.0007	8 to Ult	1.0056
9 to 10	1.0016	9 to Ult	1.0049
10 to 11	1.0010	10 to Ult	1.0033
11 to 12	1.0004	11 to Ult	1.0023
12 to 13	1.0000	12 to Ult	1.0019
13 to 14	0.9995	13 to Ult	1.0019
14 to 15	1.0001	14 to Ult	1.0024
15 to 16	1.0002	15 to Ult	1.0023
16 to 17	0.9990	16 to Ult	1.0021
17 to 18	0.9999	17 to Ult	1.0031
18 to 19	0.9991	18 to Ult	1.0032
19 to 20	1.0003	19 to Ult	1.0041
20 to Ult	1.0038	20 to Ult	1.0038
20 to 21	1.0013		
21 to 22	0.9999		
22 to 23	0.9995		
23 to 24	1.0004		
24 to 25	0.9999		
25 to 26	1.0011		
26 to 27	1.0001		
27 to 28	1.0003		
Beyond	1.0013		

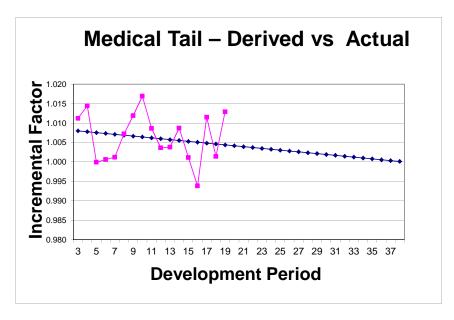
Source: PCRB Loss Cost Filing effective April 1, 2017 - Exhibit 6, page 6.2

<sup>\*</sup> The 20:Ult Factor is the product of PCRB factors beyond 19:20.

# Exhibit V-E-1 is the same as VI-B-4

#### Coal Mine Compensation Rating Bureau Medical Tail – Derived vs Actual

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Average		Adjusted	Accumulated Adjusted	Derived	Accumulated	Tail	Derived	Accumulation of
Development	Age-toAge	PCRB	Age-to-Age	Age-to-Age	Development	Derived	Development	Development	Derived Subsequent
Period	<u>Factor</u>	<u>Factors</u>	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>	Period	<u>Factor</u>	<u>Factors</u>
1	1.0924		1.0924	1.2135	1.0924	1.2135	20	1.0041	1.0411
2	1.0005		1.0005	1.1109	1.0005	1.1109	21	1.0039	1.0368
3	1.0112		1.0112	1.1103	1.0080	1.1103	22	1.0037	1.0327
4	1.0144		1.0144	1.0980	1.0078	1.1015	23	1.0035	1.0289
5	0.9999		0.9999	1.0824	1.0075	1.0931	24	1.0032	1.0254
6	1.0006		1.0006	1.0826	1.0073	1.0849	25	1.0030	1.0220
7	1.0012		1.0012	1.0819	1.0071	1.0770	26	1.0028	1.0190
8	1.0072		1.0072	1.0806	1.0069	1.0695	27	1.0026	1.0161
9	1.0119		1.0119	1.0729	1.0066	1.0622	28	1.0023	1.0135
10	1.0169	1.0054	1.0112	1.0603	1.0064	1.0552	29	1.0021	1.0112
11	1.0086	1.0112	1.0099	1.0486	1.0062	1.0485	30	1.0019	1.0090
12	1.0036	1.0068	1.0052	1.0383	1.0059	1.0420	31	1.0017	1.0071
13	1.0038	1.0036	1.0037	1.0329	1.0057	1.0359	32	1.0014	1.0054
14	1.0087	1.0093	1.0090	1.0291	1.0055	1.0300	33	1.0012	1.0040
15	1.0011	1.0019	1.0015	1.0199	1.0053	1.0243	34	1.0010	1.0027
16	0.9938	1.0030	0.9984	1.0184	1.0050	1.0190	35	1.0008	1.0017
17	1.0115	1.0071	1.0093	1.0200	1.0048	1.0139	36	1.0005	1.0010
18	1.0014	0.9976	0.9995	1.0106	1.0046	1.0090	37	1.0003	1.0004
19	1.0129	1.0094	1.0112	1.0112	1.0044	1.0044	38	1.0001	1.0001



CMCRB derived tail factor	1.0411
PCRB tail factor	1.0473
Selected	1.0442

Sources: (1) Development period:e.g. "1" =12 months to 24 months

- (2) Exhibit VI-B-4
- (3) PCRB Factors (Exhibit V-E-3)
- (4) (1) thru (9): Col. (2)
  - (10) thru (19): average of Col. (2) and Col. (3)
- (5) Accumulation of (4)
- (6) See (4) above plus refer to written report.
- (7) Accumulation of (6)
- (8) Tail Factor Development Periods
- (9) Final Tail Calculation
- (10) Upward accumulation of Col. (9)

# Coal Mine Compensation Rating Bureau Traumatic Loss Development Medical Loss Development Tail Factor PCRB Development and Tail Factors

(1)	(2) Age-to-Age	(3)	(4) Cumulative
Span of	Incurred Loss	Span of	Incurred Loss
<u>Maturities</u>	<u>Factors</u>	<u>Maturities</u>	<u>Factors</u>
	<del></del>	<del></del>	
1 to 2	1.0775	1 to Ult.	1.2906
2 to 3	1.0281	2 to Ult.	1.1978
3 to 4	1.0038	3 to Ult.	1.1651
4 to 5	1.0113	4 to Ult.	1.1606
5 to 6	1.0029	5 to Ult.	1.1477
6 to 7	1.0073	6 to Ult.	1.1444
7 to 8	1.0101	7 to Ult.	1.1361
8 to 9	1.0091	8 to Ult.	1.1247
9 to 10	1.0072	9 to Ult.	1.1146
10 to 11	1.0054	10 to Ult.	1.1066
11 to 12	1.0112	11 to Ult.	1.1007
12 to 13	1.0068	12 to Ult.	1.0885
13 to 14	1.0036	13 to Ult.	1.0811
14 to 15	1.0093	14 to Ult.	1.0772
15 to 16	1.0019	15 to Ult.	1.0673
16 to 17	1.0030	16 to Ult.	1.0653
17 to 18	1.0071	17 to Ult.	1.0621
18 to 19	0.9976	18 to Ult.	1.0546
19 to 20	1.0094	19 to Ult.	1.0571
20 to Ult.	1.0473	20 to Ult.	1.0473
20 to 21	1.0082		
21 to 22	1.0055		
22 to 23	1.0017		
23 to 24	1.0066		
24 to 25	1.0040		
25 to 26	1.0079		
26 to 27	1.0025		
27 to 28	1.0029		
Beyond	1.0071		

Source:PCRB Loss Cost Filing effective April 1, 2017 - Exhibit 6, page 6.14

File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-05-CDE.xlsm]V-E-3 PAB Run Date: September 15, 2017 - 01:12:41 PM Effective Date - April 01, 2018

<sup>\*</sup> The 20:Ult Factor is the product of PCRB factors beyond 19:20.

#### Traumatic Loss Trend

# Indemnity, Funeral and Medical for All Classes Combined

## Trend Factors

#### Indemnity and Funeral

	Annua	l Percentage Change:	-0.9%	Annual			HB 1846	Protz	Adjusted
				Percentage		Trend	Adjustment	Adjustment	Trend
Accio	lent Year	Trend Period - Ye	ars	Change	<u>Formula</u>	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>
201	2	7-1-12 to 4-1-2019	6.75	-0.9%	(1-0.009) ^ 6.75	0.9408	1.0000	1.1337	1.0666
201	3	7-1-13 to 4-1-2019	5.75	-0.9%	(1-0.009) ^ 5.75	0.9493	1.0000	1.1337	1.0762
201	4	7-1-14 to 4-1-2019	4.75	-0.9%	(1-0.009) ^ 4.75	0.9580	1.0000	1.1337	1.0861
201	5	7-1-15 to 4-1-2019	3.75	-0.9%	(1-0.009) ^ 3.75	0.9667	1.0000	1.1337	1.0959
201	6	7-1-16 to 4-1-2019	2.75	-0.9%	(1-0.009) \ 2.75	0.9754	1.0000	1.1337	1.1058

#### Medical and Medical Only

Annual Percentage Change: -2.0%

			Annual			HB 1846	Protz	Adjusted
			Percentage		Trend	Adjustment	Adjustment	Trend
Accident Year	Trend Period - Ye	ears	Change	<u>Formula</u>	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>	Factor
2012	7-1-12 to 4-1-2019	6.75	-2.0%	(1-0.020) ^ 6.75	0.8725	0.9936	1.0000	0.8669
2013	7-1-13 to 4-1-2019	5.75	-2.0%	(1-0.020) ^ 5.75	0.8903	0.9927	1.0000	0.8838
2014	7-1-14 to 4-1-2019	4.75	-2.0%	(1-0.020) ^ 4.75	0.9085	0.9930	1.0000	0.9021
2015	7-1-15 to 4-1-2019	3.75	-2.0%	(1-0.020) ^ 3.75	0.9270	0.9970	1.0000	0.9242
2016	7-1-16 to 4-1-2019	2.75	-2.0%	(1-0.020) ^ 2.75	0.9460	1.0000	1.0000	0.9460

Source: Annual Percentage Change - Exhibit V-K

This exhibit has been eliminated as redundant. This exhibit number is reserved for future use.

Run Date: October 03, 2017 - 02:59:04 PM

# Traumatic Loss Trend Indemnity and Funeral losses for All Classes Combined

	(1)	(2)	(3)	(4)
	Indemnity	Loss		Loss
	Case Incurred	Development	Ultimate	Cost
Year	Losses	<u>Factors</u>	Losses	Premium
2007	6,652,402	1.0148	6,434,140 *	9,611,826
2008	9,672,629	1.0163	9,830,293	11,458,931
2009	5,295,524	1.0179	5,390,314	10,610,843
2010	7,274,640	1.0195	7,416,495	12,274,960
2011	8,635,331	1.0212	8,818,400	14,908,569
2012	9,293,673	1.0230	9,507,427	15,465,386
2013	7,461,258	1.0542	7,865,658	14,421,627
2014	11,781,410	1.1090	13,065,584	21,744,166
2015	9,249,942	1.2879	11,913,000	18,140,127
2016	4,871,955	2.1106	9,622,948 *	13,017,578

#### Sources:

- (1) Exhibit V-D,pg.1 or Exhibit VI-A,pg.4
- (2) Exhibit V-C-1 Column (8)
- (3) = (1)x(2)
- (4) Exhibit X-B
- \* Note: Ultimate losses for 2007 & 2016 reflect limitation on large claims, see Exhibits V-J-1 & V-J-2

## Traumatic Loss Trend Medical and Medical Only Losses for All Classes Combined

	(1)	(2)	(3)	(4)
	Medical	Loss		Loss
	Case Incurred	Development	Ultimate	Cost
<u>Year</u>	Losses	<u>Factors</u>	Losses	Premium
2007	5,819,126	1.1018	5,171,663 *	9,611,826
2008	3,608,725	1.1091	4,002,437	11,458,931
2009	2,986,651	1.1167	3,335,193	10,610,843
2010	4,459,354	1.1246	5,014,990	12,274,960
2011	5,654,038	1.1328	6,404,894	14,908,569
2012	5,519,600	1.1413	6,299,519	15,465,386
2013	3,971,009	1.1502	4,567,455	14,421,627
2014	6,043,218	1.1594	7,006,507	21,744,166
2015	3,981,666	1.1600	4,618,733	18,140,127
2016	3,963,291	1.2672	5,023,274 *	13,017,578

#### Sources:

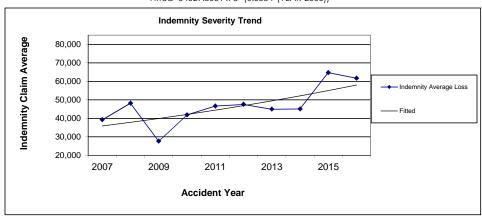
- (1) Exhibit V-E,pg.1 or Exhibit VI-B,pg.4
- (2) Exhibit V-C-2 Column (8)
- (3) = (1)x(2)
- (4) Exhibit X-B
- \* Note: Ultimate losses for 2007 & 2016 reflect limitation on large claims, see Exhibits V-J-1 & V-J-2

#### Severity Trend

	(1)	(2)	(3)	(4) Annual
	Ultimate	Claim	Average	Average Loss
<u>Year</u>	Losses	<u>Counts</u>	Loss	<u>Change</u>
2007	6,434,140 *	164	39,233	
2008	9,830,293	204	48,188	22.8%
2009	5,390,314	195	27,643	-42.6%
2010	7,416,495	177	41,901	51.6%
2011	8,818,400	189	46,658	11.4%
2012	9,507,427	200	47,537	1.9%
2013	7,865,658	175	44,947	-5.4%
2014	13,065,584	290	45,054	0.2%
2015	11,913,000	184	64,745	43.7%
2016	9,622,948 *	156	61,686	-4.7%

Indemnity Severity Trend Factor: 1.070
Source: Summary Exhibit (V-K)

#### Fitted=34029.3031 x e^(0.0534\*(YEAR-2006))



Sources:

(1) Exhibit V-H page 1, Column (3)

(2) Exhibit VI-C-1

(4) (Current Avg. Loss / Prior Avg. Loss -1.0) x 100

\* Note: Ultimate losses for 2007 & 2016 reflect limitation on large claims, see Exhibits V-J-1 & V-J-2

Traumatic Loss Trend Medical and Medical Only Losses for All Classes Combined

Exhibit V-I Page 2 Summary

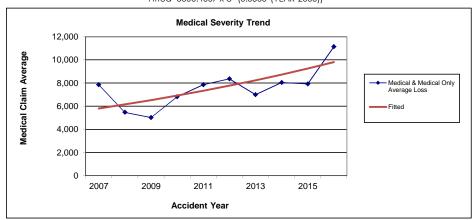
#### Severity Trend

	(1)	(2)	(3)	(4) Annual
	Ultimate	Claim	Average	Average Loss
<u>Year</u>	Losses	<u>Counts</u>	Loss	<u>Change</u>
2007	5,171,663 *	659	7,848	
2008	4,002,437	732	5,468	-30.3%
2009	3,335,193	664	5,023	-8.1%
2010	5,014,990	736	6,814	35.7%
2011	6,404,894	816	7,849	15.2%
2012	6,299,519	753	8,366	6.6%
2013	4,567,455	653	6,995	-16.4%
2014	7,006,507	871	8,044	15.0%
2015	4,618,733	583	7,922	-1.5%
2016	5,023,274 *	451	11,138	40.6%

Medical Severity Trend Factor:

1.060 Source: Summary Exhibit (V-K)

#### Fitted=5606.4667 x e^(0.0500\*(YEAR-2006))



Sources:

(1) Exhibit V-H page 2, Column (3)

(2) Exhibit VI-C-1 + Exhibit VI-C-2

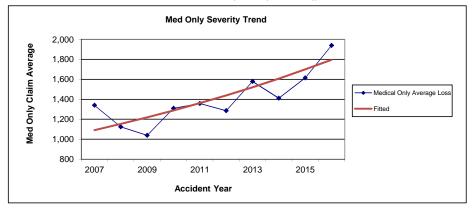
\* Note: Ultimate losses for 2007 & 2016 reflect limitation on large claims, see Exhibits V-J-1 & V-J-2

#### Severity Trend

	(1) Ultimate	(2) Ultimate	(3)	(4) Annual
	Claim	Incurred	Average	Average Loss
<u>Year</u>	<u>Counts</u>	Losses	Loss	<u>Change</u>
2007	495	663,201	1,340	
2008	528	593,200	1,123	-16.2%
2009	469	487,454	1,039	-7.5%
2010	559	732,324	1,310	26.1%
2011	627	851,341	1,358	3.7%
2012	553	710,507	1,285	-5.4%
2013	478	754,990	1,579	22.9%
2014	581	819,307	1,410	-10.7%
2015	399	644,151	1,614	14.5%
2016	295	572,060	1,939	20.1%

Med. Only Severity Trend Factor: Source: Summary Exhibit (V-K) 1.057

#### Fitted= $1060.0258 \times e^{(0.0479*(YEAR-2006))}$



Sources:

(1) Exhibit VI-C-2

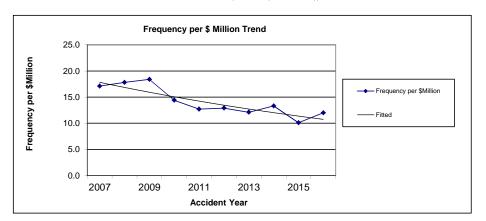
(2) Exhibit VI-C-3

#### Frequency Trend

	(1)	(2)	(3)	(4)
	Ultimate	Loss		Annual
	Claim	Cost	Frequency	Average Loss
<u>Year</u>	<u>Counts</u>	<u>Premium</u>	per(\$M)	<u>Change</u>
2007	164	9,611,826	17.1	
2008	204	11,458,931	17.8	4.1%
2009	195	10,610,843	18.4	3.4%
2010	177	12,274,960	14.4	-21.7%
2011	189	14,908,569	12.7	-11.8%
2012	200	15,465,386	12.9	1.6%
2013	175	14,421,627	12.1	-6.2%
2014	290	21,744,166	13.3	9.9%
2015	184	18,140,127	10.1	-24.1%
2016	156	13,017,578	12.0	18.8%

Frequency per \$Million Trend Factor: 0.939 Source: Summary Exhibit (V-K)

#### Fitted= $18.8585 \times e^{-0.0563*}(YEAR-2006)$



#### Sources:

(1) Exhibit V-I - Col. 2

(2) Exhibit X-B

(3) (1) / (2) x 1,000,000

(4) (Current Freq. / Prior Freq. -1.0) x 100'

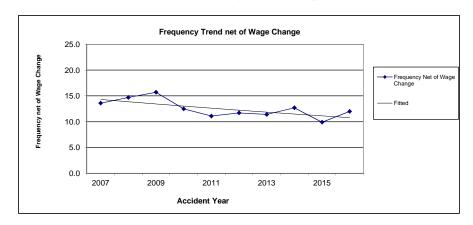
 $\label{eq:File: C:Clients\Coal Mine\2017 Rate Filing\XL\[2017-05-FGHIJK.xlsm]V-l-4} Run \ Date: \ October 03, 2017 - 02:59:04 \ PM$ 

## Frequency Trend Net of Wage Trend

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Loss	Statewide	On	Loss Cost		Adjusted	Annual
	Cost	Average	2016	Premium	Claim	Frequency	Frequency
<u>Year</u>	<u>Premium</u>	Weekly Wage	Level	on 2016 Level	<u>Counts</u>	per(\$M)	Change
2007	9,611,826	779	1.255	12,062,842	164	13.6	
2008	11,458,931	807	1.212	13,888,224	204	14.7	8.1%
2009	10,610,843	836	1.170	12,414,686	195	15.7	6.8%
2010	12,274,960	845	1.157	14,202,129	177	12.5	-20.4%
2011	14,908,569	858	1.140	16,995,769	189	11.1	-11.2%
2012	15,465,386	888	1.101	17,027,390	200	11.7	5.4%
2013	14,421,627	917	1.067	15,387,876	175	11.4	-2.6%
2014	21,744,166	932	1.049	22,809,630	290	12.7	11.4%
2015	18,140,127	951	1.028	18,648,051	184	9.9	-22.0%
2016	13,017,578	978	1.000	13,017,578	156	12.0	21.2%

Frequency net of Wage Change Trend Factor: Source: Summary Exhibit (V-K) 0.962

#### Fitted=14.7647 x e^(-0.0314\*(YEAR-2006))



#### Soures:

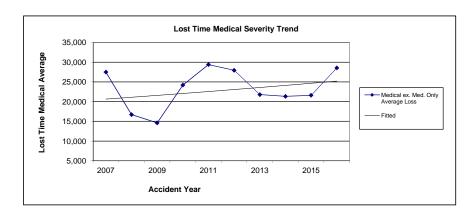
- (1) Exhibit X-B
- (2) Exhibit XII-D
- (3) 2016 is 1.000. Values for other years divided into 2016 value to determine factor
- (4) (1) x (3)
- (5) Exhibit VI-C-1
- (6) (5) / (4) \* 1,000,000
- (7) (Current Freq./Prior Freq.-1.0)x100

	(1)	(2)	(3)	(4)	(5)	(6)
		Med. Only				
	Ultimate	Ultimate	Ult. Med. On			Annual
	Medical Losses	Incurred	Lost Time	Claim	Average	Average Loss
<u>Year</u>	Incurred	Losses	<u>Claims</u>	Counts	Loss	Change
2007	5,171,663 *	663,201	4,508,462	164	27,491	
2008	4,002,437	593,200	3,409,237	204	16,712	-39.2%
2009	3,335,193	487,454	2,847,739	195	14,604	-12.6%
2010	5,014,990	732,324	4,282,666	177	24,196	65.7%
2011	6,404,894	851,341	5,553,553	189	29,384	21.4%
2012	6,299,519	710,507	5,589,012	200	27,945	-4.9%
2013	4,567,455	754,990	3,812,465	175	21,786	-22.0%
2014	7,006,507	819,307	6,187,200	290	21,335	-2.1%
2015	4,618,733	644,151	3,974,582	184	21,601	1.2%
2016	5.023.274 *	572.060	4.451.214	156	28.533	32.1%

Lost Time Medical Severity Trend Factor: Source: Summary Exhibit (V-K)

1.028

#### Fitted=20192.4854 x e^(0.0222\*(YEAR-2006))



#### Source:

- (1) Exhibit V-H,Page 2
- (2) Exhibit VI-C-3
- (3) (1)-(2)
- (4) Exhibit VI-C-1
- (5) (3)/(4)
- (6) (Current Avg. Loss /Prior Avg. Loss-1.0)x100

\* Note: Ultimate losses for 2007 & 2016 reflect limitation on large claims, see Exhibits V-J-1 & V-J-2

# Allocation of Claim 43059 Between Indemnity and Medical Accident Year 2007

			Loss	
	Reported	Percent	Development	Developed
	Incurred	<u>Distribution</u>	<u>Factor</u>	Losses
Indemnity	594,174	22.9%	1.0148	602,968
Medical	2,000,000	<u>77.1%</u>	1.1018	2,203,600
Total	2,594,174	100.0%		2,806,568

Developed Incurred is greater than catastrophe limit so capping and allocation is necessary.

	Т	otal Reported I	ndemnity (2007) =	6,652,402
Total This claim	(1) <u>Incurred</u> 6,652,402 <u>594,174</u> Total excluding	(2) <u>LDF</u> 1.0148 1.0148 g this claim =	(3) = (1)x(2) 6,750,858 602,968 6,147,890	
	Maximum <u>Claim Size</u> 1,250,000	% Indemnity 22.9%	Limited Indemnity 286,250	
	Total Indemi	nity including th	nis limited claim =	6,434,140
		Total Reported	d Medical (2007) =	5,819,126
Total This claim	(1) <u>Incurred</u> 5,819,126 <u>2,000,000</u> Total excluding	(2) <u>LDF</u> 1.1018 1.1018 g this claim =	(3) = (1)x(2) 6,411,513 2,203,600 4,207,913 Limited	
	<u>Claim Size</u> 1,250,000	<u>Medical</u> 77.1%	<u>Medical</u> 963,750	

Total Medical including this limited claim = 5,171,663

# Allocation of Claim 48759 Between Indemnity and Medical Accident Year 2016

			Loss	
	Reported	Percent	Development	Developed
	Incurred	<u>Distribution</u>	<u>Factor</u>	Losses
Indemnity	895,385	98.4%	2.1106	1,889,800
Medical	15,000	<u>1.6%</u>	1.2672	19,008
Total	910,385	100.0%		1,908,808

Developed Incurred is greater than catastrophe limit so capping and allocation is necessary.

	To	otal Reported I	Indemnity (2016) =	4,871,955
	(1)	(2)	(3)	
	Incurred	LDF	$= (1) \times (2)$	
Total	4,871,955	2.1106	10,282,748	
This claim	895,385	2.1106	1,889,800	
	Total excluding		8,392,948	
	Maximum	%	Limited	
	Claim Size	<u>Indemnity</u>	<u>Indemnity</u>	
	1,250,000	98.4%	1,230,000	
	Total Indemr	nity including th	his limited claim =	9,622,948
		Total Reported	d Medical (2016) =	3,963,291
	(1)	(2)	(3)	
	Incurred	LDF	$= (1) \times (2)$	
Total	3,963,291	1.2672	5,022,282	
This claim	15,000	1.2672	19,008	
	Total excluding	this claim =	5,003,274	
	Maximum	%	Limited	
	<u>Claim Size</u>	<u>Medical</u>	<u>Medical</u>	
	1,250,000	1.6%	20,000	

Total Medical including this limited claim = 5,023,274

# Traumatic Loss Trend Summary of Estimates

			Ests. 1&2	Ests. 3&4	Ests. 5&6	Ests. 7&8	Ests.9&10	Ests.11&12	Average	
V-I-1	Traditional	Indemnity	105.4%	104.8%	110.9%	105.8%	105.1%	112.7%	107.5%	Severity
	Moving Average	Indemnity	105.8%	106.4%	108.1%	105.0%	105.6%	107.4%	106.4%	Severity
									107.0%	Average
V-I-2	Traditional	Total Medical	104.6%	108.5%	109.9%	101.8%	105.9%	106.9%	106.3%	Severity
	Moving Average	Total Medical	105.7%	107.8%	106.6%	103.8%	105.8%	103.9%	<u>105.6%</u>	Severity
									106.0%	Average
V-I-3	Traditional	Medical Only	104.6%	106.8%	108.2%	103.1%	105.5%	106.8%	105.8%	Severity
	Moving Average	Medical Only	105.1%	106.1%	106.0%	104.6%	105.8%	105.5%	<u>105.5%</u>	Severity
									105.7%	Average
V-I-4	Traditional	Frequency	95.3%	94.7%	94.3%	93.6%	92.6%	91.8%	93.7%	Frequency
	Moving Average	Frequency	94.3%	94.2%	95.1%	93.4%	93.1%	93.9%	94.0%	Frequency
									93.9%	Average
V-I-5	Traditional	Frequency	97.7%	97.0%	96.5%	96.1%	94.9%	94.0%	96.0%	Frequency
	Moving Average	Frequency	96.6%	96.4%	97.4%	95.7%	95.4%	96.4%	96.3%	<u>Frequency</u>
									96.2%	Average
V-I-6	Traditional	Medical Ex. M.O.	101.3%	105.8%	106.8%	99.1%	103.9%	104.5%	103.6%	Severity
	Moving Average	Medical Ex. M.O.	102.8%	104.3%	100.9%	101.6%	103.1%	98.7%	<u>101.9%</u>	Severity
									102.8%	Average
			Average F	requency Inc	dication_					
	Traditional	Trad Freq	95.3%	94.7%	94.2%	93.7%	92.6%	91.8%	93.7%	
	Moving Average	MA Freq	94.3%	94.1%	95.1%	93.4%	93.1%	94.0%	<u>94.0%</u> 93.9%	

	<u>Medical</u>	Indemnity	
*	93.9% *	93.9% *	Selected Frequency Factor
	104.4% ***	105.5% **	Selected Severity Factor
**	98.0%	99.1%	Composite Trend Factor
***			
	00.07	00.07	
	98.8%	98.9%	Approved 4-1-2017
* ***	** 98.0% ***	99.1% ***	Selected 4-1-2018
	90.0%	99.1%	3616C160 4-1-2016

<sup>\*</sup> Selected Frequency is average of V-I-4 Estimates 1,2,3,4,7,8,9,10

<sup>\*\*</sup> Selected Indemnity Severity is average of V-I-1 Estimates 1,2,3,4,7,8,9,10

<sup>\*\*</sup> Selected Medical Severity is the weighted average of V-1-2,V-1-3 & V-1-6 Estimates 1,2,3,4,7,8,9,10 The respective weights are 50%,10%,& 40%.

<sup>\*\*\*</sup> Limited to a maximum change of +-3.0 points, when necessary.

# Traumatic Loss Trend Indemnity and Funeral losses for All Classes Combined

Exhibit V-I Page 1 Estimates 01-06

# Severity Trend

	(1)	(2)	(3)	(4) Annual	(5) 3-Year	(6) Annual
	Ultimate	Claim	Average	Average Loss	Moving	Mov. Avg.
<u>Year</u>	Losses	<u>Counts</u>	Loss	<u>Change</u>	<u>Average</u>	<u>Change</u>
2007	6,434,140 *	164	39,233			
2008	9,830,293	204	48,188	22.8%		
2009	5,390,314	195	27,643	-42.6%	38,355	
2010	7,416,495	177	41,901	51.6%	39,244	2.3%
2011	8,818,400	189	46,658	11.4%	38,734	-1.3%
2012	9,507,427	200	47,537	1.9%	45,365	17.1%
2013	7,865,658	175	44,947	-5.4%	46,381	2.2%
2014	13,065,584	290	45,054	0.2%	45,846	-1.2%
2015	11,913,000	184	64,745	43.7%	51,582	12.5%
2016	9,622,948 *	156	61,686	-4.7%	57,162	10.8%

Analysis performed on data for 2007 through 2016.	Geometric Average:	5.2%	5.8%	Ests.
	Regression Indication:	5.5%		1 & 2
	Selected:	5.4%	5.8%	
Analysis performed on data for 2008 through 2016.	Geometric Average:	3.2%	6.4%	Ests.
	Regression Indication:	6.3%		3 & 4
	Selected:	4.8%	6.4%	
Analysis performed on data for 2009 through 2016.	Geometric Average:	12.2%	8.1%	Ests.
	Regression Indication:	9.5%		5 & 6
	Selected:	10.9%	8.1%	

\* Note: Ultimate losses for 2007 & 2016 reflect limitation on large claims, see Exhibits V-J-1 & V-J-2

#### Sources:

(1) Exhibit V-H page 1,Column (3)

(2) Exhibit VI-C-1

(4) (Current Avg. Loss / Prior Avg. Loss -1.0) x 100

# Traumatic Loss Trend Medical and Medical Only Losses for All Classes Combined

Exhibit V-I Page 2 Estimates 01-06

# Severity Trend

	(1)	(2)	(3)	(4) Annual	(5) 3-Year	(6) Annual
	Ultimate	Claim	Average	Average Loss	Moving	Mov. Avg.
<u>Year</u>	Losses	<u>Counts</u>	Loss	<u>Change</u>	Average	<u>Change</u>
2007	5,171,663 *	659	7,848			
2008	4,002,437	732	5,468	-30.3%		
2009	3,335,193	664	5,023	-8.1%	6,113	
2010	5,014,990	736	6,814	35.7%	5,768	-5.6%
2011	6,404,894	816	7,849	15.2%	6,562	13.8%
2012	6,299,519	753	8,366	6.6%	7,676	17.0%
2013	4,567,455	653	6,995	-16.4%	7,737	0.8%
2014	7,006,507	871	8,044	15.0%	7,802	0.8%
2015	4,618,733	583	7,922	-1.5%	7,654	-1.9%
2016	5,023,274 *	451	11,138	40.6%	9,035	18.0%

Analysis performed on data for 2007 through 2016.	Geometric Average:	4.0%	5.7%	Ests.
	Regression Indication:	5.1%		1 & 2
	Selected:	4.6%	5.7%	
Analysis performed on data for 2008 through 2016.	Geometric Average:	9.3%	7.8%	Ests.
	Regression Indication:	7.7%		3 & 4
	Selected:	8.5%	7.8%	
Analysis performed on data for 2009 through 2016.	Geometric Average:	12.1%	6.6%	Ests.
	Regression Indication:	7.7%		5 & 6
	Selected:	9.9%	6.6%	

\* Note: Ultimate losses for 2007 & 2016 reflect limitation on large claims, see Exhibits V-J-1 & V-J-2

#### Sources:

(1) Exhibit V-H page 2, Column (3)

(2) Exhibit VI-C-1 + Exhibit VI-C-2

(4) (Current Avg. Loss / Prior Avg. Loss -1.0) x 100

# Traumatic Loss Trend Medical Only Losses for All Classes Combined

Exhibit V-I Page 3 Estimates 01-06

# Severity Trend

	(1) Ultimate	(2) Ultimate	(3)	(4) Annual	(5) 3-Year	(6) Annual
	Claim	Incurred	Average	Average Loss	Moving	Mov. Avg.
<u>Year</u>	<u>Counts</u>	Losses	Loss	<u>Change</u>	<u>Average</u>	<u>Change</u>
2007	495	663,201	1,340			
2008	528	593,200	1,123	-16.2%		
2009	469	487,454	1,039	-7.5%	1,167	
2010	559	732,324	1,310	26.1%	1,157	-0.9%
2011	627	851,341	1,358	3.7%	1,236	6.8%
2012	553	710,507	1,285	-5.4%	1,318	6.6%
2013	478	754,990	1,579	22.9%	1,407	6.8%
2014	581	819,307	1,410	-10.7%	1,425	1.3%
2015	399	644,151	1,614	14.5%	1,534	7.6%
2016	295	572,060	1,939	20.1%	1,654	7.8%

Analysis performed on data for 2007 through 2016.	Geometric Average:	4.2%	5.1%	Ests.
	Regression Indication:	4.9%		1 & 2
	Selected:	4.6%	5.1%	
Analysis performed on data for 2008 through 2016.	Geometric Average:	7.1%	6.1%	Ests.
	Regression Indication:	6.5%		3 & 4
	Selected:	6.8%	6.1%	
Analysis performed on data for 2009 through 2016.	Geometric Average:	9.3%	6.0%	Ests.
	Regression Indication:	7.1%		5 & 6
	Selected:	8.2%	6.0%	

#### Sources:

(1) Exhibit VI-C-2

(2) Exhibit VI-C-3

(4) (Current Avg. Loss / Prior Avg. Loss -1.0) x 100

# Traumatic Loss Trend Indemnity and Funeral losses for All Classes Combined

Exhibit V-I Page 4 Estimates 01-06

# Frequency Trend

	(1) Ultimate	(2) Loss	(3)	(4) Annual	(5) 3-Year	(6) Annual
	Claim	Cost	Frequency	Average Loss	Moving	Mov. Avg.
<u>Year</u>	<u>Counts</u>	<u>Premium</u>	per(\$M)	<u>Change</u>	<u>Average</u>	<u>Change</u>
2007	164	9,611,826	17.1			
2008	204	11,458,931	17.8	4.1%		
2009	195	10,610,843	18.4	3.4%	17.8	
2010	177	12,274,960	14.4	-21.7%	16.9	-5.1%
2011	189	14,908,569	12.7	-11.8%	15.2	-10.1%
2012	200	15,465,386	12.9	1.6%	13.3	-12.5%
2013	175	14,421,627	12.1	-6.2%	12.6	-5.3%
2014	290	21,744,166	13.3	9.9%	12.8	1.6%
2015	184	18,140,127	10.1	-24.1%	11.8	-7.8%
2016	156	13,017,578	12.0	18.8%	11.8	0.0%

Analysis performed on data for 2007 through 2016.	Geometric Average:	-3.9%	-5.7%	Ests.
	Regression Indication:	-5.5%		1 & 2
	Selected:	-4.7%	-5.7%	
Analysis performed on data for 2008 through 2016.	Geometric Average:	-4.8%	-5.8%	Ests.
	Regression Indication:	-5.8%		3 & 4
	Selected:	-5.3%	-5.8%	
Analysis performed on data for 2009 through 2016.	Geometric Average:	-5.9%	-4.9%	Ests.
	Regression Indication:	-5.4%		5 & 6
	Selected:	-5.7%	-4.9%	

#### Sources:

- (1) Exhibit V-I-1 Col. 2
- (2) Exhibit X-B
- (3) (1) / (2) x 1,000,000
- (4) (Current Freq. / Prior Freq. -1.0) x 100'

# Traumatic Loss Trend Indemnity and Funeral losses for All Classes Combined

Exhibit V-I Page 5 Estimates 01-06

## Frequency Trend Net of Wage Trend

	(1) Loss	(2) Statewide	(3) On	(4) Loss Cost	(5)	(6) Adjusted	(7) Annual	(8) 3-Year	(9) Annual
<u>Year</u>	Cost Premium	Average Weekly Wage	2016 Level	Premium on 2016 Level	Claim Counts	Frequency per(\$M)	Frequency Change	Moving Average	Mov. Avg. Change
2007	9.611.826	779	1.255	12.062.842	164	13.6	<u>enange</u>	<u>/1101495</u>	<u>orrango</u>
2008	11,458,931	807	1.212	13,888,224	204	14.7	8.1%		
2009	10,610,843	836	1.170	12,414,686	195	15.7	6.8%	14.7	
2010	12,274,960	845	1.157	14,202,129	177	12.5	-20.4%	14.3	-2.7%
2011	14,908,569	858	1.140	16,995,769	189	11.1	-11.2%	13.1	-8.4%
2012	15,465,386	888	1.101	17,027,390	200	11.7	5.4%	11.8	-9.9%
2013	14,421,627	917	1.067	15,387,876	175	11.4	-2.6%	11.4	-3.4%
2014	21,744,166	932	1.049	22,809,630	290	12.7	11.4%	11.9	4.4%
2015	18,140,127	951	1.028	18,648,051	184	9.9	-22.0%	11.3	-5.0%
2016	13,017,578	978	1.000	13,017,578	156	12.0	21.2%	11.5	1.8%

Analysis performed on data for 2007 through 2016.	Geometric Average:	-1.4%	-3.4% E	Ests.
Analysis performed on data for 2007 intrough 2016.	9			
	Regression Indication:	-3.1%	1	1 & 2
	Selected:	-2.3%	-3.4%	
Analysis performed on data for 2008 through 2016.	Geometric Average:	-2.5%	-3.6% E	Ests.
	Regression Indication:	-3.5%	3	3 & 4
	Selected:	-3.0%	-3.6%	
Analysis performed on data for 2009 through 2016.	Geometric Average:	-3.8%	-2.6% E	Ests.
	Regression Indication:	-3.1%	5	5 & 6
	Selected:	-3.5%	-2.6%	

#### Sources:

- (1) Exhibit X-B
- (2) Exhibit XII-D
- (3) 2016 is 1.000. Values for other years divided into 2016 value to determine factor
- (4) (1)x(3)
- (5) Exhibit VI-C-1
- (6) (5) / (4) \* 1,000,000
- (7) (Current Freq./Prior Freq.-1.0)x100

## Traumatic Loss Trend Medical (excl. Medical Only Losses) for All Classes Combined

Exhibit V-I Page 6 Estimates 01-06

	(1)	(2) Med. Only	(3)	(4)	(5)	(6)	(7)	(8)
	Ultimate	Ultimate	Ult. Med. On			Annual	3-Year	Annual
	Medical Losses	Incurred	Lost Time	Claim	Average	Average Loss	Moving	Mov. Avg.
<u>Year</u>	Incurred	Losses	<u>Claims</u>	<u>Counts</u>	Loss	<u>Change</u>	Average	<u>Change</u>
2007	5,171,663 *	663,201	4,508,462	164	27,491			
2008	4,002,437	593,200	3,409,237	204	16,712	-39.2%		
2009	3,335,193	487,454	2,847,739	195	14,604	-12.6%	19,602	
2010	5,014,990	732,324	4,282,666	177	24,196	65.7%	18,504	-5.6%
2011	6,404,894	851,341	5,553,553	189	29,384	21.4%	22,728	22.8%
2012	6,299,519	710,507	5,589,012	200	27,945	-4.9%	27,175	19.6%
2013	4,567,455	754,990	3,812,465	175	21,786	-22.0%	26,372	-3.0%
2014	7,006,507	819,307	6,187,200	290	21,335	-2.1%	23,689	-10.2%
2015	4,618,733	644,151	3,974,582	184	21,601	1.2%	21,574	-8.9%
2016	5,023,274 *	572,060	4,451,214	156	28,533	32.1%	23,823	10.4%

Analysis performed on data for 2007 through 2016.	Geometric Average:	0.4%	2.8%	Ests.
	Regression Indication:	2.2%		1 & 2
	Selected:	1.3%	2.8%	
Analysis performed on data for 2008 through 2016.	Geometric Average:	6.9%	4.3%	Ests.
	Regression Indication:	4.7%		3 & 4
	Selected:	5.8%	4.3%	
Analysis performed on data for 2009 through 2016.	Geometric Average:	10.0%	0.9%	Ests.
	Regression Indication:	3.5%		5 & 6
	Selected:	6.8%	0.9%	

### Sources:

(1) Exhibit V-H,Page 2

(2) Exhibit VI-C-3

(3) (1)-(2)

(4) Exhibit VI-C-1

(5) (3)/(4)

(6) (Current Avg. Loss / Prior Avg. Loss-1.0)x100

# Traumatic Loss Trend Indemnity and Funeral losses for All Classes Combined

Exhibit V-I Page 1 Estimates 07-12

## Severity Trend

	(1)	(2)	(3)	(4) Annual	(5) 3-Year	(6) Annual
	Ultimate	Claim	Average	Average Loss	Moving	Mov. Avg.
<u>Year</u>	Losses	<u>Counts</u>	Loss	Change	<u>Average</u>	<u>Change</u>
2007	6,434,140 *	164	39,233			
2008	9,830,293	204	48,188	22.8%		
2009	5,390,314	195	27,643	-42.6%	38,355	
2010	7,416,495	177	41,901	51.6%	39,244	2.3%
2011	8,818,400	189	46,658	11.4%	38,734	-1.3%
2012	9,507,427	200	47,537	1.9%	45,365	17.1%
2013	7,865,658	175	44,947	-5.4%	46,381	2.2%
2014	13,065,584	290	45,054	0.2%	45,846	-1.2%
2015	11,913,000	184	64,745	43.7%	51,582	12.5%

Analysis performed on data for 2007 through 2015.	Geometric Average:	6.5%	5.0%	Ests.
	Regression Indication:	5.0%		7 & 8
	Selected:	5.8%	5.0%	
Analysis performed on data for 2008 through 2015.	Geometric Average:	4.3%	5.6%	Ests.
	Regression Indication:	5.8%		9 & 10
	Selected:	5.1%	5.6%	
Analysis performed on data for 2009 through 2015.	Geometric Average:	15.3%	7.4%	Ests.
	Regression Indication:	10.0%		11 & 12
	Selected:	12.7%	7.4%	

Sources:

(1) Exhibit V-H page 1, Column (3)

(2) Exhibit VI-C-1

(4) (Current Avg. Loss / Prior Avg. Loss -1.0) x 100

## Traumatic Loss Trend Medical and Medical Only Losses for All Classes Combined

Exhibit V-I Page 2 Estimates 07-12

## Severity Trend

	(1)	(2)	(3)	(4) Annual	(5) 3-Year	(6) Annual
	Ultimate	Claim	Average	Average Loss	Moving	Mov. Avg.
<u>Year</u>	Losses	Counts	Loss	Change	Average	Change
2007	5,171,663 *	659	7,848			
2008	4,002,437	732	5,468	-30.3%		
2009	3,335,193	664	5,023	-8.1%	6,113	
2010	5,014,990	736	6,814	35.7%	5,768	-5.6%
2011	6,404,894	816	7,849	15.2%	6,562	13.8%
2012	6,299,519	753	8,366	6.6%	7,676	17.0%
2013	4,567,455	653	6,995	-16.4%	7,737	0.8%
2014	7,006,507	871	8,044	15.0%	7,802	0.8%
2015	4,618,733	583	7,922	-1.5%	7,654	-1.9%

Analysis performed on data for 2007 through 2015.	Geometric Average:	0.1%	3.8%	Ests.
	Regression Indication:	3.5%		7 & 8
	Selected:	1.8%	3.8%	
Analysis performed on data for 2008 through 2015.	Geometric Average:	5.5%	5.8%	Ests.
	Regression Indication:	6.2%		9 & 10
	Selected:	5.9%	5.8%	
Analysis performed on data for 2009 through 2015.	Geometric Average:	7.9%	3.9%	Ests.
	Regression Indication:	5.8%		11 & 12
	Selected:	6.9%	3.9%	

Sources:

(1) Exhibit V-H page 2,Column (3)

(2) Exhibit VI-C-1 + Exhibit VI-C-2

(4) (Current Avg. Loss / Prior Avg. Loss -1.0) x 100

# Traumatic Loss Trend Medical Only Losses for All Classes Combined

Exhibit V-I Page 3 Estimates 07-12

# Severity Trend

	(1) Ultimate	(2) Ultimate	(3)	(4) Annual	(5) 3-Year	(6) Annual
	Claim	Incurred	Average	Average Loss	Moving	Mov. Avg.
<u>Year</u>	<u>Counts</u>	Losses	Loss	<u>Change</u>	<u>Average</u>	Change
2007	495	663,201	1,340			
2008	528	593,200	1,123	-16.2%		
2009	469	487,454	1,039	-7.5%	1,167	
2010	559	732,324	1,310	26.1%	1,157	-0.9%
2011	627	851,341	1,358	3.7%	1,236	6.8%
2012	553	710,507	1,285	-5.4%	1,318	6.6%
2013	478	754,990	1,579	22.9%	1,407	6.8%
2014	581	819,307	1,410	-10.7%	1,425	1.3%
2015	399	644,151	1,614	14.5%	1,534	7.6%

Analysis performed on data for 2007 through 2015.	Geometric Average:	2.4%	4.6%	Ests.
	Regression Indication:	3.8%		7 & 8
	Selected:	3.1%	4.6%	
Analysis performed on data for 2008 through 2015.	Geometric Average:	5.3%	5.8%	Ests.
	Regression Indication:	5.6%	9	9 & 10
	Selected:	5.5%	5.8%	
Analysis performed on data for 2009 through 2015.	Geometric Average:	7.6%	5.5%	Ests.
	Regression Indication:	6.0%	1	1 & 12
	Selected:	6.8%	5.5%	

### Sources:

(1) Exhibit VI-C-2

(2) Exhibit VI-C-3

(4) (Current Avg. Loss / Prior Avg. Loss -1.0) x 100

# Traumatic Loss Trend Indemnity and Funeral losses for All Classes Combined

Exhibit V-I Page 4 Estimates 07-12

# Frequency Trend

	(1) Ultimate	(2)	(3)	(4)	(5) 3-Year	(6)
	Claim	Loss Cost	Fraguanay	Annual		Annual
			Frequency	Average Loss	Moving	Mov. Avg.
<u>Year</u>	<u>Counts</u>	<u>Premium</u>	per(\$M)	<u>Change</u>	<u>Average</u>	<u>Change</u>
2007	164	9,611,826	17.1			
2008	204	11,458,931	17.8	4.1%		
2009	195	10,610,843	18.4	3.4%	17.8	
2010	177	12,274,960	14.4	-21.7%	16.9	-5.1%
2011	189	14,908,569	12.7	-11.8%	15.2	-10.1%
2012	200	15,465,386	12.9	1.6%	13.3	-12.5%
2013	175	14,421,627	12.1	-6.2%	12.6	-5.3%
2014	290	21,744,166	13.3	9.9%	12.8	1.6%
2015	184	18,140,127	10.1	-24.1%	11.8	-7.8%

Analysis performed on data for 2007 through 2015.	Geometric Average:	-6.4%	-6.6%	Ests.
	Regression Indication:	-6.3%		7 & 8
	Selected:	-6.4%	-6.6%	
Analysis performed on data for 2008 through 2015.	Geometric Average:	-7.8%	-6.9%	Ests.
	Regression Indication:	-7.0%		9 & 10
	Selected:	-7.4%	-6.9%	
Analysis performed on data for 2009 through 2015.	Geometric Average:	-9.5%	-6.1%	Ests.
	Regression Indication:	-6.9%		11 & 12
	Selected:	-8.2%	-6.1%	

### Sources:

(1) Exhibit V-I-1 Col. 2

(2) Exhibit X-B-1

(3) (1) / (2) x 1,000,000

(4) (Current Freq. / Prior Freq. -1.0) x 100'

## Traumatic Loss Trend Indemnity and Funeral losses for All Classes Combined

Exhibit V-I Page 5 Estimates 07-12

## Frequency Trend net of Wage Trend

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Loss	Statewide	On	Loss Cost		Adjusted	Annual	3-Year	Annual
	Cost	Average	2016	Premium	Claim	Frequency	Frequency	Moving	Mov. Avg.
<u>Year</u>	Premium	Weekly Wage	Level	on 2016 Level	Counts	per(\$M)	Change	<u>Average</u>	Change
2007	9,611,826	779	1.255	12,062,842	164	13.6			
2008	11,458,931	807	1.212	13,888,224	204	14.7	8.1%		
2009	10,610,843	836	1.170	12,414,686	195	15.7	6.8%	14.7	
2010	12,274,960	845	1.157	14,202,129	177	12.5	-20.4%	14.3	-2.7%
2011	14,908,569	858	1.140	16,995,769	189	11.1	-11.2%	13.1	-8.4%
2012	15,465,386	888	1.101	17,027,390	200	11.7	5.4%	11.8	-9.9%
2013	14,421,627	917	1.067	15,387,876	175	11.4	-2.6%	11.4	-3.4%
2014	21,744,166	932	1.049	22,809,630	290	12.7	11.4%	11.9	4.4%
2015	18,140,127	951	1.028	18,648,051	184	9.9	-22.0%	11.3	-5.0%

	Selected:	-6.0%	-3.6%	
	Regression Indication:	-4.6%	11	11 & 12
Analysis performed on data for 2009 through 2015.	Geometric Average:	-7.4%	-3.6%	Ests.
	Selected:	-5.1%	-4.6%	
	Regression Indication:	-4.7%	9	9 & 10
Analysis performed on data for 2008 through 2015.	Geometric Average:	-5.5%	-4.6%	Ests.
	Selected:	-3.9%	-4.3%	
	Regression Indication:	-3.9%	7	7 & 8
Analysis performed on data for 2007 through 2015.	Geometric Average:	-3.9%	-4.3% I	Ests.

### Source:

- (1) Exhibit X-B
- (2) Exhibit XII-D
- (3) 2016 is 1.000. Values for other years divided into 2016 value to determine factor

- (3) 2016 is 1,000. Values for other years (4) (1)x(3) (5) Exhibit VI-C-1 (6) (5) / (4) \* 1,000,000 (7) (Current Freq./Prior Freq.-1.0)x100

## Traumatic Loss Trend Medical (excl. Medical Only Losses) for All Classes Combined

Exhibit V-I Page 6 Estimates 07-12

## Severity Trend

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Med. Only						
	Ultimate	Ultimate	Ult. Med. On			Annual	3-Year	Annual
	Medical Losses	Incurred	Lost Time	Claim	Average	Average Loss	Moving	Mov. Avg.
<u>Year</u>	Incurred	Losses	<u>Claims</u>	<u>Counts</u>	Loss	<u>Change</u>	<u>Average</u>	Change
2007	5,171,663 *	663,201	4,508,462	164	27,491			
2008	4,002,437	593,200	3,409,237	204	16,712	-39.2%		
2009	3,335,193	487,454	2,847,739	195	14,604	-12.6%	19,602	
2010	5,014,990	732,324	4,282,666	177	24,196	65.7%	18,504	-5.6%
2011	6,404,894	851,341	5,553,553	189	29,384	21.4%	22,728	22.8%
2012	6,299,519	710,507	5,589,012	200	27,945	-4.9%	27,175	19.6%
2013	4,567,455	754,990	3,812,465	175	21,786	-22.0%	26,372	-3.0%
2014	7,006,507	819,307	6,187,200	290	21,335	-2.1%	23,689	-10.2%
2015	4,618,733	644,151	3,974,582	184	21,601	1.2%	21,574	-8.9%

Analysis performed on data for 2007 through 2015.	Geometric Average:	-3.0%	1.6% Ests.
	Regression Indication:	1.2%	7 & 8
	Selected:	-0.9%	1.6%
Analysis performed on data for 2008 through 2015.	Geometric Average:	3.7%	3.1% Ests.
	Regression Indication:	4.0%	9 & 1
	Selected:	3.9%	3.1%
Analysis performed on data for 2009 through 2015.	Geometric Average:	6.7%	-1.3% Ests.
	Regression Indication:	2.3%	11 & 1
	Selected:	4.5%	-1.3%

### Source:

(1) Exhibit V-H,Page 2

(2) Exhibit VI-C-3

(3) (1)-(2)

(4) Exhibit VI-C-1

(5) (3)/(4)

(6) (Current Avg. Loss / Prior Avg. Loss-1.0)x100

A. Indemnity Reported Incurred Losses as of 04/30/17

Α.			urred Losses a		7																				
Report	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1	11,442,821	9,265,234		7,495,224		5,169,557	4,616,566	3,404,097	3,705,402	4,478,660	5,436,836	4,367,449	4,077,968	6,150,319	3,325,544	3,275,884	5,594,328	2,447,080	3,188,490	3,669,341	3,724,530		7,192,624	6,961,079	4,871,955
			14,886,283			7,204,997	6,425,692	5,685,213	6,056,207	7,551,263	8,904,201	6,352,445	6,450,455	9,269,896	5,595,218	5,094,625	6,615,460	4,426,812	4,704,074	6,714,362	6,826,563		11,723,305	9,249,942	
			19,319,350		10,812,980	7,650,302	7,184,304	6,107,512	6,887,906		10,824,370			10,301,194	5,998,029	6,026,129	8,947,874	5,084,862	5,837,644	8,225,491		7,346,985	11,781,410		
			21,058,150			7,955,452		7,314,026	7,362,001		11,966,090	7,287,256		12,018,140	5,597,263	6,053,552	9,233,530	5,276,335	6,918,124			7,461,258			
			21,755,213			8,698,833		7,591,552	7,291,553		12,323,050	8,286,573			5,496,933	6,217,757	9,406,949	5,433,501	7,301,176		9,293,673				
			20,495,133			8,527,476	8,275,893	7,679,135	7,454,081	8,994,827		8,109,584		11,984,386	5,215,101	6,349,621	9,432,764	5,295,524	7,158,740	8,635,331					
7	24,121,619	20,136,650	20,718,662	12,001,044	11,985,455	8,464,405	8,429,042	7,685,857	7,462,274	8,879,879	12,772,686	8,140,325	7,469,216	12,178,272	5,237,407	6,471,573	9,542,759	5,295,524	7,274,640						
			21,125,316			8,453,559	8,382,835	7,718,721	7,475,918	8,693,906		7,865,421	7,498,081		5,251,578	6,933,809	9,453,964	5,295,524							
9	22,029,965	20,028,912	20,681,047	11,903,088	12,181,640	8,385,552	8,467,821	7,754,976	7,486,544	8,481,353	12,455,797	7,459,231	7,539,604	12,600,820	5,372,852	6,720,431	9,672,629								
10	22,274,610	19,360,885	20,095,543	11,956,190	12,047,901	8,461,485	8,565,347	8,091,638	7,480,132	8,515,273	12,228,895	7,494,451	7,586,354	12,368,018	5,948,585	6,652,402									
11	21,860,102	19,300,020	20,328,244	11,961,066	12,121,809	8,504,790	8,647,604	8,094,480	7,481,252	8,549,118	12,023,866	7,400,303	7,633,071	12,470,444	6,000,946										
			20,479,299				8,654,986	8,095,907	7,481,862		12,101,118	7,425,395	7,603,806												
			20,635,147			8,712,300	8,662,379	8,054,458	7,481,735	8,612,926		7,450,178	7,631,230	12,100,177											
			20,796,338			8.797.458	8,760,619	8,050,069	7,481,735	8,419,199		7,430,170	7,001,200												
			20,955,578			8.824.907	8.763.703	8.050.069	7,481,735	8.433.117		7,474,402													
			21,238,443			8,629,585	8,763,787	8,050,069	7,481,735	8,431,001	11,541,677														
			20,549,947				8,764,731	8,050,069	7,481,735	0,431,001															
			20,658,968			8,660,130	8,767,395	8,050,069	7,401,733																
							8.808.505	0,030,067																	
			20,766,504			8,797,616	8,808,505																		
20	20,513,393	20,217,996	20,860,130	12,309,663	12,617,517	8,812,465																			
В.			djusment Fac		0.0071	1 0000	1 0000	1 0000	1 0000	1 0000	1 0000	1 0000	1 0000	1 0000	1 0000	1 0000	1 0000	1 0000	1 0000	1 0000	1 0000	1 0000	1 0000	1 0000	1 0000
	0.8247	0.8247		0.8247	0.8871	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	0.8247	0.8247	0.8247	0.8247	0.8871	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
3	0.8247	0.8247		0.8247	0.8871	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		
4	0.8247	0.8247	0.8247	0.8247	0.8871	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			
5	0.8247	0.8247	0.8247	0.8247	0.8871	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				
6	0.8247	0.8247	0.8247	0.8247	0.8871	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000					
7	0.8247	0.8247		0.8247	0.8871	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000						
8	0.8247	0.8247	0.8247	0.8247	0.8871	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000							
9	0.8247	0.8247	0.8247	0.8247	0.8871	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000								
											1.0000	1.0000	1.0000	1.0000	1.0000	1.0000									
10	0.8247	0.8247	0.8247	0.8247	0.8871	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000											
10 11	0.8247 0.8247	0.8247 0.8247	0.8247 0.8247	0.8247 0.8247	0.8871 0.8871	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000						Act 5	7 Effective D	ate	Prior to
	0.8247															1.0000							7 Effective D		Prior to 1996
11	0.8247 0.8247	0.8247	0.8247	0.8247	0.8871	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		1.0000								-23-96)	
11 12	0.8247 0.8247 0.8247	0.8247 0.8247	0.8247 0.8247 0.8247	0.8247 0.8247	0.8871 0.8871	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000		1.5555					2	b) Accident	Year 1996 (8		1996
11 12 13	0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247	0.8871 0.8871 0.8871 0.8871	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	1.0000		1.5000					<u>/</u>	b) Accident act 57 re	Year 1996 (8 <u>Effect</u> 17.53%	<u>-23-96)</u> <u>Weight</u> 0.644	1996 Effect
11 12 13 14	0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247	0.8871 0.8871 0.8871 0.8871 0.8871	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	1.0000		1.5555					<u>/</u> F <u>F</u>	b) Accident act 57 re rost	Year 1996 (8 Effect 17.53% 0.00%	-23-96) Weight 0.644 0.356	1996 Effect
11 12 13 14 15	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	1.0000		1.5000					<u>/</u> F <u>F</u>	b) Accident act 57 re	Year 1996 (8 <u>Effect</u> 17.53%	<u>-23-96)</u> <u>Weight</u> 0.644	1996 Effect
11 12 13 14 15 16	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	1.0000		1.5000					F <u>E</u> 1	b) Accident act 57 fre fost 996 Avg	Year 1996 (8 <u>Effect</u> 17.53% <u>0.00%</u> 11.29%	-23-96) Weight 0.644 0.356	1996 Effect 17.53%
11 12 13 14 15 16 17	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	1.0000		1.5000					F <u>E</u> 1	b) Accident act 57 re rost	Year 1996 (8 Effect 17.53% 0.00%	-23-96) Weight 0.644 0.356	1996 Effect
11 12 13 14 15 16 17 18	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	1.0000		1.5000					F <u>E</u> 1	b) Accident act 57 fre fost 996 Avg	Year 1996 (8 <u>Effect</u> 17.53% <u>0.00%</u> 11.29%	-23-96) Weight 0.644 0.356	1996 Effect 17.53%
11 12 13 14 15 16 17	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	1.0000		1.0000					F <u>E</u> 1	b) Accident act 57 fre fost 996 Avg	Year 1996 (8 <u>Effect</u> 17.53% <u>0.00%</u> 11.29%	-23-96) Weight 0.644 0.356	1996 Effect 17.53%
11 12 13 14 15 16 17 18 19 20	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	1.0000		1.0000					F <u>E</u> 1	b) Accident act 57 fre fost 996 Avg	Year 1996 (8 <u>Effect</u> 17.53% <u>0.00%</u> 11.29%	-23-96) Weight 0.644 0.356	1996 Effect 17.53%
11 12 13 14 15 16 17 18 19 20	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	1.0000		5 594 328	2 447 080	3 188 490	1 1 1 2 2 2 2 2	E E 1	b) Accident act 57 re ost 996 Avg mplement:	Year 1996 (8 Effect 17.53% 0.00% 11.29% 0.8871	-23-96]	1996 Effect 17.53% 0.8247
11 12 13 14 15 16 17 18 19 20 C.	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4/30/17 5,169,557	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4.616,566	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3,705,402	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 4,077,968	1.0000 1.0000	1.0000 3,325,544	3,275,884	5,594,328		3,188,490	3,669,341		b) Accident set 57 re lost 996 Avg mplement: 3,455,344	Year 1996 (8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624	-23-96) Weight 0.644 0.356 1.000	1996 Effect 17.53%
11 12 13 14 15 16 17 18 19 20 C.	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 1ndemnity In 9.437,000 13,001,000	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8246 0.8247	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4/30/17 5,169,557 7,204,997	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4.616,566 6.425,692	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3,404,097 5,685,213	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3,705,402 6,056,207	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4,478,660 7,551,263	1.0000 1.0000 1.0000 1.0000 1.0000 5,436,836 8,904,201	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 6.150,319 9,269,896	3,325,544 5,595,218	3,275,884 5,094,625	6,615,460	4,426,812	4,704,074	6,714,362	Co 3,724,530 6,826,563	b) Accident sct 57 re 996 Avg mplement: 3,455,344 6,561,596	Year 1996 [8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624 11,723,305	-23-96]	1996 Effect 17.53% 0.8247
11 12 13 14 15 16 17 18 19 20 C. 1 2	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 1.8247 1.8247 1.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 1.8247 0.8247 0.8248 1.000000000000000000000000000000000000	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8248 0.8247 0.8249 0.	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.871 0.871 0.871 0.871 0.872	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4/30/17 5,169,557 7,204,997 7,650,302	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4.616,566 6.425,692 7,184,304	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3.404,097 5,685,213 6,107,512	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3,705,402 6,056,207 6,887,906	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 5,436,836 8,904,201 10,824,370	1.0000 1.0000 1.0000 1.0000 1.0000 4.367,449 6.352,445 6,965,973	1.0000 1.0000 1.0000 1.0000 4,077,968 6,450,455 7,304,561	1.0000 1.0000 6,150,319 9,269,896 10,301,194	3,325,544 5,595,218 5,998,029	3,275,884 5,094,625 6,026,129	6,615,460 8,947,874	4,426,812 5,084,862	4,704,074 5,837,644	6,714,362 8,225,491	7 F F F Co 3,724,530 6,826,563 8,319,223	b) Accident sct 57 re ost 996 Avg mplement: 3,455,344 6,561,596 7,346,985	Year 1996 [8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624 11,723,305	-23-96) Weight 0.644 0.356 1.000	1996 Effect 17.53% 0.8247
11 12 13 14 15 16 17 18 19 20 C. 1 2	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 10.8247 10.8247 10.8247 11.5586,000 13.001,000 15.586,000	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 17.283,000 12.277,000 15,933,000	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.825 0.8247 0.8247 0.8247 0.8247 0.8247	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.874 0.874 0.874 0.959000 8.749.000 9.592.000 9.791.000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4/30/17 5.169,557 7,204,997 7,650,302 7,955,452	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4.616,566 6.425,692 7,184,304	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3,404.097 5,685,213 6,107,512 7,314,026	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3.705.402 6.056.207 6.887.906 7.362.001	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.551,263 7,965,255 8,490,153	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 5,436,836 8,904,201 10,824,370 11,966,090	1.0000 1.0000 1.0000 1.0000 1.0000 4,367,449 6,352,445 6,965,973 7,287,256	1.0000 1.0000 1.0000 1.0000 4,077,968 6,450,455 7,304,561 7,268,321	1.0000 1.0000 6,150,319 9,269,896 10,201,194 12,018,140	3,325,544 5,595,218 5,998,029 5,597,263	3,275,884 5,094,625 6,026,129 6,053,552	6,615,460 8,947,874 9,233,530	4,426,812 5,084,862 5,276,335	4,704,074 5,837,644 6,918,124	6,714,362 8,225,491 8,373,419	7. F F E T Co 3,724,530 6,826,563 8,319,223 9,121,284	b) Accident sct 57 re 996 Avg mplement: 3,455,344 6,561,596	Year 1996 [8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624 11,723,305	-23-96) Weight 0.644 0.356 1.000	1996 Effect 17.53% 0.8247
11 12 13 14 15 16 17 18 19 20 C. 1 2 3 3 4	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 10.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 1.565,000 11,565,000 13,968,000 15,766,000	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 285 Adjusted to 7,283,000 12,277,000 15,933,000 17,367,000	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.837,000 0.337,000 9.337,000	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.871 0.872 0.9592,000 9.592,000 9.701,000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4/30/17 5.169,557 7,204,997 7.650,302 7,955,452 8,698,833	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4.616,566 6.425,692 7.184,304 7.644,338 8.242,894	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3,404,097 5,685,213 6,107,512 7,314,026 7,591,552	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3,705,402 6,056,207 6,887,906 7,362,001 7,291,553	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4,478,660 7,551,263 7,965,255 8,490,153 8,760,507	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 5,436,836 8,904,201 10,824,370 11,966,090 12,323,050	1.0000 1.0000 1.0000 1.0000 1.0000 4.367,449 6.352,445 6.965,973 7.287,256 8.286,573	1.0000 1.0000 1.0000 1.0000 4.077.968 6.450,455 7.304,561 7.268,321 7.374,171	1.0000 1.0000 1.0000 6.150,319 9,269,896 10,301,194 12,453,149	3,325,544 5,595,218 5,998,029 5,597,263 5,496,933	3,275,884 5,094,625 6,026,129 6,053,552 6,217,757	6,615,460 8,947,874 9,233,530 9,406,949	4,426,812 5,084,862 5,276,335 5,433,501	4,704,074 5,837,644 6,918,124 7,301,176	6,714,362 8,225,491 8,373,419 8,616,232	7 F F F Co 3,724,530 6,826,563 8,319,223	b) Accident sct 57 re ost 996 Avg mplement: 3,455,344 6,561,596 7,346,985	Year 1996 [8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624 11,723,305	-23-96) Weight 0.644 0.356 1.000	1996 Effect 17.53% 0.8247
11 12 13 14 15 16 17 18 19 20 C. 1 2 3 3 4 5 5	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 10.8247 10.8247 10.8247 10.8247 10.8247 10.8247 10.8247 10.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.817 0.8247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.83,000 12,277,000 15,933,000 17,347,000 16,902,000	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.924000 0.937,000 9.922,000 9.992,000	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.871 0.871 0.701 0.	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4/30/17 5.169.557 7.204.997 7.650.302 7.955.452 8.698.833 8.527.476	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4.616.566 6.425.692 7.184.304 7.644.338 8.242.894 8.275.893	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3,404.097 5,685,213 6,107.512 7,314,026 7,591,552 7,679,135	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3.705,402 6.056,207 6.887,906 7.362,001 7.291,553 7.454,081	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4.478,660 7.551,243 7.965,255 8.490,153 8.760,507 8.994,827	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 5,436,836 8,904,201 10,824,370 11,966,090 12,323,050 13,133,004	1.0000 1.0000 1.0000 1.0000 4.367.449 6.352.445 6.965.973 7.287.256 8.286.573 8.109.584	1,0000 1,0000 1,0000 1,0000 4,077,968 6,450,455 7,304,561 7,268,321 7,268,321 7,418,021	1.0000 1.0000 6.150,319 9.269,896 10,301,194 12,018,140 12,453,149 11,984,386	3,325,544 5,595,218 5,998,029 5,597,263 5,496,933 5,215,101	3,275,884 5,094,625 6,026,129 6,053,552 6,217,757 6,349,621	6,615,460 8,947,874 9,233,530 9,406,949 9,432,764	4,426,812 5,084,862 5,276,335 5,433,501 5,295,524	4,704,074 5,837,644 6,918,124 7,301,176 7,158,740	6,714,362 8,225,491 8,373,419	7. F F E T Co 3,724,530 6,826,563 8,319,223 9,121,284	b) Accident sct 57 re ost 996 Avg mplement: 3,455,344 6,561,596 7,346,985	Year 1996 [8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624 11,723,305	-23-96) Weight 0.644 0.356 1.000	1996 Effect 17.53% 0.8247
11 12 13 14 15 16 17 18 19 20 C. 1 2 3 3 4 5 6	0.8247 0.	0.8247 0.	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.7,283,000 12,277,000 15,933,000 17,347,000 17,347,000 17,942,000 117,987,000	0.8247 0.	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.871 Level as of 0 6.090,000 8,749,000 9,592,000 0,701,000 10,178,000 10,686,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4/30/17 5,169,557 7,204,997 7,650,302 7,955,452 8,698,833 8,527,476	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4.616.566 6.425,692 7.184,304 7.644,338 8.242,894 8.275,893 8.429,042	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3.404.097 5.685,213 6.107,512 7.314,026 7.591,552 7.685,857	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3.705.402 6.056,207 6.887.906 7.362.001 7.291.553 7.454.081 7.462.274	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,478,660 7,551,263 7,965,255 8,490,153 8,760,507 8,974,827 8,879,879	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,436,836 8,904,201 10,824,370 11,966,090 12,323,050 13,133,004 12,772,686	1.0000 1.0000 1.0000 1.0000 4.367,449 6.352,445 6.965,973 7.287,256 8.286,673 8.109,584 8.1109,584	1,0000 1,0000 1,0000 4,077,968 6,450,455 7,304,561 7,268,321 7,347,417 7,418,021	6,150,319 9,269,896 10,301,194 12,018,140 12,453,149 11,984,386 12,178,272	3,325,544 5,595,218 5,998,029 5,597,263 5,496,933 5,215,101 5,237,407	3,275,884 5,094,625 6,026,129 6,053,552 6,217,757 6,349,621 6,471,573	6,615,460 8,947,874 9,233,530 9,406,949 9,432,764 9,542,759	4,426,812 5,084,862 5,276,335 5,433,501 5,295,524 5,295,524	4,704,074 5,837,644 6,918,124 7,301,176	6,714,362 8,225,491 8,373,419 8,616,232	7. F F E T Co 3,724,530 6,826,563 8,319,223 9,121,284	b) Accident sct 57 re ost 996 Avg mplement: 3,455,344 6,561,596 7,346,985	Year 1996 [8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624 11,723,305	-23-96) Weight 0.644 0.356 1.000	1996 Effect 17.53% 0.8247
111 122 133 144 155 166 177 188 199 20 C. 1 1 2 2 3 3 4 4 5 6	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 10.8247	0.8247 0.	0.8247 0.	0.8247 0.	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8971 0.8971 0.979,000 9.592,000 9.701,000 10,178,000 10,632,000 10,632,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4/30/17 5,169,557 7,204,997 7,650,302 7,7955,452 8,498,833 8,527,476 8,464,405 8,453,559	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,616,566 6,425,692 7,184,304 7,644,338 8,242,894 8,242,894 8,242,894 8,242,894 8,242,894	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3.404.097 5.685.213 6.107.512 7.391.552 7.697.135 7.685.857 7.788,721	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,705,402 6,056,207 6,887,906 7,362,001 7,291,553 7,454,081 7,462,274 7,475,918	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,478,660 7,551,263 7,965,255 8,490,153 8,760,507 8,994,827 8,879,879,886	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,436,836 8,904,201 10,824,370 11,966,090 12,323,050 13,133,004 12,772,686 12,539,319	1,0000 1,0000 1,0000 1,0000 1,0000 4,367,449 6,352,445 6,965,973 7,287,256 8,286,573 8,109,584 8,140,325 7,865,421	1,0000 1,0000 1,0000 1,0000 4,077,968 6,450,455 7,304,561 7,268,321 7,374,171 7,418,021 7,469,216 7,498,081	1,0000 1,0000 1,0000 6,150,319 9,269,896 10,301,194 12,018,140 12,453,149 11,984,386 12,178,272 12,484,772	3.325,544 5.595,218 5.998,029 5.597,263 5.496,933 5.215,101 5.237,407 5.251,540	3,275,884 5,094,625 6,026,129 6,053,552 6,217,757 6,349,621 6,471,573 6,933,803	6,615,460 8,947,874 9,233,530 9,406,949 9,432,764 9,542,759 9,453,964	4,426,812 5,084,862 5,276,335 5,433,501 5,295,524	4,704,074 5,837,644 6,918,124 7,301,176 7,158,740	6,714,362 8,225,491 8,373,419 8,616,232	7. F F E T Co 3,724,530 6,826,563 8,319,223 9,121,284	b) Accident sct 57 re ost 996 Avg mplement: 3,455,344 6,561,596 7,346,985	Year 1996 [8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624 11,723,305	-23-96) Weight 0.644 0.356 1.000	1996 Effect 17.53% 0.8247
111 122 133 144 155 166 177 188 199 20 Cc. 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8	0.8247 0.	0.8247 0.	0.8247 0.	0.8247 0.	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.871 0	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,616,566 6,425,692 7,184,304 8,275,893 8,275,893 8,429,042 8,382,835 8,382,835 8,467,832	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,404,097 5,685,213 6,107,512 7,314,026 7,591,552 7,679,135 7,688,857 7,718,721 7,754,976	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,705,402 6,056,207 6,887,906 7,362,001 7,291,553 7,454,081 7,454,081 7,454,918 7,454,918	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,478,660 7,551,263 7,965,255 8,490,153 8,794,827 8,879,879 8,693,906 8,481,353	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,436,836 8,904,201 10,824,370 11,966,090 12,323,050 13,133,004 12,772,686 12,539,319 12,455,797	1,0000 1,0000 1,0000 1,0000 1,0000 4,367,449 6,352,445 6,965,973 7,287,256 8,286,573 8,109,584 8,140,325 7,865,421 7,459,231	1,0000 1,0000 1,0000 1,0000 4,077,968 6,450,455 7,304,561 7,268,321 7,474,171 7,418,021 7,489,216 7,498,081 7,539,601	1,0000 1,0000 1,0000 6,150,319 9,269,896 10,301,194 12,018,140 12,453,149 11,784,386 12,178,272 12,484,769 12,480,820	3,325,544 5,595,218 5,998,029 5,597,263 5,496,933 5,237,407 5,237,407 5,372,852	3,275,884 5,094,625 6,026,129 6,053,552 6,217,757 6,349,621 6,471,573 6,933,809 6,720,431	6,615,460 8,947,874 9,233,530 9,406,949 9,432,764 9,542,759	4,426,812 5,084,862 5,276,335 5,433,501 5,295,524 5,295,524	4,704,074 5,837,644 6,918,124 7,301,176 7,158,740	6,714,362 8,225,491 8,373,419 8,616,232	7. F F E T Co 3,724,530 6,826,563 8,319,223 9,121,284	b) Accident sct 57 re ost 996 Avg mplement: 3,455,344 6,561,596 7,346,985	Year 1996 [8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624 11,723,305	-23-96) Weight 0.644 0.356 1.000	1996 Effect 17.53% 0.8247
111 122 133 144 155 166 177 188 199 20 C. 1 2 3 3 4 4 5 6 6 7 7 8 8 9 9	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 1.0247 1.03247 1	0.8247 0.	0.8247 0.	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8249 0.8245 0.	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.871 0.871 0.871 0.871 0.792 0	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,616,566 6,425,692 7,184,304 8,242,894 8,244,894 8,244,844 8,244,844 8,244,844 8,244,844 8,244,844	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,404,097 3,5485,213 6,107,512 7,591,552 7,679,135 7,685,857 7,718,721 7,754,976 8,091,638 8,091,638	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,705,402 6,056,207 6,887,906 7,362,001 7,291,553 7,454,081 7,462,274 7,475,918 7,482,544 7,480,132	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,478,660 7,551,263 8,79,879 8,79,879 8,879,879 8,879,879 8,879,879 8,879,879	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,436,836 8,904,201 10,824,370 11,966,090 12,323,050 13,133,004 12,772,846 12,539,319 12,455,797 12,455,797	1,0000 1,0000 1,0000 1,0000 1,0000 4,367,449 6,352,445 6,965,973 7,287,256 8,286,573 8,109,584 8,140,325 7,865,421 7,459,231	1,0000 1,0000 1,0000 1,0000 4,077,968 6,450,455 7,304,561 7,268,321 7,374,171 7,489,216 7,469,216 7,469,216 7,539,604 7,538,635	1,0000 1,0000 1,0000 6,150,319 9,269,896 10,301,194 12,018,140 12,453,149 11,788,4386 12,450,820 12,188,272 12,484,769 12,600,820 12,368,018	3.325.544 5.595.218 5.996.029 5.597.263 5.496.933 5.215.101 5.237.407 5.251.578 5.372.852 5.945.858	3,275,884 5,094,625 6,026,129 6,053,552 6,217,757 6,349,621 6,471,573 6,933,803	6,615,460 8,947,874 9,233,530 9,406,949 9,432,764 9,542,759 9,453,964	4,426,812 5,084,862 5,276,335 5,433,501 5,295,524 5,295,524	4,704,074 5,837,644 6,918,124 7,301,176 7,158,740	6,714,362 8,225,491 8,373,419 8,616,232	7. F F E T Co 3,724,530 6,826,563 8,319,223 9,121,284	b) Accident sct 57 re ost 996 Avg mplement: 3,455,344 6,561,596 7,346,985	Year 1996 [8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624 11,723,305	-23-96) Weight 0.644 0.356 1.000	1996 Effect 17.53% 0.8247
111 122 133 144 155 166 177 188 199 20 C. 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9	0.8247 0.	0.8247 0.	0.8247 0.	0.8247 0.	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.871 0.8710 0.8740 0.9701 0.9	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,616,566 6,425,692 7,184,304 7,644,338 8,242,894 8,275,893 8,429,042 8,382,835 8,487,604 8,565,347 8,565,347 8,567,504	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,404,097 5,685,213 6,107,512 7,314,026 7,591,352 7,679,135 7,679,135 7,679,135 7,679,135 8,094,480	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,705,402 6,056,207 6,887,906 7,362,001 7,291,553 7,454,081 7,455,918 7,455,918 7,456,544 7,480,132 7,481,252	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,478,660 7,551,263 7,965,255 8,490,153 8,794,827 8,879,879 8,873,906 8,481,353 8,513,273 8,549,118	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,436,836 8,904,201 10,824,370 11,966,090 12,322,3050 13,133,004 12,772,686 12,539,319 12,455,797 12,228,895 12,023,866	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,367,449 6,352,445 6,965,973 7,287,256 8,286,573 7,865,421 7,459,231 7,494,451 7,400,303	1,0000 1,0000 1,0000 1,0000 4,077,968 6,450,455 7,304,561 7,268,321 7,374,171 7,418,021 7,489,081 7,539,604 7,586,354 7,633,071	1,0000 1,0000 1,0000 6,150,319 9,269,896 10,301,194 12,453,149 11,984,386 12,178,272 12,484,769 12,600,820 12,368,018 12,470,444	3,325,544 5,595,218 5,998,029 5,597,263 5,496,933 5,237,407 5,237,407 5,372,852	3,275,884 5,094,625 6,026,129 6,053,552 6,217,757 6,349,621 6,471,573 6,933,809 6,720,431	6,615,460 8,947,874 9,233,530 9,406,949 9,432,764 9,542,759 9,453,964	4,426,812 5,084,862 5,276,335 5,433,501 5,295,524 5,295,524	4,704,074 5,837,644 6,918,124 7,301,176 7,158,740	6,714,362 8,225,491 8,373,419 8,616,232	7. F F E T Co 3,724,530 6,826,563 8,319,223 9,121,284	b) Accident sct 57 re ost 996 Avg mplement: 3,455,344 6,561,596 7,346,985	Year 1996 [8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624 11,723,305	-23-96) Weight 0.644 0.356 1.000	1996 Effect 17.53% 0.8247
111 122 133 144 155 166 177 188 199 20 C. 33 44 55 66 77 88 99 10 111	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 1.0000 15,586,000 17,554,000 19,971,000 19,971,000 19,973,000 18,000,000 18,000,000 18,000,000 18,000,000 18,000,000 18,000,000 18,000,000 18,000,000	0.8247 0.	0.8247 0.	0.8247 0.	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.772 0.	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,614,338 8,242,894 8,275,893 8,429,042 8,882,835 8,427,642 8,847,821 8,647,604 8,654,986	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,404,097 5,685,213 6,107,512 7,591,552 7,718,721 7,748,768 8,091,638 8,094,480 8,095,907	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,705,402 6,056,207 6,887,906 7,362,001 7,291,553 7,454,081 7,462,274 7,475,918 7,480,132 7,481,542 7,481,812	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,478,660 7,551,243 7,965,255 8,490,153 8,760,507 8,974,827 8,879,879 8,879,879 8,879,879 8,879,879 8,879,879 8,879,879	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,436,836 8,904,201 10,824,370 11,1966,090 12,323,050 13,133,004 12,523,931 12,772,848 12,523,977 12,223,866 12,101,118	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,367,449 6,352,445 6,965,973 7,287,256 8,109,584 8,140,325 7,865,421 7,499,431 7,499,431 7,499,431	1,0000 1,0000 1,0000 1,0000 4,077,968 6,450,455 7,304,561 7,268,321 7,478,1081 7,49,216 7,49,216 7,539,604 7,538,6354 7,633,3071 7,603,806	1,0000 1,0000 1,0000 6,150,319 9,269,896 10,301,194 12,453,149 11,984,386 12,178,272 12,484,769 12,600,820 12,368,018 12,470,444	3.325.544 5.595.218 5.996.029 5.597.263 5.496.933 5.215.101 5.237.407 5.251.578 5.372.852 5.945.858	3,275,884 5,094,625 6,026,129 6,053,552 6,217,757 6,349,621 6,471,573 6,933,809 6,720,431	6,615,460 8,947,874 9,233,530 9,406,949 9,432,764 9,542,759 9,453,964	4,426,812 5,084,862 5,276,335 5,433,501 5,295,524 5,295,524	4,704,074 5,837,644 6,918,124 7,301,176 7,158,740	6,714,362 8,225,491 8,373,419 8,616,232	7. F F E T Co 3,724,530 6,826,563 8,319,223 9,121,284	b) Accident sct 57 re ost 996 Avg mplement: 3,455,344 6,561,596 7,346,985	Year 1996 [8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624 11,723,305	-23-96) Weight 0.644 0.356 1.000	1996 Effect 17.53% 0.8247
111 122 133 144 155 166 177 188 199 20 C. 33 44 55 66 77 88 99 10 111	0.8247 0.	0.8247 0.	0.8247 0.	0.8247 0.	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,616,566 6,425,692 7,184,304 8,242,894 8,242,894 8,242,894 8,242,894 8,828,385 8,467,821 8,655,347 8,647,604 8,656,986	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,705,402 6,056,207 6,887,906 7,362,001 7,291,553 7,454,081 7,455,918 7,455,918 7,456,544 7,480,132 7,481,252	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,478,660 7,551,263 7,965,255 8,490,153 8,794,827 8,879,879 8,873,906 8,481,353 8,513,273 8,549,118	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,436,836 8,904,201 10,824,370 11,1966,090 12,323,050 13,133,004 12,523,931 12,772,848 12,523,977 12,223,866 12,101,118	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,367,449 6,352,445 6,965,973 7,287,256 8,286,573 7,865,421 7,459,231 7,494,451 7,400,303	1,0000 1,0000 1,0000 1,0000 4,077,968 6,450,455 7,304,561 7,268,321 7,374,171 7,418,021 7,489,081 7,539,604 7,586,354 7,633,071	1,0000 1,0000 1,0000 6,150,319 9,269,896 10,301,194 12,453,149 11,984,386 12,178,272 12,484,769 12,600,820 12,368,018 12,470,444	3.325.544 5.595.218 5.996.029 5.597.263 5.496.933 5.215.101 5.237.407 5.251.578 5.372.852 5.945.858	3,275,884 5,094,625 6,026,129 6,053,552 6,217,757 6,349,621 6,471,573 6,933,809 6,720,431	6,615,460 8,947,874 9,233,530 9,406,949 9,432,764 9,542,759 9,453,964	4,426,812 5,084,862 5,276,335 5,433,501 5,295,524 5,295,524	4,704,074 5,837,644 6,918,124 7,301,176 7,158,740	6,714,362 8,225,491 8,373,419 8,616,232	7. F F E T Co 3,724,530 6,826,563 8,319,223 9,121,284	b) Accident sct 57 re ost 996 Avg mplement: 3,455,344 6,561,596 7,346,985	Year 1996 [8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624 11,723,305	-23-96) Weight 0.644 0.356 1.000	1996 Effect 17.53% 0.8247
11 12 13 14 15 16 16 17 18 19 20 C. 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 13.001.000 13.001.000 17.554.000 19.971.000 19.973.000 19.973.000 19.978.000 19.978.000 19.978.000 19.978.000 19.978.000 19.978.000 19.978.000 19.978.000	0.8247 0.	0.8247 0.	0.8247 0.8248 0.8249 0.9249 0.925 0.	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8971 0.970 0.970 0.1000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,616,566 6,425,692 7,184,304 8,242,894 8,242,894 8,242,894 8,242,894 8,828,385 8,467,821 8,655,347 8,647,604 8,656,986	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,404,097 5,685,213 6,107,512 7,591,552 7,718,721 7,748,768 8,091,638 8,094,480 8,095,907	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,705,402 6,056,207 6,887,906 7,362,001 7,291,553 7,454,081 7,462,274 7,475,918 7,480,132 7,481,542 7,481,812	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,478,660 7,551,243 7,965,255 8,490,153 8,760,507 8,974,827 8,879,879 8,879,879 8,879,879 8,879,879 8,879,879 8,879,879	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,436,836 8,904,201 10,824,370 11,966,090 12,232,050 13,133,004 12,772,686 12,232,050 12,2539,319 12,245,5797 12,245,5797 12,228,895 12,023,886 12,101,118 12,053,898	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,367,449 6,352,445 6,965,973 7,287,256 8,109,584 8,140,325 7,865,421 7,499,431 7,499,431 7,499,431	1,0000 1,0000 1,0000 1,0000 4,077,968 6,450,455 7,304,561 7,268,321 7,478,1081 7,49,216 7,49,216 7,539,604 7,538,6354 7,633,3071 7,603,806	1,0000 1,0000 1,0000 6,150,319 9,269,896 10,301,194 12,453,149 11,984,386 12,178,272 12,484,769 12,600,820 12,368,018 12,470,444	3.325.544 5.595.218 5.996.029 5.597.263 5.496.933 5.215.101 5.237.407 5.251.578 5.372.852 5.945.858	3,275,884 5,094,625 6,026,129 6,053,552 6,217,757 6,349,621 6,471,573 6,933,809 6,720,431	6,615,460 8,947,874 9,233,530 9,406,949 9,432,764 9,542,759 9,453,964	4,426,812 5,084,862 5,276,335 5,433,501 5,295,524 5,295,524	4,704,074 5,837,644 6,918,124 7,301,176 7,158,740	6,714,362 8,225,491 8,373,419 8,616,232	7. F F E T Co 3,724,530 6,826,563 8,319,223 9,121,284	b) Accident sct 57 re ost 996 Avg mplement: 3,455,344 6,561,596 7,346,985	Year 1996 [8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624 11,723,305	-23-96) Weight 0.644 0.356 1.000	1996 Effect 17.53% 0.8247
111 122 133 144 155 166 177 188 20 C. 1 2 2 3 4 5 6 7 7 8 8 9 10 11 12 13 144	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8248 0.8247 0.8249 0.	0.8247 0.	0.8247 0.	0.8247 0.	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8870 0.871 0.871 0.871 0.871 0.871 0.871 0.871 0.871 0.871 0.871 0.871 0.871 0.751 0.	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,616,566 6,425,692 7,184,304 8,242,894 8,242,894 8,242,894 8,242,894 8,828,385 8,467,821 8,655,347 8,647,604 8,656,986	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,705,402 6,056,207 6,887,906 7,362,201 7,291,553 7,475,918 7,475,918 7,480,132 7,481,132 7,481,132 7,481,132	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,478,660 7,551,263 7,965,255 8,490,153 8,760,507 8,974,827 8,879,879 8,673,906 8,481,353 8,515,273 8,515,273 8,582,610 8,582,910 8,582,610	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,436,836 8,904,201 10,824,370 11,966,090 12,322,3050 13,133,004 12,772,686 12,192,193,193 12,2539,319 12,2539,319 12,2539,319 12,2538,898 11,535,171	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,367,449 6,352,445 6,965,973 7,287,256 8,109,584 8,140,325 7,485,431 7,494,451 7,494,451 7,494,451	1,0000 1,0000 1,0000 1,0000 4,077,968 6,450,455 7,304,561 7,268,321 7,478,1081 7,49,216 7,49,216 7,539,604 7,538,6354 7,633,3071 7,603,806	1,0000 1,0000 1,0000 6,150,319 9,269,896 10,301,194 12,453,149 11,984,386 12,178,272 12,484,769 12,600,820 12,368,018 12,470,444	3.325.544 5.595.218 5.996.029 5.597.263 5.496.933 5.215.101 5.237.407 5.251.578 5.372.852 5.945.858	3,275,884 5,094,625 6,026,129 6,053,552 6,217,757 6,349,621 6,471,573 6,933,809 6,720,431 6,652,402	6,615,460 8,947,874 9,233,530 9,406,949 9,432,764 9,542,759 9,453,964 9,672,629	4,426,812 5,084,842 5,276,33,501 5,295,524 5,295,524 5,295,524	4,704,074 5,837,644 6,918,124 7,301,176 7,158,740	6,714,362 8,225,491 8,373,419 8,616,232 8,635,331	3,724,530 6,826,563 8,319,223 9,121,284 9,293,673	b) Accident cct 57 re ost 996 Avg mplement: 3,455,344 6,561,596 7,346,985 7,461,258	Yeor 1996 (8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624 11,723,305 11.781,410	-23-96) Weight 0.644 0.356 1.000	1996 Effect 17.53% 0.8247
11 12 13 14 15 16 17 18 19 20 C. 1 2 2 3 3 4 4 5 5 6 6 7 7 8 9 9 10 11 11 12 12 13 14 14 15 15 16 16 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.00000 1.000000 1.000000 1.00000000	0.8247 0.	0.8247 0.	0.8247 0.	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8971 0.8971 0.979000 0.9791.000 10.486.000 10.496.000 10.496.000 10.496.000 10.496.000 10.496.000 10.496.000 10.496.000 10.496.000 10.496.000	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,616,566 6,425,692 7,184,304 7,644,338 8,429,042 8,382,835 8,429,042 8,855,347 8,647,804 8,654,986 8,662,379 8,760,619	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,404,097 5,685,213 6,107,512 7,314,024 7,591,552 7,718,721 7,754,976 8,091,438 8,094,480 8,094,458 8,095,907 8,050,069	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,705,402 6,056,207 6,887,906 7,345,001 7,291,553 7,454,081 7,462,274 7,475,918 7,486,544 7,481,735 7,481,735 7,481,735	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,478,660 7,551,263 7,965,255 8,490,153 8,794,827 8,879,879 8,693,906 4,481,353 8,549,118 8,582,610 8,612,926 8,419,179	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,436,836 8,904,201 10,824,370 11,966,090 12,322,3050 13,133,004 12,772,686 12,192,193,193 12,2539,319 12,2539,319 12,2539,319 12,2538,898 11,535,171	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,367,449 6,352,445 6,965,973 7,287,256 8,109,584 8,140,325 7,485,431 7,494,451 7,494,451 7,494,451	1,0000 1,0000 1,0000 1,0000 4,077,968 6,450,455 7,304,561 7,268,321 7,478,1081 7,49,216 7,49,216 7,539,604 7,538,6354 7,633,3071 7,603,806	1,0000 1,0000 1,0000 6,150,319 9,269,896 10,301,194 12,453,149 11,984,386 12,178,272 12,484,769 12,600,820 12,368,018 12,470,444	3.325.544 5.595.218 5.996.029 5.597.263 5.496.933 5.215.101 5.237.407 5.251.578 5.372.852 5.945.858	3,275,884 5,094,625 6,026,129 6,053,552 6,217,757 6,349,621 6,471,573 6,933,809 6,720,431 6,652,402	6,615,460 8,947,874 9,233,530 9,406,949 9,432,764 9,542,759 9,453,964 9,672,629	4,426,812 5,084,842 5,276,33,501 5,295,524 5,295,524 5,295,524	4,704,074 5,837,644 6,918,124 7,301,176 7,158,740 7,274,640	6,714,362 8,225,491 8,373,419 8,616,232 8,635,331	3.724,530 6.826,563 8.319,223 9,121,284 9,293,673	b) Accident cct 57 re ost 996 Avg mplement: 3,455,344 6,561,596 7,346,985 7,461,258	Yeor 1996 (8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624 11,723,305 11.781,410	-23-96) Weight 0.644 0.356 1.000	1996 Effect 17.53% 0.8247
111 122 133 144 155 166 177 188 199 200 C. 11 22 33 44 55 66 77 88 99 100 111 12 131 144 155 166	0.8247 0.	0.8247 0.	0.8247 0.	0.8247 0.	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8971 0.8971 0.8971 0.8071 0.686,000 10,468	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4/30/17 5,169,557 7,204,977 7,450,302 7,755,452 8,468,833 8,527,476 8,453,557 8,385,552 8,461,485 8,654,576 8,768,768 8,745,768 8,745,768	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,616,566 6,425,692 7,184,304 7,644,338 8,428,944 8,242,894 8,242,894 8,382,835 8,467,821 8,565,347 8,647,604 8,565,347 8,647,604 8,646,379 8,763,703	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,404,097 5,685,213 6,107,512 7,591,552 7,687,135 7,685,887 7,718,721 7,718,721 7,718,721 8,091,638 8,094,480 8,095,907	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,705,402 6,056,202 6,056,207 7,362,201 7,291,553 7,454,081 7,462,274 7,480,132 7,481,735 7,481,735 7,481,735 7,481,735	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,478,660 4,478,512,52 8,490,153 8,760,507 8,994,827 8,879,879 8,879,879 8,879,879 8,879,879 8,879,879 8,879,879 8,693,906 8,481,353 8,515,273 8,515,273 8,582,610 8,612,926 8,413,117	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,436,836 8,904,201 10,824,370 11,966,090 12,322,3050 13,133,004 12,772,686 12,192,193,193 12,2539,319 12,2539,319 12,2539,319 12,2538,898 11,535,171	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,367,449 6,352,445 6,965,973 7,287,256 8,109,584 8,140,325 7,485,431 7,494,451 7,494,451 7,494,451	1,0000 1,0000 1,0000 1,0000 4,077,968 6,450,455 7,304,561 7,268,321 7,478,1081 7,49,216 7,49,216 7,539,604 7,538,6354 7,633,3071 7,603,806	1,0000 1,0000 1,0000 6,150,319 9,269,896 10,301,194 12,453,149 11,984,386 12,178,272 12,484,769 12,600,820 12,368,018 12,470,444	3.325.544 5.595.218 5.996.029 5.597.263 5.496.933 5.215.101 5.237.407 5.251.578 5.372.852 5.945.858	3,275,884 5,094,625 6,026,129 6,053,552 6,217,573 6,349,621 6,471,573 6,973,809 6,720,431 6,652,402	6,615,460 8,947,874 9,233,530 9,406,949 9,432,764 9,542,759 9,453,964 9,672,629	4,426,812 5,084,862 5,276,335 5,433,501 5,295,524 5,295,524 5,295,524	4,704,074 5,837,644 6,918,124 7,301,176 7,158,740 7,274,640	6,714,362 8,225,491 8,373,419 8,616,232 8,635,331	3,724,530 6,826,523 9,121,284 9,293,673	b) Accident cct 57 re ost 996 Avg mplement: 3,455,344 6,561,596 7,346,985 7,461,258	Yeor 1996 (8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624 11,723,305 11.781,410	-23-96) Weight 0.644 0.356 1.000	1996 Effect 17.53% 0.8247
111 122 133 144 155 166 177 188 199 200 C. 1 2 2 3 4 4 5 6 6 7 8 8 9 10 11 12 13 144 15 16 17	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 1.03247	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8248 0.8249 0.	0.8247 0.	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 1.8215 1.	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.872 0.872 0.872 0.872 0.872 0.872 0.872 0.872 0.872 0.872 0.872 0.872 0.872 0.872 0.872 0.872 0.872 0.772 0.	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4/30/17 5,169,597 7,264,997 7,264,997 7,264,997 7,265,452 8,498,833 8,527,476 8,464,465 8,464,465 8,464,465 8,674,576 8,774,788 8,878,783 8,878,784 8,878,784 8,878,784 8,878,784 8,878,784 8,878,784 8,878,784 8,878,784 8,878,784 8,879,788 8,879,748 8,879,748 8,879,748 8,879,748 8,879,748 8,879,748 8,879,748 8,879,748 8,879,748 8,879,748 8,879,748 8,879,748 8,879,748 8,879,748 8,879,748 8,879,748 8,879,748 8,879,748 8,879,748	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,616,566 6,425,692 7,184,304 7,644,338 8,242,894 8,275,893 8,429,042 8,565,347 8,647,604 8,645,498 8,642,699 8,763,783	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,705,402 6,056,207 6,887,906 7,362,201 7,291,553 7,445,4081 7,462,274 7,475,918 7,486,544 7,480,135 7,481,735 7,481,735 7,481,735	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,478,660 4,478,512,52 8,490,153 8,760,507 8,994,827 8,879,879 8,879,879 8,879,879 8,879,879 8,879,879 8,879,879 8,693,906 8,481,353 8,515,273 8,515,273 8,582,610 8,612,926 8,413,117	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,436,836 8,904,201 10,824,370 11,966,090 12,322,3050 13,133,004 12,772,686 12,192,193,193 12,2539,319 12,2539,319 12,2539,319 12,2538,898 11,535,171	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,367,449 6,352,445 6,965,973 7,287,256 8,109,584 8,140,325 7,485,431 7,494,451 7,494,451 7,494,451	1,0000 1,0000 1,0000 1,0000 4,077,968 6,450,455 7,304,561 7,268,321 7,478,1081 7,49,216 7,49,216 7,539,604 7,538,6354 7,633,3071 7,603,806	1,0000 1,0000 1,0000 6,150,319 9,269,896 10,301,194 12,453,149 11,984,386 12,178,272 12,484,769 12,600,820 12,368,018 12,470,444	3.325.544 5.595.218 5.996.029 5.597.263 5.496.933 5.215.101 5.237.407 5.251.578 5.372.852 5.945.858	3,275,884 5,094,625 6,026,129 6,053,552 6,217,757 6,349,621 6,471,573 6,933,809 6,720,431 6,652,402 Note: I	6.615,460 8,947,874 9,233,530 9,406,949 9,432,764 9,542,759 9,453,964 9,672,629	4,426,812 5,084,862 5,276,335 5,433,501 5,295,524 5,295,524 5,295,524 5,295,524	4,704,074 5,837,644 6,918,124 7,301,176 7,158,740 7,274,640	6,714,362 8,225,491 8,373,419 8,616,232 8,635,331	3,724,530 6,826,553 8,319,223 9,121,284 9,293,673	b) Accident cct 57 re ost 996 Avg mplement: 3,455,344 6.561,596 7,346,985 7,461,258	Yeor 1996 (8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624 11,723,305 11.781,410	-23-96] Weight 0.644 0.356 1.000	1996 Effect 17.53% 0.8247
11 12 13 14 15 16 16 17 18 19 20 C. 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 9 10 11 11 12 12 13 14 14 15 15 16 16 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 1.000000000000000000000000000000000000	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8248 0.8249 0.	0.8247 0.	0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8247 0.8248 0.8248 0.8249 0.9349 0.9490 0.	0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8871 0.8971 0.8971 0.9752 0.	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,616,566 6,425,692 7,184,304 8,242,894 8,242,894 8,242,894 8,242,894 8,429,042 8,865,347 8,647,604 8,654,986 8,665,379 8,760,619 8,760,619 8,760,619 8,763,703	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,404,097 5,485,213 4,107,512 7,311,4026 7,591,552 7,718,721 7,748,785 8,091,638 8,095,907 8,055,069 8,050,069 8,050,069 8,050,069	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,705,402 6,056,207 6,887,906 7,362,201 7,291,553 7,445,4081 7,462,274 7,475,918 7,486,544 7,480,135 7,481,735 7,481,735 7,481,735	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,478,660 4,478,512,52 8,490,153 8,760,507 8,994,827 8,879,879 8,879,879 8,879,879 8,879,879 8,879,879 8,879,879 8,693,906 8,481,353 8,515,273 8,515,273 8,582,610 8,612,926 8,413,117	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,436,836 8,904,201 10,824,370 11,966,090 12,322,3050 13,133,004 12,772,686 12,192,193,193 12,2539,319 12,2539,319 12,2539,319 12,2538,898 11,535,171	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,367,449 6,352,445 6,965,973 7,287,256 8,109,584 8,140,325 7,485,431 7,494,451 7,494,451 7,494,451	1,0000 1,0000 1,0000 1,0000 4,077,968 6,450,455 7,304,561 7,268,321 7,478,1081 7,49,216 7,49,216 7,539,604 7,538,6354 7,633,3071 7,603,806	1,0000 1,0000 1,0000 6,150,319 9,269,896 10,301,194 12,453,149 11,984,386 12,178,272 12,484,769 12,600,820 12,368,018 12,470,444	3.325.544 5.595.218 5.996.029 5.597.263 5.496.933 5.215.101 5.237.407 5.251.578 5.372.852 5.945.858	3,275,884 5,094,625 6,026,129 6,053,552 6,217,757 6,349,621 6,471,573 6,933,809 6,720,431 6,652,402 Note: I	6.615,460 8,947,874 9,233,530 9,406,949 9,432,764 9,542,759 9,453,964 9,672,629	4,426,812 5,084,862 5,276,335 5,433,501 5,295,524 5,295,524 5,295,524 sses times Act	4,704,074 5,837,644 6,918,124 7,301,176 7,158,740 7,274,640	6,714,362 8,225,491 8,373,419 8,616,232 8,635,331	3,724,530 6,826,553 8,319,223 9,121,284 9,293,673	b) Accident cct 57 re ost 996 Avg mplement: 3,455,344 6.561,596 7,346,985 7,461,258	Yeor 1996 (8 Effect 17.53% 0.00% 11.29% 0.8871 7,192,624 11,723,305 11.781,410	-23-96] Weight 0.644 0.356 1.000	1996 Effect 17.53% 0.8247

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Report 1993 1995 1998 4,616,566 3,404,097 3,705,402 4,478,660 5,436,836 4,367,449 4,077,968 3,325,544 3,275,884 5,594,328 2,447,080 3,188,490 3,669,341 3,724,530 3,455,344 6,961,079 9,437,000 7,641,000 7,283,000 6,181,000 6,090,000 5,169,557 6.150.319 7,192,624 4.871.955 13,001,000 11,565,000 12,277,000 8.356.000 8.749.000 7.204.997 6,425,692 5,685,213 6,056,207 7,551,263 8,904,201 6,352,445 6,450,455 9,269,896 5,595,218 5,094,625 6,615,460 4,426,812 4,704,074 6,714,362 6,826,563 6,561,596 11,723,305 9.249.942 15,586,000 13,968,000 15,933,000 8,925,000 9,592,000 7,650,302 7,184,304 6,107,512 6.887.906 7,965,255 10,824,370 6,965,973 7,304,561 10.301.194 5,998,029 6,026,129 8,947,874 5,084,862 5,837,644 8,225,491 8,319,223 7,346,985 11,781,410 6,053,552 4 17.564.000 14.758.000 17.367.000 9.337.000 9,701,000 7.955.452 7.644.338 7.314.026 7.362.001 8,490,153 11,966,090 7.287.256 7.268.321 12.018.140 5.597.263 9.233.530 5.276.335 6,918,124 8.373.419 9.121.284 7.461.258 5 19,202,000 15,766,000 17,942,000 9,922,000 10,178,000 8.698.833 8.242.894 7.591.552 7.291.553 8.760.507 12.323.050 8.286.573 7 374 171 12.453.149 5.496.933 6.217.757 9.406.949 5 433 501 7.301.176 8,616,232 9.293.673 19.971.000 16.067.000 16.902.000 9 904 000 10 686 000 8 527 476 8 275 893 7 679 135 7 454 081 8 994 827 13 133 004 8 109 584 7 418 021 11 984 386 5 215 101 6.349.621 9 432 764 5 295 524 7 158 740 8.635.331 19.893.000 16.607.000 17.087.000 9.897.000 10.632.000 8 464 405 8 429 042 7 485 857 7 462 274 8.879.879 12.772.686 8 140 325 7 469 216 12 178 272 5 237 407 6.471.573 9.542.759 5 295 524 7.274.640 8 19.064.000 16.401.000 17.422.000 9 757 000 10 696 000 8 453 559 8 382 835 7 718 721 7 475 918 8 693 906 12 539 319 7 865 421 7 498 081 12 484 769 5 251 578 6 933 809 9 453 964 5.295.524 9 18 168 000 16 518 000 17 056 000 9.814.000 10.804.000 8 385 552 8 467 821 7 754 976 7 486 544 8 481 353 12 455 797 7 459 231 7 539 604 12 600 820 5 372 852 6 720 431 9.672.629 10 18 370 000 15 967 000 16 573 000 9 860 000 10 688 000 8 441 485 8 565 347 8 091 638 7 480 132 8 515 273 12 228 895 7 494 451 7 586 354 12 368 018 5 948 585 6 652 402 9 864 000 10 753 000 8 504 790 8 647 604 8 094 480 7 481 252 8 549 118 12 023 866 7 400 303 7 633 071 12 470 444 11 18 028 000 15 917 000 16 765 000 6 000 946 12 17.628.000 16.162.000 16.889.000 9.863.000 10.817.000 8.674.576 8.654.986 8.095.907 7.481.862 8.582.610 12.101.118 7,425,395 7.603.806 12.133.479 13 17.180.000 16.314.000 17.018.000 9.871.000 10.933.000 8.712.300 8.662.379 8.054.458 7.481.735 8.612.926 12.053.898 7.450.178 7.631.230 14 17,254,000 16,314,000 17,151,000 9,877,000 10,976,000 8,797,458 8,760,619 8,050,069 7,481,735 8,419,199 11,535,171 7,474,462 15 17 043 000 16 283 000 17,282,000 10,023,000 11 013 000 8 824 907 8,763,703 8.050.069 7 481 735 8,433,117 11,541,679 16 17,103,000 16,405,000 17,515,000 10,120,000 11.049.000 8.629.585 8,763,787 8.050.069 7.481.735 8.431.001 16.328.000 16.948.000 10.126.000 11.084.000 8.640.604 8.764.731 7.481.735 16,844,000 16,436,000 17,037,000 10,149,000 11,119,000 8.660.130 8.767.395 8.050.069 16.881.000 16.550.000 17.126.000 10.146.000 11.158.000 8.797.616 8.808.505 16,917,000 16,674,000 17,203,000 10,152,000 11,193,000 8.812.465 B. Effect of Claim Settlement Levels Only = (Losses adjusted by Act 57 Law Adj. Factors and Claim Settlement Levels (Exhibit VI-A, page 3) divided by Losses adjusted by Act 57 Law Adj. Factors only (Exhibit VI-A, page 1)) 1 0000 1.0000 1 0000 1.0000 1 0227 1.0000 1.0000 1 0000 1 0000 1.0000 1 0000 1.0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1.0000 1 0000 1 0000 1 0000 1.0000 1 0000 1 0000 1.0000 1 0000 1 0000 1.0243 1.0450 1.0000 1.0000 1 0000 1 0000 1.0000 1 0000 1.0000 1 0000 1 0000 1 0000 1 0000 1.0000 1 0000 1.0000 1.0000 1.0000 1 0000 1 0000 1.0000 1 0000 1 0000 1.0485 1.0677 1.0000 1 0000 1 0000 1 0000 1.0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1.0000 1 0000 1.0000 1 0000 1 0000 1.0461 1.0727 1.0902 1.0000 1 0000 1 0000 1 0000 1.0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1.0000 1 0000 1.0000 1.0206 1.0436 1 0691 1 0971 1 1071 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1.0000 1 0000 1.0655 1.0412 1 0922 1 1183 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1.0000 1.0618 1.0873 1 1094 1.1273 1.1241 1.0000 1.0000 1.0000 1 0000 1.0000 1.0000 1.0000 1.0000 1 0000 1.0000 1 0000 1.0000 1 0000 1 0000 Selected Years 11 to 20 1.0825 1.1037 1.1209 1.1334 1.1273 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Selected Years 0 to 10 Claim Settlement Level Addititves 1.0979 1.1146 1.1267 1.1395 1.1273 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Claim Settlement Level Addititves +1.2% per vear 1.1082 1.0000 1.1201 1.1324 1.1455 1.1272 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 9th Last +2.0% per vear 13th Last +1.2% per vegi 1.1113 1.1222 1.1347 1.1480 1.1273 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 8th Last +2.0% per year 12th Last +1.2% per year 12 +1.2% per year 1.1133 1.1244 1.1371 1.1491 1.1273 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 7th Last +2.0% per year 11th Last 6th Last 13 1 1266 1 1382 1.1491 1.1272 1.0000 1.0000 1 0000 1 0000 1.0000 1 0000 1 0000 +2.0% per year 10th Last +0.9% per year 1.1154 1.0000 14 1.1175 1 1276 1 1382 1.1491 1.1273 1.0000 1.0000 1 0000 1 0000 1.0000 1 0000 1 0000 5th Last +1.5% per year 9th Last +0.6% per vear 1.1185 1.1277 1.1382 1.1492 1.1272 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1995 (2) 0.8447 (Page 4th Last +1.0% per vear 8th Last +0.3% per vegi 1.1185 1.1277 1.1383 1.1491 1.1272 1.0000 1.0000 1.0000 1.0000 1.0000 divided by 0.8247 3rd Last +0.5% per vear 7th Last +0.2% per vegi 17 1.1277 +0.5% per year 1.1185 1.1382 1.1491 1.1273 1.0000 1.0000 1.0000 1.0000 eauals 1.0243 2nd Last 6th Last +0.2% per vegi 18 1.1185 1.1277 1.1383 1.1491 1.1273 1.0000 1.0000 1 0000 1st Last +0.5% per vear 5th Last +0.2% per year 1 1277 +0.1% per year 19 1 1185 1 1383 1 1491 1 1273 1 0000 1 0000 4th Last 1.0000 +0.0% per year 20 1 1186 1 1277 1 1382 1 1491 1 1273 3rd Last +0.0% per vear 2nd Last C. Indemnity Incurred Losses Adjusted to Act 57 Law Level and Claim Settlement Levels as of 04/30/17 1st Last +0.0% per vear 9.437.000 7.641.000 7.283.000 6.181.000 6.228.000 5.169.557 4 616 566 3 404 097 3 705 402 4 478 660 5 436 836 4 367 449 4 077 968 6 150 319 3 325 544 3 275 884 5 594 328 2 447 080 3 188 490 3 669 341 3 724 530 3 455 344 7 192 624 13 001 000 11 565 000 12 277 000 8 559 000 9 143 000 7 204 997 6 425 692 5 685 213 6.056.207 7 551 263 8 904 201 6 352 445 6 450 455 9 269 896 5 595 218 5 094 625 6 615 460 4 426 812 4 704 074 6 714 362 6.826.563 6.561.596 11.723.305 9 249 942 3 15 586 000 13 968 000 16 300 000 9.358.000 10.241.000 7 650 302 7 184 304 6 107 512 4 887 904 7 965 255 10 824 370 6 965 973 7 304 561 10 301 194 5 998 029 6 026 129 8 947 874 5 084 862 5 837 644 8 225 491 8 319 223 7 346 985 11 781 410 17.564.000 15.081.000 18.167.000 10.016.000 10.576.000 7 955 452 7 644 338 7.314.026 7 362 001 8 490 153 11 966 090 7 287 256 7 268 321 12 018 140 5 597 263 6.053.552 9 233 530 5 276 335 6 918 124 8 373 419 9 121 284 7 461 258 5 19.598.000 16.454.000 19.182.000 10.885.000 11.268.000 8.698.833 8.242.894 7.591.552 7.291.553 8.760.507 12.323.050 8.286.573 7.374.171 12.453.149 5.496.933 6.217.757 9.406.949 5.433.501 7.301.176 8.616.232 9.293.673 20,794,000 17,119,000 18,460,000 11,045,000 11,950,000 8.527.476 8.275.893 7.679.135 7,454,081 8.994.827 13.133.004 8.109.584 7.418.021 11.984.386 5.215.101 6.349.621 9.432.764 5.295.524 7.158.740 8.635.331 11,951,000 8,879,879 12,178,272 6,471,573 21.123.000 18.057.000 18.957.000 11.157.000 8.464.405 8.429.042 7.685.857 7.462.274 12.772.686 8.140.325 7.469.216 5.237.407 9.542.759 5.295.524 7.274.640 8 20,636,000 18,102,000 19,529,000 11,059,000 12,057,750 8,453,559 8,382,835 7,718,721 7,475,918 8,693,906 12,539,319 7,865,421 7,498,081 12,484,769 5,251,578 6,933,809 9,453,964 5.295.524 19.947.000 18.411.000 19.217.000 11,185,000 12,181,640 8.385.552 8,467,821 7,754,976 7,486,544 8,481,353 12,455,797 7,459,231 7,539,604 12,600,820 5.372.852 6,720,431 9,672,629 10 20.358.000 17.884.000 18.768.000 11.295.000 12.047.901 8.461.485 8.565.347 8.091.638 7,480,132 8.515.273 12.228.895 7.494.451 7.586.354 12.368.018 5.948.585 6.652.402 11 20.035.000 17.862.000 19.024.000 11.324.000 12.121.809 8.504.790 8.647.604 8.094.480 7.481.252 8.549.118 12.023.866 7,400,303 7.633.071 12.470.444 6.000.946 8,582,610 12,101,118 19.626.000 18.172.000 19.204.000 11.334.000 12.194.216 8.674.576 8.654.986 8.095.907 7.481.862 7.425.395 7.603.806 12.133.479 13 19,163,000 18,380,000 19,370,000 11,343,000 12,323,984 8,712,300 8,662,379 8,612,926 12,053,898 8.054.458 7.481.735 7.450.178 7.631.230 19,281,000 18,396,000 19,522,000 11,350,000 12,373,446 8.797.458 8,760,619 8.050.069 7.481.735 8,419,199 11,535,171 7.474.462 8,433,117 11,541,679 15 19.063.000 18.362.000 19.671.000 11.518.000 12.414.145 8.824.907 8.763.703 8 050 069 7.481.735 19.130.000 18.500.000 19.937.000 11.629.000 12.454.657 8.629.585 8.763.787 8 050 069 7 481 735 8.431.001 17 19 197 000 18 413 000 19 290 000 11 636 000 12 494 644 8 640 604 8 764 731 8 050 069 7 481 735 Source: A. Exhibit VI-A, p. 1 (C) 18 18.840.000 18.535.000 19.393.000 11.662.000 12.534.389 8.660.130 8.767.395 8.050.069 B. Section C / Section A

C. Exhibit VI-A, p. 3 (C)

19 18.881.000 18.663.000 19.494.000 11.659.000 12.577.856

20 18,923,000 18,803,000 19,581,000 11,666,000 12,617,517

8.797.616

8,808,505

A. Indemnity Incurred Losses Adjusted to Act 57 Law Level as of 04/30/17

#### Exhibit VI-A Page 3

#### Coal Mine Compensation Rating Bureau Traumatic Loss Development Incurred Indemnity and Funeral Losses for All Classes Combined

									li li	ncurred Inc	demnity an	d Funeral	Losses for	All Classes	Combined	Ė									
A	. Indemnity Re				,																				
Repo	t 1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
	1 11,442,821	9,265,234	8,831,126	7,495,224	6,865,290	5,169,557	4,616,566	3,404,097	3,705,402	4,478,660	5,436,836	4,367,449	4,077,968	6,150,319	3,325,544	3,275,884	5,594,328	2,447,080	3,188,490	3,669,341	3,724,530	3,455,344	7,192,624	6,961,079	4,871,955
					9,862,300	7,204,997	6,425,692	5,685,213	6,056,207	7,551,263	8,904,201	6,352,445	6,450,455	9,269,896	5,595,218	5,094,625	6,615,460	4,426,812	4,704,074	6,714,362	6,826,563		11,723,305	9,249,942	
	3 18,899,163				10,812,980	7,650,302	7,184,304	6,107,512	6,887,906		10,824,370	6,965,973	7,304,561		5,998,029	6,026,129	8,947,874	5,084,862	5,837,644	8,225,491	8,319,223	7,346,985	11,781,410		
	4 21,297,742					7,955,452	7,644,338	7,314,026	7,362,001		11,966,090	7,287,256		12,018,140	5,597,263	6,053,552	9,233,530	5,276,335	6,918,124	8,373,419		7,461,258			
	5 23,283,444					8,698,833	8,242,894	7,591,552	7,291,553		12,323,050	8,286,573		12,453,149	5,496,933	6,217,757	9,406,949	5,433,501	7,301,176	8,616,232	9,293,673				
		19,482,073				8,527,476	8,275,893	7,679,135	7,454,081		13,133,004	8,109,584		11,984,386	5,215,101	6,349,621	9,432,764	5,295,524	7,158,740	8,635,331					
	7 24,121,619					8,464,405	8,429,042	7,685,857	7,462,274	8,879,879		8,140,325		12,178,272	5,237,407	6,471,573	9,542,759	5,295,524	7,274,640						
	3 23,116,561					8,453,559	8,382,835	7,718,721	7,475,918		12,539,319	7,865,421	7,498,081	12,484,769	5,251,578	6,933,809	9,453,964	5,295,524							
	22,029,965				12,181,640	8,385,552	8,467,821	7,754,976	7,486,544	8,481,353		7,459,231	7,539,604		5,372,852	6,720,431	9,672,629								
1		19,360,885				8,461,485	8,565,347	8,091,638	7,480,132	8,515,273		7,494,451	7,586,354	12,368,018	5,948,585	6,652,402									
	1 21,860,102					8,504,790	8,647,604	8,094,480	7,481,252	8,549,118		7,400,303		12,470,444	6,000,946										
	2 21,374,865					8,674,576	8,654,986	8,095,907	7,481,862		12,101,118	7,425,395	7,603,806	12,133,479											
	3 20,831,448					8,712,300	8,662,379	8,054,458	7,481,735	8,612,926		7,450,178	7,631,230												
	4 20,921,084					8,797,458	8,760,619	8,050,069	7,481,735		11,535,171	7,474,462													
1		19,743,633				8,824,907	8,763,703	8,050,069	7,481,735	8,433,117	11,541,6/9														
	5 20,737,874					8,629,585	8,763,787	8,050,069	7,481,735	8,431,001															
	7 20,810,640					8,640,604	8,764,731	8,050,069	7,481,735																
	3 20,424,387					8,660,130	8,767,395	8,050,069																	
1		20,068,163			12,577,856	8,797,616	8,808,505																		
2		20,217,996	20,860,130	12,307,663	12,617,317	8,812,465											,	Claim Cattlan	antloval Ad	lditions are n	aultiplied by	the nercent	vano at the t	n of oach o	aluman
	. Act 57 Inder				m Cattlaman	t Lavala											,	Jam semen	nent Level Ad	allions are n	nulliplied by	me percent	iges at the to	p or each c	olumn.
	. ACI 37 IIIGEI 1 0.8247	0.8247	0.8247	0.8247	0.9071	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
		0.8247	0.8247	0.8447	0.9271	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
		0.8247	0.8437	0.8647	0.7271	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
		0.8427	0.8627	0.8847	0.9671	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		
	0.02 17	0.8607	0.8817	0.9047	0.9821	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			
		0.8787	0.9007	0.7047	0.9921	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				
		0.8967	0.9150	0.9297	0.9971	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		F	to lo 2	ed Years 11 to	0.20
																			1.0000			10			
		0.9102	0.9245	0.9347 0.9397	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			ted Years 0 to			ment Level A	
1	0.7000	0.9192 0.9237	0.9292 0.9340	0.9397	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				ement Level		14th Last	+1.2% p	
1		0.9257	0.9340	0.9447	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				9th Last 8th Last		oer year	13th Last 12th Last	+1.2% p	
1		0.9255	0.9359	0.9467	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000							oer year	11th Last	+1.2% p +1.2% p	
1		0.7273	0.9387	0.9477	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000						7th Last 6th Last		oer year oer year	10th Last	+0.9% p	
				0.9477													p : 1								
1		0.9300 0.9300	0.9387 0.9387	0.9477	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		Act 57 Effecti (b) Accident		02.07	Prior to			5th Last		oer year	9th Last	+0.6% p	
1		0.9300	0.9387	0.9477	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			Act 57	Effect		1996 Effect			4th Last 3rd Last		oer year oer year	8th Last 7th Last	+0.3% p +0.2% p	
i		0.9300	0.9387	0.9477	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				Pre	17.53%	Weight 0.644	17.53%			2nd Last		per year	6th Last	+0.2% p	
1		0.9300	0.9387	0.9477	1.0000	1.0000	1.0000	1.0000	1.0000					Post	0.00%	0.844	17.33/6			1st Last		per year	5th Last	+0.2% p	
								1.0000											L	TSI EGSI	10.5/6	Jei yeui			
1 2		0.9300 0.9300	0.9387 0.9387	0.9477 0.9477	1.0000	1.0000	1.0000							1996 Avg Complement	11.29%	1.000							4th Last 3rd Last	+0.1% p	
2	0.7223	0.7300	0.7367	0.74//	1.0000	1.0000								1.0-0.1129= (			0.8247						2nd Last	+0.0% p +0.0% p	
	. Indemnity In	an mad Lama	a Adiustad ta	Act F7 Love	Laval and Cl	aim Sattlama	ont Lovolo as	of 04/20/17						1.0-0.1127= (	J.007 I		0.0247						1st Last		per year
_									0.705.400		F 40 4 00 4	1017 110			0.005.544	0.075.004	5 50 4 000	0 447 000	0 100 400	0 / / 0 0 / 1	0.704.500	0.455.044			
	9,437,000		7,283,000			5,169,557	4,616,566	3,404,097	3,705,402	4,478,660		4,367,449		6,150,319		3,275,884	5,594,328	2,447,080	3,188,490	3,669,341	3,724,530	3,455,344	7,192,624	6,961,079	4,871,955
	2 13,001,000			8,559,000	9,143,000	7,204,997	6,425,692	5,685,213	6,056,207	7,551,263	8,904,201	6,352,445	6,450,455	9,269,896	5,595,218	5,094,625	6,615,460	4,426,812	4,704,074	6,714,362	6,826,563		11,723,305	9,249,942	
	3 15,586,000			9,358,000		7,650,302	7,184,304	6,107,512	6,887,906		10,824,370	6,965,973	7,304,561	10,301,194	5,998,029	6,026,129	8,947,874	5,084,862	5,837,644	8,225,491	8,319,223	7,346,985	11,781,410		
		15,081,000 16,454,000				7,955,452	7,644,338 8,242,894	7,314,026 7,591,552	7,362,001 7,291,553		11,966,090 12,323,050	7,287,256 8,286,573		12,018,140 12,453,149	5,597,263	6,053,552 6,217,757	9,233,530 9,406,949	5,276,335 5,433,501	6,918,124 7,301,176	8,373,419	9,121,284 9,293,673	7,461,258			
	5 20,794,000					8,698,833 8,527,476	8,275,893	7,679,135	7,454,081		13,133,004	8,109,584		11,984,386	5,496,933 5,215,101	6,349,621	9,432,764	5,295,524	7,301,176	8,616,232 8,635,331	7,273,073				
	7 21,123,000					8,464,405	8,429,042	7,685,857	7,454,061		12,772,686	8,140,325		12,178,272	5,237,407	6,471,573	9,542,759	5,295,524	7,136,740	0,033,331					
	3 20,636,000					8,453,559	8,382,835	7,718,721	7,462,274		12,772,000	7,865,421		12,176,272	5,251,578	6,933,809	9,453,964	5,295,524	7,274,040						
		18,411,000				8,385,552	8,467,821	7,754,976	7,486,544	8,481,353		7,459,231		12,404,707	5,372,852	6,720,431	9,672,629	3,273,324							
	20,358,000					8,461,485	8,565,347	8,091,638	7,480,132	8,515,273		7,437,231		12,368,018	5,948,585	6,652,402	7,072,027								
i			19,024,000			8,504,790	8.647.604	8.094.480	7,480,132	8,549,118		7,474,431	7,366,334	12,366,016	6.000.946	0,002,402									
i	,		19,204,000			8,674,576	8,654,986	8,095,907	7,481,862		12,023,000	7,400,303	7,603,806	12,470,444	0,000,746										
1	,,					8,712,300	8,662,379	8,054,458	7,481,735		12,053,898	7,450,178	7,631,230	.2,100,4//	Note:	1996 Adiustm	ent Factors	are canned	at a maximur	m of 1 0000					
	4 19,281,000					8,797,458			7,481,735	8,419,199		7,474,462	, ,001,200						changed fron		nondina secti	ion of last ve	ar's (Annroya	d) filing	
i		18,362,000				8,824,907	8,763,703	8,050,069	7,481,735	8,433,117		. , ., ., ., .,				1001013111			agod 1101					-,9.	
	5 19,130,000					8,629,585	8.763.787	8,050,069	7,481,735	8,431,001	,,,														
i					12,494,644	8,640,604	8,764,731	8,050,069	7,481,735	.,						Source: A	A. Exhibit VI-A	A. p. 1 (A)							
i	,,	18,535,000				8,660,130	8,767,395	8,050,069	, , . 50										ment Levels	Combined					
	9 18,881,000					8,797,616	8,808,505											-5a,VI-A-5b,\							
	18 923 000					9 912 445	.,,										^ A times R								

C. A times B equals C

20 18,923,000 18,803,000 19,581,000 11,666,000 12,617,517 8,812,465

### Coal Mine Compensation Rating Bureau Traumatic Loss Development

### Incurred Indemnity and Funeral Losses for All Classes Combined

Report  1 2 3 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18	1992 9,437,000 15,586,000 15,586,000 15,598,000 20,794,000 20,794,000 21,123,000 20,636,000 19,947,000 20,358,000 19,281,000 19,281,000 19,281,000 19,130,000 19,130,000 19,130,000 19,197,000 18,881,000	1993 7,641,000 11,565,000 13,968,000 15,081,000 16,454,000 17,119,000 18,102,000 18,112,000 18,172,000 18,172,000 18,380,000 18,380,000 18,362,000 18,362,000 18,362,000 18,363,000 18,563,000 18,563,000	1994 7,283,000 12,277,000 16,300,000 18,167,000 19,182,000 18,957,000 19,529,000 19,217,000 19,224,000 19,204,000 19,370,000 19,522,000 19,370,000 19,522,000 19,370,000 19,937,000 19,937,000	1995 6.181,000 9.358,000 10,885,000 11,045,000 11,045,000 11,157,000 11,1324,000 11,334,000 11,334,000 11,350,000 11,350,000 11,350,000 11,350,000 11,350,000 11,350,000 11,559,000 11,636,000 11,636,000 11,636,000 11,659,000	9,143,000 10,241,000 10,576,000 11,950,000 11,950,000 11,951,000 12,057,750 12,181,640 12,047,901 12,121,809 12,194,216 12,323,984 12,373,446 12,414,145 12,454,657 12,494,644 12,577,856	vel and Clai 1997 5,169,557 7,204,997 7,450,302 7,955,452 8,698,833 8,527,476 8,464,405 8,453,559 8,385,552 8,461,485 8,453,559 8,453,559 8,453,559 8,453,559 8,453,559 8,454,576 8,777,458 8,824,907 8,627,858 8,460,604 8,660,130 8,797,418 8,812,465	m Settlement 1998 4.616,566 6.425,672 7,184,304 7,644,338 8.242,894 8.275,893 8.427,042 8.382,835 8.467,821 8.362,835 8.467,801 8.662,379 8.763,703 8.763,703 8.763,703 8.763,787 8.764,731 8.767,395 8.808,505	Levels as of 1979 3,404,097 5,488,213 6,107,512 7,314,026 7,591,552 7,679,135 7,688,857 7,718,721 7,754,976 8,091,638 8,094,440 8,095,907 8,050,069 8,050,069 8,050,069 8,050,069	04/30/17 2000 3,705,402 6,056,207 6,887,906 7,362,001 7,291,553 7,454,081 7,454,081 7,445,274 7,475,918 7,486,544 7,480,132 7,481,235 7,481,735 7,481,735 7,481,735 7,481,735	8,612,926	12,023,866 12,101,118 12,053,898 11,535,171	2003 4,367,449 6,352,445 6,945,973 7,287,256 8,286,573 8,109,584 8,140,325 7,465,421 7,459,231 7,409,303 7,425,395 7,450,178	2004 4.077.968 6.450.455 7.304.561 7.268.321 7.374.171 7.418.021 7.498.081 7.539,604 7.633.071 7.633.071 7.633.073	2005 6.150,319 9.269,896 10.301,194 12.018,140 12.453,149 11.984,386 12.178,272 12.484,769 12,400,820 12.368,018 12.470,444 12,133,479	2006 3,325,544 5,595,218 5,998,029 5,597,263 5,496,933 5,215,101 5,237,407 5,251,578 5,372,852 5,948,585 6,000,946	2007 3,275,884 5,094,625 6,026,129 6,053,552 6,217,757 6,349,621 6,471,573 6,933,809 6,720,431 6,652,402	2008 5,594,328 6,615,460 8,947,874 9,233,530 9,406,949 9,432,764 9,542,759 9,453,964 9,672,629	2009 2,447,080 4,426,812 5,084,862 5,276,335 5,433,501 5,295,524 5,295,524 5,295,524	2010 3,188,490 4,704,074 5,837,644 6,918,124 7,301,176 7,158,740 7,274,640	2011 3.669,341 6.714,362 8.225,491 8.373,419 8.616,232 8.635,331	2012 3,724,530 6,826,563 8,319,223 9,121,284 9,293,673		2014 7,192,624 11,723,305 11,781,410	2015 6,961,079 9,249,942	2016 4.871,955
B. / 1:2 2:3 3:4 4:5 5:6 6:7 7:8 8:9 9:10 10:11 11:12 12:13 13:14 14:15 15:16 16:17 17:18 18:19 19:20	1.0035 1.0035 1.0035 0.9814 1.0022	0.9982 1.0075 0.9953 1.0069 1.0069	1.0078 1.0078 1.0075 1.0135 0.9675 1.0052 1.0052	1.0008 1.0006 1.0148 1.0096 1.0006 1.0022 0.9997	1.0060 1.0106 1.0040 1.0033 1.0032 1.0032 1.0035	1.0051 1.0200 1.0043 1.0098 1.0031 0.9779 1.0013 1.0023 1.0159	1.0115 1.0096 1.0009 1.0009 1.0113 1.0004 1.0000 1.0001 1.0003	1.0047 1.0434 1.0004 1.0002 0.9949 0.9995 1.0000 1.0000	1.0018 1.0014 0.9991 1.0001 1.0000 1.0000 1.0000 1.0000	0.9872 0.9791 0.9756 1.0040 1.0039 1.0035 0.9775 1.0017	1.0657 0.9726 0.9817 0.9933 0.9832 1.0064 0.9961 0.9570 1.0006	1.1371 0.9786 1.0038 0.9662 0.9484 1.0047 0.9874 1.0034 1.0033	0.9950 1.0146 1.0059 1.0059 1.0039 1.0055 1.0062 1.0062 1.0062 1.0063	1.1113 1.1667 1.0362 0.9624 1.0162 1.0252 1.0093 0.9815 1.0083 0.9730	1.6825 1.0720 0.9332 0.9821 0.9487 1.0043 1.0027 1.0231 1.1072	1.5552 1.1828 1.0046 1.0271 1.0212 1.0192 1.0714 0.9692 0.9899	1.1825 1.3526 1.0319 1.0188 1.0027 1.0117 0.9907 1.0231	1.8090 1.1487 1.0377 1.0298 0.9746 1.0000	1.4753 1.2410 1.1851 1.0554 0.7805 1.0162	1.8299 1.2251 1.0180 1.0290 1.0022	1.8329 1.2187 1.0964 1.0189	1.8990 1.1197 1.0156	1.6299 1.0050	1.3288	
C. \$\cdot \text{1:2} \\ 2:3 \\ 3:4 \\ 4:5 \\ 5:6 \\ 6:7 \\ 7:8 \\ 8:9 \\ 9:10 \\ 10:11 \\ 11:12 \\ 12:13 \\ 13:14 \\ 14:15 \\ 15:16 \\ 16:17 \\ 17:18 \\ 18:19 \\ 19:20 \end{array}	Summary					10 Year Straight Average 1.6225 1.16277 1.0484 1.0334 1.0038 1.0023 0.9954 1.0129 1.0010 1.0010 1.0018 0.9971 1.0030 1.0015 0.9968 1.0022 1.0054 1.0033	Straight \	Weighted	Average .		6 Year Weighted Average 1.6239 1.1377 1.0559 1.0287 0.9909 1.0124 1.0157 0.9975 1.0025 0.9988 0.9959 0.9989 1.0010 0.9971 1.0010 0.9971 1.0028 1.0056 1.0037		Average of Middle Four 1.6388 1.1613 1.0520 1.0305 0.9916 1.0008 0.9969 1.0010 0.9952 1.0018 1.0004 0.9969 1.0017 1.0053 1.0033	Е	Straight Av	s Developme of Straight Av Averages fo verages for 1	ent Factors verages for 1 r 10 and 6 ye	0 and 6 years, s excluding 1		owest,					

## Coal Mine Compensation Rating Bureau Traumatic Loss Development Indemnity Claim Settlement Adjustment Factors Summary of Data and Selections

	(1)	(2)
Data	0 to 10	0 to 10
<u>as of</u>	Development	<u>Selection</u>
4/30/2005	0.3%	0.5%
4/30/2004	0.8%	0.5%
4/30/2003	1.4%	0.5%
4/30/2002	1.0%	1.0%
4/30/2001	2.2%	1.5%
4/30/2000	3.1%	2.0%
4/30/1999	2.7%	2.0%
4/30/1998	2.8%	2.0%
4/30/1997	<u>2.2%</u>	2.0%
Total	16.5%	12.0%
	(0)	
	(3)	(4)
Data	10 to 20	10 to 20
as of	<u>Development</u>	Selection
4/30/2010	0.0%	0.0%
4/30/2009	0.1%	0.0%
4/30/2008	0.0%	0.0%
4/30/2007	0.1%	0.1%
4/30/2006	0.2%	0.2%
4/30/2005	0.4%	0.2%
4/30/2004	0.2%	0.2%
4/30/2003	0.9%	0.3%
4/30/2002	0.5%	0.6%
4/30/2001	1.4%	0.9%
4/30/2000	4.4%	1.2%
4/30/1999	0.1%	1.2%
4/30/1998	0.0%	1.2%
4/30/1997	<u>0.0%</u>	<u>1.2%</u>
Total	8.3%	7.3%

#### Sources:

- (1) Exhibit VI-A Page 5b
- (2) Exhibit VI-A Page 5b
- (3) Exhibit VI-A Page Sc for 2001-2010, Filing effective 4/1/2009 for 1997-2000 (4) Exhibit VI-A Page Sc for 2001-2010, Filing effective 4/1/2009 for 1997-2000

Note: Personnel from the CMCRB have concluded that the impact of Act 57 has waned to the point that the Claim Settlement effect for this year and future years is zero (0.00). Thus this Exhibit will no longer be updated.

# Coal Mine Compensation Rating Bureau Traumatic Loss Development

Indemnity Claim Settlement Adjustment Factors - 1st to 10th Report

	(1)	(2)	(3)	(4)		(1)	(2)	(3)	(4)		(1)	(2)	(3)	(4)		(1)	(2)	(3)	(4)
Accident	4/30/1997	12 Month			Accident	4/30/1998	12 Month			Accident	4/30/1999	12 Month			Accident	4/30/2000	12 Month		
<u>Year</u>	Rpt.Loss(5)	Fav_Dev <sup>14</sup>	(2) / (1)	Selection	<u>Year</u>	Rpt.Loss™	Fav_Dev <sup>14</sup>	(2) / (1)	Selection	<u>Year</u>	Rpt.Loss™	Fav_Dev™	(2) / (1)	Selection	Year	Rpt.Loss <sup>14</sup>	Fav_Dev <sup>14</sup>	(2) / (1)	Selection
1987	18,806	759	4.0%	XX	1988	16,032	0	0.0%	xx	1989	18,878	368	1.9%	XX	1990	29,328	800	2.7%	XX
1988	15,731	926	5.9%	XX	1989	19,106	874	4.6%	xx	1990	29,654	1150	3.9%	XX	1991	19,165	457	2.4%	XX
1989	19,920	856	4.3%	XX	1990	30,400	1150	3.8%	xx	1991	19,430	596	3.1%	XX	1992	23,117	988	4.3%	XX
1990	30,426	478	1.6%	XX	1991	19,984	544	2.7%	XX	1992	24,122	491	2.0%	XX	1993	20,137	0	0.0%	XX
1991	19,515	319	1.6%	XX	1992	24,216	651	2.7%	XX	1993	19,482	440	2.3%	XX	1994	20,495	1321	6.4%	XX
1992	23,283	0	0.0%	XX	1993	19,117	919	4.8%	XX	1994	21,755	656	3.0%	XX	1995	12,031	0	0.0%	XX
1993	17,896	445	2.5%	XX	1994	21,058		1.6%	XX	1995	11,322		1.1%	XX	1996	10,936	663	6.1%	XX
1994	19,319	0	0.0%	XX	1995	10,822	349	3.2%	XX	1996	10,813	296	2.7%	XX	1997	XX	XX	XX	XX
<u>1995</u>	10,133	<u>0</u>	0.0%	XX	<u>1996</u>	<u>9,862</u>	<u>0</u>	0.0%	XX	<u>1997</u>	XX	XX	XX	XX	1998	XX		XX	XX
Total	175,029	3,783	2.2%	2.0%	Total	170,597	4,824	2.8%	2.0%	Total	155,456	4,124	2.7%	2.0%	Total	135,209	4,229	3.1%	2.0%
Accident	(1) 4/30/2001	(2) 12 Month	(3)	(4)	Accident	(1) 4/30/2002	(2) 12 Month	(3)	(4)	Accident	(1) 4/30/2003	(2) 12 Month	(3)	(4)	Accident	(1) 4/30/2004	(2) 12 Month	(3)	(4)
Accident <u>Year</u>	4/30/2001		(3) (2) / (1)	(4) Selection	Accident <u>Year</u>			(3) (2) / (1)	(4) Selection	Accident <u>Year</u>			(3) (2) / (1)	(4) Selection	Accident <u>Year</u>			(3) (2) / (1)	(4) Selection
	4/30/2001	12 Month				4/30/2002	12 Month Fav_Dev <sup>(a)</sup>				4/30/2003	12 Month				4/30/2004	12 Month Fav_Dev <sup>(a)</sup>		
<u>Year</u>	4/30/2001 Rpt.Loss <sup>(a)</sup>	12 Month Fav_Dev <sup>(a)</sup>	(2) / (1)	Selection	<u>Year</u>	4/30/2002 Rpt.Loss <sup>(a)</sup>	12 Month Fav_Dev <sup>(a)</sup>	(2) / (1) 0.0% 1.6%	Selection	<u>Year</u>	4/30/2003 <u>Rpt.Loss</u> <sup>(a)</sup> 19,361 20,681	12 Month Fav_Dev <sup>(a)</sup>	(2) / (1)	Selection	<u>Year</u>	4/30/2004 Rpt.Loss <sup>(a)</sup>	12 Month Fav_Dev <sup>(a)</sup>	(2) / (1) 1.8% 0.0%	Selection
<u>Year</u> 1991 1992 1993	4/30/2001 <u>Rpt.Loss<sup>(c)</sup></u> 19,058 22,030 19,887	12 Month <u>Fav_Dev<sup>(a)</sup></u> 244 813 522	(2) / (1) 1.3% 3.7% 2.6%	Selection xx	<u>Year</u> 1992 1993 1994	4/30/2002 Rpt.Loss <sup>(a)</sup> 22,275 20,029 21,125	12 Month <u>Fav_Dev<sup>(a)</sup></u> 0 314 214	(2) / (1) 0.0% 1.6% 1.0%	Selection xx	<u>Year</u> 1993 1994 1995	4/30/2003 Rpt.Loss <sup>(a)</sup> 19,361 20,681 11,831	12 Month <u>Fav_Dev<sup>(a)</sup></u> 236 637 0	(2) / (1) 1.2% 3.1% 0.0%	Selection xx	<u>Year</u> 1994 1995 1996	4/30/2004 <u>Rpt.Loss<sup>(a)</sup></u> 20,243	12 Month Fav_Dev <sup>(a)</sup> 368	(2) / (1) 1.8%	Selection xx
<u>Year</u> 1991 1992 1993 1994	4/30/2001 <u>Rpt.Loss<sup>(a)</sup></u> 19,058 22,030 19,887 20,719	12 Month <u>Fav_Dev<sup>(a)</sup></u> 244 813 522 434	(2) / (1) 1.3% 3.7% 2.6% 2.1%	Selection xx xx	<u>Year</u> 1992 1993 1994 1995	4/30/2002 Rpt.Loss <sup>(a)</sup> 22,275 20,029 21,125 12,001	12 Month Fav_Dev <sup>(a)</sup> 0 314	(2) / (1) 0.0% 1.6% 1.0% 2.9%	Selection xx xx	<u>Year</u> 1993 1994 1995 1996	4/30/2003 <u>Rpt.Loss</u> <sup>(a)</sup> 19,361 20,681	12 Month <u>Fav_Dev<sup>(a)</sup></u> 236 637 0	(2) / (1) 1.2% 3.1%	Selection xx xx	<u>Year</u> 1994 1995 1996 1997	4/30/2004 <u>Rpt.Loss</u> <sup>(a)</sup> 20,243 11,907	12 Month Fav_Dev <sup>(a)</sup> 368 0	(2) / (1) 1.8% 0.0%	Selection xx xx
Year 1991 1992 1993 1994 1995	4/30/2001 <u>Rpt.Loss<sup>(a)</sup></u> 19,058 22,030 19,887 20,719 12,009	12 Month <u>Fav_Dev<sup>(a)</sup></u> 244 813 522 434 162	(2) / (1) 1.3% 3.7% 2.6% 2.1% 1.3%	Selection xx xx xx	<u>Year</u> 1992 1993 1994 1995	4/30/2002 Rpt.Loss <sup>(a)</sup> 22,275 20,029 21,125	12 Month <u>Fav_Dev<sup>(a)</sup></u> 0 314 214	(2) / (1) 0.0% 1.6% 1.0%	Selection xx xx xx	<u>Year</u> 1993 1994 1995 1996	4/30/2003 Rpt.Loss <sup>(a)</sup> 19,361 20,681 11,831	12 Month <u>Fav_Dev</u> <sup>(a)</sup> 236 637 0 0	(2) / (1) 1.2% 3.1% 0.0%	Selection xx xx xx	<u>Year</u> 1994 1995 1996 1997 1998	4/30/2004 <u>Rpt.Loss<sup>[a]</sup></u> 20,243 11,907 11,994	12 Month <u>Fav_Dev<sup>(a)</sup></u> 368 0 0 0	(2) / (1) 1.8% 0.0% 0.0%	Selection xx xx xx
Year 1991 1992 1993 1994 1995	4/30/2001 <u>Rpt.Loss<sup>(a)</sup></u> 19,058 22,030 19,887 20,719	12 Month <u>Fav_Dev<sup>(a)</sup></u> 244 813 522 434	(2) / (1) 1.3% 3.7% 2.6% 2.1%	Selection xx xx xx xx xx	Year 1992 1993 1994 1995 1996	4/30/2002 Rpt.Loss <sup>(a)</sup> 22,275 20,029 21,125 12,001	12 Month Fav_Dev <sup>[a]</sup> 0 314 214 354 0	(2) / (1) 0.0% 1.6% 1.0% 2.9%	Selection xx xx xx xx xx	Year 1993 1994 1995 1996 1997 1998	4/30/2003 Rpt.Loss <sup>(c)</sup> 19,361 20,681 11,831 11,985	12 Month Fav_Dev <sup>[a]</sup> 236 637 0 0 xx	(2) / (1) 1.2% 3.1% 0.0% 0.0%	Selection XX XX XX XX	Year 1994 1995 1996 1997 1998 1999	4/30/2004 Rpt.Loss <sup>(a)</sup> 20,243 11,907 11,994 xx	12 Month <u>Fav_Dev</u> <sup>(a)</sup> 368 0 0 0 xx	(2) / (1) 1.8% 0.0% 0.0% ×x	Selection xx xx xx xx xx
Year 1991 1992 1993 1994 1995 1996 1997	4/30/2001 <u>Rpt.Loss<sup>(a)</sup></u> 19,058 22,030 19,887 20,719 12,009	12 Month <u>Fav_Dev<sup>(a)</sup></u> 244 813 522 434 162	(2) / (1) 1.3% 3.7% 2.6% 2.1% 1.3%	Selection  xx  xx  xx  xx  xx  xx	Year 1992 1993 1994 1995 1996 1997	4/30/2002 <u>Rpt.Loss</u> <sup>(a)</sup> 22,275 20,029 21,125 12,001 12,046	12 Month Fav_Dev <sup>[a]</sup> 0 314 214 354 0 xx	(2) / (1) 0.0% 1.6% 1.0% 2.9% 0.0%	Selection XX XX XX XX XX	Year 1993 1994 1995 1996 1997 1998	4/30/2003 <u>Rpt.Loss</u> <sup>(a)</sup> 19,361 20,681 11,831 11,985 xx	12 Month Fav_Dev <sup>[a]</sup> 236 637 0 0 xx xx	(2) / (1) 1.2% 3.1% 0.0% 0.0% xx	Selection  xx  xx  xx  xx  xx  xx	Year 1994 1995 1996 1997 1998 1999 2000	4/30/2004 <u>Rpt.Loss</u> <sup>(a)</sup> 20,243 11,907 11,994 xx xx	12 Month Fav_Dev <sup>(a)</sup> 368 0 0 0 xx xx	(2) / (1) 1.8% 0.0% 0.0% xx xx	Selection  xx  xx  xx  xx  xx  xx
Year 1991 1992 1993 1994 1995 1996 1997 1998	4/30/2001 <u>Rpt.Loss</u> <sup>(2)</sup> 19,058 22,030 19,887 20,719 12,009 11,474	12 Month <u>Fav_Dev<sup>[a]</sup></u> 244 813 522 434 162 156	(2) / (1) 1.3% 3.7% 2.6% 2.1% 1.3% 1.4%	Selection xx	Year 1992 1993 1994 1995 1996 1997 1998	4/30/2002 <u>Rpt.Loss</u> <sup>[a]</sup> 22,275 20,029 21,125 12,001 12,046 xx	12 Month Fav_Dev <sup>[a]</sup> 0 314 214 354 0 xx xx	(2) / (1) 0.0% 1.6% 1.0% 2.9% 0.0% xx	Selection  xx  xx  xx  xx  xx  xx  xx	Year 1993 1994 1995 1996 1997 1998 1999 2000	4/30/2003 <u>Rpt.Loss</u> <sup>[a]</sup> 19,361 20,681 11,831 11,985 xx xx	12 Month Fav_Dev <sup>[a]</sup> 236 637 0 0 xx xx	(2) / (1) 1.2% 3.1% 0.0% 0.0% xx xx	Selection  xx  xx  xx  xx  xx  xx  xx  xx	Year 1994 1995 1996 1997 1998 1999 2000 2001	4/30/2004 <u>Rpt.Loss</u> <sup>[a]</sup> 20,243 11,907 11,994 xx xx	12 Month Fav_Dev <sup>(a)</sup> 368 0 0 0 xx xx xx	(2) / (1) 1.8% 0.0% 0.0% xx xx xx	Selection  xx  xx  xx  xx  xx  xx  xx  xx  xx
Year 1991 1992 1993 1994 1995 1996 1997	4/30/2001 Rpt.Loss <sup>1/2</sup> ) 19,058 22,030 19,887 20,719 12,009 11,474 xx	12 Month Fav_Dev <sup>(a)</sup> 244 813 522 434 162 156 xx	(2) / (1) 1.3% 3.7% 2.6% 2.1% 1.3% 1.4% xx	Selection  xx  xx  xx  xx  xx  xx  xx  xx  xx	Year 1992 1993 1994 1995 1996 1997	4/30/2002 <u>Rpt.Loss</u> <sup>[a]</sup> 22,275 20,029 21,125 12,001 12,046 xx xx	12 Month Fav_Dev <sup>[c]</sup> 0 314 214 354 0 xx xx xx	(2) / (1) 0.0% 1.6% 1.0% 2.9% 0.0% xx xx	Selection  xx  xx  xx  xx  xx  xx  xx  xx	Year 1993 1994 1995 1996 1997 1998	4/30/2003 <u>Rpt.Loss</u> <sup>[a]</sup> 19,361 20,681 11,831 11,985 xx xx	12 Month Fav_Dev <sup>[a]</sup> 236 637 0 0 xx xx xx xx	(2) / (1) 1.2% 3.1% 0.0% 0.0% xx xx xx	Selection xx	Year 1994 1995 1996 1997 1998 1999 2000	4/30/2004 <u>Rpt.Loss</u> <sup>[a]</sup> 20,243 11,907 11,994 xx xx xx	12 Month Fav_Dev <sup>(a)</sup> 368 0 0 0 xx xx xx	(2) / (1) 1.8% 0.0% 0.0% xx xx xx xx	Selection xx

Accident	(1) 4/30/2005	(2) 12 Month	(3)	(4)
<u>Year</u>	Rpt.Loss <sup>(a)</sup>	Fav_Dev <sup>[a]</sup>	(2) / (1)	Selection
1995	11,956	70	0.6%	XX
1996	12,182	0	0.0%	XX
1997	XX	0	XX	XX
1998	XX	0	XX	XX
1999	XX	XX	XX	XX
2000	XX	XX	XX	XX
2001	XX	XX	XX	XX
2002	XX	XX	XX	XX
2003	XX	XX	XX	XX
Total	24,138	70	0.3%	0.5%

Note: Personnel from the CMCRB have concluded that the impact of Act 57 has waned to the point that the Claim Settlement effect for this year and future years is zero (0.00). Thus this Exhibit will no longer be updated.

(a) All amounts are in thousands of dollars

Sources: Column (1) Exhibit VI-A p. 1a CMCRB Data Base

# Coal Mine Compensation Rating Bureau Traumatic Loss Development Indemnity Claim Settlement Adjustment Factors - Beyond 10th Report

Accident	(1) 4/30/2001	(2) 12 Month	(3)	(4)	Accident	(1) 4/30/2002	(2) 12 Month	(3)	(4)	Accident	(1) 4/30/2003	(2) 12 Month	(3)	(4)	Accident	(1) 4/30/2004	(2) 12 Month	(3)	(4)
Year	Rpt.Loss <sup>(a)</sup>	Fav_Dev <sup>(a)</sup>	(2) / (1)	Selection	Year	Rpt.Loss <sup>(a)</sup>	Fav_Dev <sup>(a)</sup>	(2) / (1)	Selection	Year	Rpt.Loss <sup>(a)</sup>	Fav Dev <sup>(a)</sup>	(2) / (1)	Selection	Year	Rpt.Loss <sup>(a)</sup>	Fav_Dev <sup>(a)</sup>	(2) / (1)	Selection
1983	19,728	283	1.4%	XX	1983	19,581	0	0.0%	XX	1983	19,537	132	0.7%	XX	1983	19,617	0	0.0%	xx
1984	25,745	185	0.7%	XX	1984	25,801	0	0.0%	xx	1984	25,724	0	0.0%	xx	1984	25,837	0	0.0%	xx
1985	16,662	219	1.3%	XX	1985	16,776	0	0.0%	xx	1985	16,860	0	0.0%	xx	1985	16,954	0	0.0%	xx
1986	18,002	194	1.1%	XX	1986	17,729	221	1.2%	XX	1986	17,764	0	0.0%	XX	1986	17,812	0	0.0%	XX
1987	17,785	0	0.0%	XX	1987	17,924	0	0.0%	XX	1987	17,933	122	0.7%	XX	1987	18,072	0	0.0%	XX
1988	15,926	194	1.2%	XX	1988	15,795	217	1.4%	XX	1988	15,878	0	0.0%	XX	1988	15,845	0	0.0%	XX
1989	18,586	0	0.0%	XX	1989	18,938	0	0.0%	XX	1989	18,878	0	0.0%	XX	1989	18,876	0	0.0%	XX
1990	28,447	1222	4.3%	XX	1990	28,697	0	0.0%	XX	1990	28,678	294	1.0%	XX	1990	28,968	0	0.0%	XX
1991	XX	XX	XX	XX	1991	18,465	442	2.4%	XX	1991	18,005		2.5%	XX	1991	18,078	16	0.1%	XX
1992	xx	xx	XX	0.9%	1992	XX	<u>xx</u> 880	0.5%	XX	1992	21,860	<u>835</u> 1,841	3.8% 0.9%	XX	1992	21,375	32	0.1%	XX
Total	160,881	2,297	1.4%	0.9%	Total	179,706	880	0.5%	0.6%	Total	201,117	1,841	0.9%	0.3%	1993	19,300	<u>358</u>	1.9%	xx
															Total	220,734	406	0.2%	0.2%
	(1)	(2)	(3)	(4)		(1)	(2)	(3)	(4)		(1)	(2)	(3)	(4)		(1)	(2)	(3)	(4)
Accident	4/30/2005	12 Month			Accident	4/30/2006	12 Month			Accident	4/30/07	12 Month			Accident	4/30/2008	12 Month		
<u>Year</u>		Fav_Dev <sup>(a)</sup>	(2) / (1)	Selection	<u>Year</u>	Rpt.Loss <sup>(a)</sup>	Fav_Dev <sup>(a)</sup>	(2) / (1)	Selection	<u>Year</u>	Rpt.Loss <sup>(a)</sup>	Fav_Dev <sup>(a)</sup>	(2) / (1)	Selection	<u>Year</u>		Fav_Dev <sup>(a)</sup>	(2) / (1)	Selection
1983	19,558	0	0.0%	Selection xx	1983	19,629	Fav_Dev <sup>(a)</sup>	0.0%	Selection xx	1983	19,485	0	0.0%	Selection xx	1983	19,478	0	0.0%	Selection xx
1983 1984	19,558 26,025		0.0% 0.0%		1983 1984	19,629 25,971		0.0%		1983 1984	19,485 26,136	0	0.0%		1983 1984	19,478 26,205		0.0% 0.0%	
1983 1984 1985	19,558 26,025 17,068	0 0 0	0.0% 0.0% 0.0%	xx	1983 1984 1985	19,629 25,971 17,182	0 0 0	0.0% 0.0% 0.0%	XX	1983 1984 1985	19,485 26,136 17,144	0 0	0.0% 0.0% 0.0%	xx	1983 1984 1985	19,478 26,205 16,838	0 0 0	0.0% 0.0% 0.0%	xx
1983 1984 1985 1986	19,558 26,025 17,068 17,907	0 0 0	0.0% 0.0% 0.0% 0.0%	xx xx	1983 1984 1985 1986	19,629 25,971 17,182 17,896	0 0 0 94	0.0% 0.0% 0.0% 0.5%	XX XX	1983 1984 1985 1986	19,485 26,136 17,144 17,999	0 0	0.0% 0.0% 0.0% 0.0%	xx xx	1983 1984 1985 1986	19,478 26,205 16,838 18,146	0 0 0	0.0% 0.0% 0.0% 0.0%	xx xx
1983 1984 1985 1986 1987	19,558 26,025 17,068 17,907 18,208	0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0%	xx xx xx	1983 1984 1985 1986 1987	19,629 25,971 17,182 17,896 18,028	0 0 0 94 295	0.0% 0.0% 0.0% 0.5% 1.6%	XX XX XX	1983 1984 1985 1986 1987	19,485 26,136 17,144 17,999 18,007	0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0%	XX XX XX	1983 1984 1985 1986 1987	19,478 26,205 16,838 18,146 18,110	0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0%	xx xx xx
1983 1984 1985 1986 1987 1988	19,558 26,025 17,068 17,907 18,208 15,700	0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX XX XX XX	1983 1984 1985 1986 1987 1988	19,629 25,971 17,182 17,896 18,028 15,763	0 0 0 94 295	0.0% 0.0% 0.0% 0.5% 1.6% 0.0%	XX XX XX XX	1983 1984 1985 1986 1987 1988	19,485 26,136 17,144 17,999 18,007 15,827	0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	xx xx xx xx	1983 1984 1985 1986 1987 1988	19,478 26,205 16,838 18,146 18,110 15,892	0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX XX XX XX
1983 1984 1985 1986 1987 1988 1989	19,558 26,025 17,068 17,907 18,208 15,700 18,503	0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 2.1%	XX XX XX XX XX XX	1983 1984 1985 1986 1987 1988 1989	19,629 25,971 17,182 17,896 18,028 15,763 18,538	0 0 0 94 295 0	0.0% 0.0% 0.0% 0.5% 1.6% 0.0%	xx xx xx xx xx xx xx	1983 1984 1985 1986 1987 1988 1989	19,485 26,136 17,144 17,999 18,007 15,827 18,579	0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX XX XX XX XX XX	1983 1984 1985 1986 1987 1988 1989	19,478 26,205 16,838 18,146 18,110 15,892 18,621	0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX XX XX XX XX XX
1983 1984 1985 1986 1987 1988 1989 1990	19,558 26,025 17,068 17,907 18,208 15,700 18,503 29,336	0 0 0 0 0 0 0 0 380	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 2.1% 0.0%	XX XX XX XX XX	1983 1984 1985 1986 1987 1988 1989	19,629 25,971 17,182 17,896 18,028 15,763 18,538 29,409	0 0 0 94 295 0 0	0.0% 0.0% 0.0% 0.5% 1.6% 0.0% 0.0%	xx xx xx xx xx xx	1983 1984 1985 1986 1987 1988 1989 1990	19,485 26,136 17,144 17,999 18,007 15,827 18,579 29,661	0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX XX XX XX XX	1983 1984 1985 1986 1987 1988 1989	19,478 26,205 16,838 18,146 18,110 15,892 18,621 29,843	0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX XX XX XX XX
1983 1984 1985 1986 1987 1988 1989 1990	19,558 26,025 17,068 17,907 18,208 15,700 18,503 29,336 18,154	0 0 0 0 0 0 0 380 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 2.1% 0.0%	XX	1983 1984 1985 1986 1987 1988 1989 1990	19,629 25,971 17,182 17,896 18,028 15,763 18,538 29,409 18,201	0 0 94 295 0 0 176	0.0% 0.0% 0.0% 0.5% 1.6% 0.0% 0.0% 0.6%	XX XX XX XX XX XX XX XX	1983 1984 1985 1986 1987 1988 1989 1990	19,485 26,136 17,144 17,999 18,007 15,827 18,579 29,661 18,272	0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX	1983 1984 1985 1986 1987 1988 1989 1990	19,478 26,205 16,838 18,146 18,110 15,892 18,621 29,843 18,318	0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX
1983 1984 1985 1986 1987 1988 1989 1990 1991	19,558 26,025 17,068 17,907 18,208 15,700 18,503 29,336 18,154 20,831	0 0 0 0 0 0 380 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 2.1% 0.0% 0.0% 3.0%	XX XX XX XX XX XX XX XX	1983 1984 1985 1986 1987 1988 1989 1990 1991	19,629 25,971 17,182 17,896 18,028 15,763 18,538 29,409 18,201 20,921	0 0 0 94 295 0 0 176 0	0.0% 0.0% 0.0% 0.5% 1.6% 0.0% 0.0% 0.6% 0.0%	XX XX XX XX XX XX XX XX	1983 1984 1985 1986 1987 1988 1989 1990 1991	19,485 26,136 17,144 17,999 18,007 15,827 18,579 29,661 18,272 20,665	0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX XX XX XX XX XX XX XX	1983 1984 1985 1986 1987 1988 1989 1990 1991	19,478 26,205 16,838 18,146 18,110 15,892 18,621 29,843 18,318 20,738	0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX XX XX XX XX XX XX XX
1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993	19,558 26,025 17,068 17,907 18,208 15,700 18,503 29,336 18,154 20,831 19,597	0 0 0 0 0 0 380 0 0 631	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 2.1% 0.0% 0.0% 3.0%	XX	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993	19,629 25,971 17,182 17,896 18,028 15,763 18,538 29,409 18,201 20,921 19,782	0 0 0 94 295 0 0 176 0	0.0% 0.0% 0.0% 0.5% 1.6% 0.0% 0.6% 0.0% 0.0% 0.0%	XX XX XX XX XX XX XX XX	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993	19,485 26,136 17,144 17,999 18,007 15,827 18,579 29,661 18,272 20,665 19,781	0 0 0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993	19.478 26,205 16,838 18,146 18,110 15,892 18,621 29,843 18,318 20,738 19,744	0 0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX
1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994	19,558 26,025 17,068 17,907 18,208 15,700 18,503 29,336 18,154 20,831 19,597 20,328	0 0 0 0 0 0 380 0 0 631 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994	19,629 25,971 17,182 17,896 18,028 15,763 18,538 29,409 18,201 20,921 19,782 20,479	0 0 0 94 295 0 0 176 0	0.0% 0.0% 0.0% 0.5% 1.6% 0.0% 0.6% 0.0% 0.0% 0.0%	XX XX XX XX XX XX XX XX XX XX	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993	19,485 26,136 17,144 17,999 18,007 15,827 18,579 29,661 18,272 20,665 19,781 20,635	0 0 0 0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994	19,478 26,205 16,838 18,146 18,110 15,892 18,621 29,843 18,318 20,738 19,744 20,796	0 0 0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX
1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993	19,558 26,025 17,068 17,907 18,208 15,700 18,503 29,336 18,154 20,831 19,597	0 0 0 0 0 0 380 0 0 631	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 2.1% 0.0% 0.0% 3.0%	XX	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995	19,629 25,971 17,182 17,896 18,028 15,763 18,538 29,409 18,201 20,921 19,782 20,479 11,961	0 0 94 295 0 176 0 0	0.0% 0.0% 0.0% 0.5% 1.6% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995	19,485 26,136 17,144 17,999 18,007 15,827 18,579 29,661 18,272 20,665 19,781 20,635	0 0 0 0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995	19,478 26,205 16,838 18,146 18,110 15,892 18,621 29,843 18,318 20,738 19,744 20,796	0 0 0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX XX XX XX XX XX XX XX XX XX
1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994	19,558 26,025 17,068 17,907 18,208 15,700 18,503 29,336 18,154 20,831 19,597 20,328	0 0 0 0 0 0 380 0 0 631 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994	19,629 25,971 17,182 17,896 18,028 15,763 18,538 29,409 18,201 20,921 19,782 20,479	0 0 0 94 295 0 0 176 0	0.0% 0.0% 0.0% 0.5% 1.6% 0.0% 0.6% 0.0% 0.0% 0.0%	XX	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996	19,485 26,136 17,144 17,999 18,007 15,827 18,579 29,661 18,272 20,665 19,781 20,635 11,960	0 0 0 0 0 0 0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995	19,478 26,205 16,838 18,146 18,110 15,892 18,621 29,843 18,318 20,738 19,744 20,796 11,969	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX
1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994	19,558 26,025 17,068 17,907 18,208 15,700 18,503 29,336 18,154 20,831 19,597 20,328	0 0 0 0 0 0 380 0 0 631 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995	19,629 25,971 17,182 17,896 18,028 15,763 18,538 29,409 18,201 20,921 19,782 20,479 11,961	0 0 94 295 0 176 0 0	0.0% 0.0% 0.0% 0.5% 1.6% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995	19,485 26,136 17,144 17,999 18,007 15,827 18,579 29,661 18,272 20,665 19,781 20,635	0 0 0 0 0 0 0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997	19,478 26,205 16,838 18,146 18,110 15,892 18,621 29,843 18,318 20,738 19,744 20,796 11,969 12,194 8,505	0 0 0 0 0 0 0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX XX XX XX XX XX XX XX XX XX
1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994	19,558 26,025 17,068 17,907 18,208 15,700 18,503 29,336 18,154 20,831 19,597 20,328	0 0 0 0 0 0 380 0 0 631 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995	19,629 25,971 17,182 17,896 18,028 15,763 18,538 29,409 18,201 20,921 19,782 20,479 11,961	0 0 94 295 0 176 0 0	0.0% 0.0% 0.0% 0.5% 1.6% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996	19,485 26,136 17,144 17,999 18,007 15,827 18,579 29,661 18,272 20,665 19,781 20,635 11,960	0 0 0 0 0 0 0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XX	1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995	19,478 26,205 16,838 18,146 18,110 15,892 18,621 29,843 18,318 20,738 19,744 20,796 11,969	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	XOX

	(1)	(2)	(3)	(4)
Accident	4/30/2009	12 Month		
Year	Rpt.Loss <sup>(a)</sup>	Fav_Dev <sup>(a)</sup>	(2) / (1)	Selection
1983	19,527	0	0.0%	XX
1984	26,360	0	0.0%	XX
1985	16,906	0	0.0%	XX
1986	18,235	0	0.0%	XX
1987	18,212	0	0.0%	XX
1988	15,850	0	0.0%	XX
1989	18,662	0	0.0%	XX
1990	29,708	140	0.5%	XX
1991	18,252	104	0.6%	XX
1992	20,811	0	0.0%	XX
1993	19,892	0	0.0%	XX
1994	20,956	0	0.0%	XX
1995	11,976	0	0.0%	XX
1996	12,324	0	0.0%	XX
1997	8,675	0	0.0%	XX
1998	8,648	<u>0</u>	0.0%	xx
Total	284,994	244	0.1%	0.0%

Note: Personnel from the CMCRB have concluded that the impact of Act 57 has waned to the point that the Claim Settlement effect for this year and future years is zero(0.00). Thus this Exhibit will no longer be updated.

(a) All amounts are in thousands of dollars

Sources: Column (1) Exhibit VI-A p. 1a

CMCRB Database as of 04/30/17 - Validated 08/15/17 and prior

 $\label{eq:file:c:loss} File: C:\Clients\Coal Mine\2017\ Rate Filing\XL\[2017-06-A,B,C,E.xlsm]\A-5c\ Run\ Date: September 05, 2017 - 03:57:26\ PM$ 

				101100117						Incon	ea Meaic	ai rosses ic	ii Ali Ciussi	es Combin	ea										
		orted Incurre 1993	ed Losses as a	1995	1007	1007	1000	1000	2000	2001	2002	2002	2004	2005	2007	2007	2000	2000	2010	2011	2012	2012	2014	2015	2017
Report	1992 5,963,632	4,780,471	3,903,052	3,946,197	1996 4,135,165	1997 3,185,472	3,370,548	2,714,671	2000 2.468.601	2001 2,225,216	2002 3.150.255	2003 2,579,313	2004 3,189,109	3,700,850	2006 2,871,489	2007 5.478.955	2008 3,509,674	2009 2,761,649	2010 3,630,574	2011 4.362.098	2012 4.806.118	2013 3.639.740	2014 6,225,769	2015 4.054.856	3.963.291
2	6,709,723	5,785,980	4,929,891	4,443,755	4,315,884	3,374,998	3,630,642	3,012,839	2,716,963	2,589,253	3,609,439	2,812,481	3,555,290	4,031,513	3,286,804	5,501,458	3,749,858	3,021,605	3,914,782	5,517,261	5,258,148	4,294,769	6,357,441	3,981,666	0,700,271
3	6,988,709	6,162,904	5,062,121	4,353,568	4,689,720	3,598,928	3,628,890	3,186,033	2,818,387	2,646,248	3,762,837	2,794,988	4.147.713	4.161.949	3,511,501	5,575,559	3,709,814	2,891,686	4,167,466	5,633,374	5,404,121	4,076,856	6,043,218	0,701,000	
4	6,985,202	6,061,248	5,216,951	4,294,114	4,808,246	3,571,097	3,720,868	3,057,663		2,629,910	3,890,149	2,756,587	4,166,709		3,418,585		3,804,580	2,991,503	4,413,176	5,609,134	5,406,521	3,971,009	-,,		
5	6,810,575	6,077,440	5,111,218		4,806,190	3,810,363	3,709,153		2,885,530	2,816,076	3,874,531	2,912,119	4,131,369		3,401,038	5,757,902	3,837,840	2,983,393	4,604,796	5,673,084	5,519,600				
6	6,966,052	5,804,110	5,029,268	4,483,826	4,703,865	3,978,305		3,178,086	2,937,414	2,896,624	4,191,261	2,899,687	4,080,336	4,299,151	3,370,262	5,864,639	3,842,096	2,946,694	4,477,330	5,654,038					
7	7,086,080	5,767,492	5,059,712	4,666,919	4,578,161	3,932,216	3,760,723	3,133,358	2,927,989	2,822,196	4,257,734	2,897,577	4,180,965	4,349,353	3,381,086	5,841,539	3,811,253	2,946,651	4,459,354						
8	6,984,759	5,730,009	5,113,134		4,617,085	3,951,475	3,791,456	3,171,882		2,789,664	4,339,920	2,890,067	4,187,418	4,411,495	3,382,185	5,950,133	3,599,483	2,986,651							
9	6,943,552	5,812,365	5,124,726	4,685,434	4,625,715	4,015,857	3,741,005	3,236,426	2,952,750	2,782,114	4,145,606	3,080,177	4,190,701	4,403,570	3,507,194	5,807,440	3,608,725								
10	7,100,992	5,971,283	5,144,115	4,668,534	4,651,769	4,393,793	3,777,626	3,357,242		2,879,623	4,160,518	3,110,017	4,206,298		3,729,031	5,819,126									
11 12	7,099,581 7,167,560	6,018,440 5,838,773	5,273,693	4,693,740	4,625,953	4,593,238 4,586,566	3,861,559	3,353,094	2,948,865	2,963,075	4,164,525 4,194,244	3,103,090	4,370,336	4,427,072 4.413.282	3,802,480										
12	7,167,560	5,732,687	5,295,932 5,346,840	4,815,890 4,869,709	4,594,309 4,485,294	4,602,844	3,843,219 3,868,653	3,409,251 3,531,522	3,021,208 3,021,095	3,005,905 3,012,114	4,194,244	3,209,975 3,209,907	4,350,145 4,351,280	4,413,282											
	7,173,430	5,818,810	5,366,481	4,793,570	4,501,155	4,627,844	3,851,694	3,532,688	3,020,836	3,143,372	4,205,064	3,207,707	4,551,200												
15	7,140,118	5,859,155	5,384,567	4,836,117	4,491,418	4,702,741	3,851,841	3,533,087	3,080,845	3,237,259	4,202,349	3,207,707													
16	7.069,470	5,935,724	5,423,525	4,865,082	4,520,959	4,694,564	3,852,213	3,539,649		3,220,132	.,,														
17	7,047,415	6,019,026	5,290,059	4,883,436	4,514,259	4,723,464	3,838,125	3,539,760	2,872,279																
18	7,028,385	6,100,724	5,370,678	4,927,115	4,523,523	5,023,336	3,835,125	3,534,812																	
19	7,029,188	6,154,033	5,371,098	4,917,010	4,536,280	5,023,336	3,834,626																		
20	7,063,572	6,153,930	5,467,814	5,276,620	4,528,080	5,023,209																			
р. 4																									
B. A	0.7082	al Law Adju: 0.8921	0.9773	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
;_	0.8052	0.8934	0.9908	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
3	0.8062	0.8948	0.9961	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
4	0.8072	0.8961	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			
5	0.8081	0.8974	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				
6	0.8091	0.8988	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000					
7	0.8101	0.9001	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000						
8	0.8111	0.9015	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000							
9	0.8121	0.9028	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000								
10	0.8130	0.9041	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000									
11 12	0.8140 0.8150	0.9055 0.9068	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000										
13	0.8160	0.9081	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			Act 44 Disco	unt Factor: 0	7092						
14	0.8170	0.9095	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				ACI 44 DISCO	om racion. c	.7002						
15	0.8179	0.9108	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000					xample: 19	92 (5th Repor	t) 0.8081. See	VI-D Page 5	Col. T at 0.8	081			
16	0.8189	0.9122	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000									,						
17	0.8199	0.9135	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000																
18	0.8209	0.9148	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000																	
19	0.8219	0.9162	1.0000	1.0000	1.0000	1.0000	1.0000																		
20	0.8228	0.9175	1.0000	1.0000	1.0000	1.0000																			
C 1	Andical Inc.	rrad Lassas A																							
C. N	viedicai ilici			ct 44 Law La	val as of 047	30/17																			
	4 223 000				vel as of 04/		3 370 548	2 714 671	2 468 601	2 225 216	3 150 255	2 579 313	3 189 109	3 700 850	2 871 489	5 478 955	3 509 674	2 761 649	3 630 574	4 362 098	4 806 118	3 639 740	6 225 769	4 054 856	3 963 291
2	4,223,000 5,403,000	4,265,000	3,814,000	3,946,197	4,135,165	3,185,472		2,714,671 3.012.839	2,468,601 2,716,963	2,225,216 2,589,253	3,150,255 3,609,439	2,579,313 2,812,481	3,189,109 3,555,290	3,700,850 4.031,513	2,871,489 3,286,804	5,478,955 5,501,458	3,509,674 3,749.858	2,761,649 3.021.605	3,630,574 3,914,782	4,362,098 5.517.261	4,806,118 5,258,148	3,639,740 4,294,769	6,225,769 6,357,441	4,054,856 3,981,666	3,963,291
2								2,714,671 3,012,839 3,186,033	2,468,601 2,716,963 2,818,387	2,225,216 2,589,253 2,646,248	3,150,255 3,609,439 3,762,837	2,579,313 2,812,481 2,794,988	3,189,109 3,555,290 4,147,713	3,700,850 4,031,513 4,161,949	2,871,489 3,286,804 3,511,501	5,478,955 5,501,458 5,575,559	3,509,674 3,749,858 3,709,814	2,761,649 3,021,605 2,891,686	3,630,574 3,914,782 4,167,466	4,362,098 5,517,261 5,633,374		3,639,740 4,294,769 4,076,856	6,225,769 6,357,441 6,043,218	4,054,856 3,981,666	3,963,291
-	5,403,000	4,265,000 5,169,000	3,814,000 4,884,000	3,946,197 4,443,755	4,135,165 4,315,884	3,185,472 3,374,998	3,630,642	3,012,839	2,716,963	2,589,253	3,609,439	2,812,481	3,555,290	4,031,513	3,286,804	5,501,458	3,749,858	3,021,605	3,914,782	5,517,261	5,258,148	4,294,769	6,357,441		3,963,291
-	5,403,000 5,634,000	4,265,000 5,169,000 5,514,000	3,814,000 4,884,000 5,042,000	3,946,197 4,443,755 4,353,568	4,135,165 4,315,884 4,689,720	3,185,472 3,374,998 3,598,928	3,630,642 3,628,890	3,012,839 3,186,033 3,057,663	2,716,963 2,818,387	2,589,253 2,646,248	3,609,439 3,762,837	2,812,481 2,794,988 2,756,587	3,555,290 4,147,713	4,031,513 4,161,949 4,249,331	3,286,804 3,511,501	5,501,458 5,575,559	3,749,858 3,709,814	3,021,605 2,891,686	3,914,782 4,167,466	5,517,261 5,633,374	5,258,148 5,404,121	4,294,769 4,076,856	6,357,441		3,963,291
3 4 5 6	5,403,000 5,634,000 5,638,000 5,504,000 5,636,000	4,265,000 5,169,000 5,514,000 5,431,000 5,454,000 5,217,000	3,814,000 4,884,000 5,042,000 5,216,951 5,111,218 5,029,268	3,946,197 4,443,755 4,353,568 4,294,114 4,416,259 4,483,826	4,135,165 4,315,884 4,689,720 4,808,246 4,806,190 4,703,865	3,185,472 3,374,998 3,598,928 3,571,097 3,810,363 3,978,305	3,630,642 3,628,890 3,720,868 3,709,153 3,761,263	3,012,839 3,186,033 3,057,663 3,188,781 3,178,086	2,716,963 2,818,387 2,836,912 2,885,530 2,937,414	2,589,253 2,646,248 2,629,910 2,816,076 2,896,624	3,609,439 3,762,837 3,890,149 3,874,531 4,191,261	2,812,481 2,794,988 2,756,587 2,912,119 2,899,687	3,555,290 4,147,713 4,166,709 4,131,369 4,080,336	4,031,513 4,161,949 4,249,331 4,143,155 4,299,151	3,286,804 3,511,501 3,418,585 3,401,038 3,370,262	5,501,458 5,575,559 5,632,912 5,757,902 5,864,639	3,749,858 3,709,814 3,804,580 3,837,840 3,842,096	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
-	5,403,000 5,634,000 5,638,000 5,504,000 5,636,000 5,741,000	4,265,000 5,169,000 5,514,000 5,431,000 5,454,000 5,217,000 5,191,000	3,814,000 4,884,000 5,042,000 5,216,951 5,111,218 5,029,268 5,059,712	3,946,197 4,443,755 4,353,568 4,294,114 4,416,259 4,483,826 4,666,919	4,135,165 4,315,884 4,689,720 4,808,246 4,806,190 4,703,865 4,578,161	3,185,472 3,374,998 3,598,928 3,571,097 3,810,363 3,978,305 3,932,216	3,630,642 3,628,890 3,720,868 3,709,153 3,761,263 3,760,723	3,012,839 3,186,033 3,057,663 3,188,781 3,178,086 3,133,358	2,716,963 2,818,387 2,836,912 2,885,530 2,937,414 2,927,989	2,589,253 2,646,248 2,629,910 2,816,076 2,896,624 2,822,196	3,609,439 3,762,837 3,890,149 3,874,531 4,191,261 4,257,734	2,812,481 2,794,988 2,756,587 2,912,119 2,899,687 2,897,577	3,555,290 4,147,713 4,166,709 4,131,369 4,080,336 4,180,965	4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353	3,286,804 3,511,501 3,418,585 3,401,038 3,370,262 3,381,086	5,501,458 5,575,559 5,632,912 5,757,902 5,864,639 5,841,539	3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
3 4 5 6 7 8	5,403,000 5,634,000 5,638,000 5,504,000 5,636,000 5,741,000 5,665,000	4,265,000 5,169,000 5,514,000 5,431,000 5,454,000 5,217,000 5,191,000 5,165,000	3,814,000 4,884,000 5,042,000 5,216,951 5,111,218 5,029,268 5,059,712 5,113,134	3,946,197 4,443,755 4,353,568 4,294,114 4,416,259 4,483,826 4,666,919 4,706,403	4,135,165 4,315,884 4,689,720 4,808,246 4,806,190 4,703,865 4,578,161 4,617,085	3,185,472 3,374,998 3,598,928 3,571,097 3,810,363 3,978,305 3,932,216 3,951,475	3,630,642 3,628,890 3,720,868 3,709,153 3,761,263 3,760,723 3,791,456	3,012,839 3,186,033 3,057,663 3,188,781 3,178,086 3,133,358 3,171,882	2,716,963 2,818,387 2,836,912 2,885,530 2,937,414 2,927,989 2,921,384	2,589,253 2,646,248 2,629,910 2,816,076 2,896,624 2,822,196 2,789,664	3,609,439 3,762,837 3,890,149 3,874,531 4,191,261 4,257,734 4,339,920	2,812,481 2,794,988 2,756,587 2,912,119 2,899,687 2,897,577 2,890,067	3,555,290 4,147,713 4,166,709 4,131,369 4,080,336 4,180,965 4,187,418	4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353 4,411,495	3,286,804 3,511,501 3,418,585 3,401,038 3,370,262 3,381,086 3,382,185	5,501,458 5,575,559 5,632,912 5,757,902 5,864,639 5,841,539 5,950,133	3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
3 4 5 6 7 8	5,403,000 5,634,000 5,638,000 5,504,000 5,636,000 5,741,000 5,665,000 5,639,000	4,265,000 5,169,000 5,514,000 5,431,000 5,454,000 5,217,000 5,191,000 5,165,000 5,247,000	3,814,000 4,884,000 5,042,000 5,216,951 5,111,218 5,029,268 5,059,712 5,113,134 5,124,726	3,946,197 4,443,755 4,353,568 4,294,114 4,416,259 4,483,826 4,666,919 4,706,403 4,685,434	4,135,165 4,315,884 4,689,720 4,808,246 4,806,190 4,703,865 4,578,161 4,617,085 4,625,715	3,185,472 3,374,998 3,598,928 3,571,097 3,810,363 3,978,305 3,932,216 3,951,475 4,015,857	3,630,642 3,628,890 3,720,868 3,709,153 3,761,263 3,760,723 3,791,456 3,741,005	3,012,839 3,186,033 3,057,663 3,188,781 3,178,086 3,133,358 3,171,882 3,236,426	2,716,963 2,818,387 2,836,912 2,885,530 2,937,414 2,927,989 2,921,384 2,952,750	2,589,253 2,646,248 2,629,910 2,816,076 2,896,624 2,822,196 2,789,664 2,782,114	3,609,439 3,762,837 3,890,149 3,874,531 4,191,261 4,257,734 4,339,920 4,145,606	2,812,481 2,794,988 2,756,587 2,912,119 2,899,687 2,897,577 2,890,067 3,080,177	3,555,290 4,147,713 4,166,709 4,131,369 4,080,336 4,180,965 4,187,418 4,190,701	4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353 4,411,495 4,403,570	3,286,804 3,511,501 3,418,585 3,401,038 3,370,262 3,381,086 3,382,185 3,507,194	5,501,458 5,575,559 5,632,912 5,757,902 5,864,639 5,841,539 5,950,133 5,807,440	3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
3 4 5 6 7 8 9	5,403,000 5,634,000 5,638,000 5,504,000 5,636,000 5,741,000 5,665,000 5,639,000 5,773,000	4,265,000 5,169,000 5,514,000 5,431,000 5,454,000 5,217,000 5,191,000 5,165,000 5,247,000 5,399,000	3,814,000 4,884,000 5,042,000 5,216,951 5,111,218 5,029,268 5,059,712 5,113,134 5,124,726 5,144,115	3,946,197 4,443,755 4,353,568 4,294,114 4,416,259 4,483,826 4,666,919 4,706,403 4,685,434 4,668,534	4,135,165 4,315,884 4,689,720 4,808,246 4,806,190 4,703,865 4,578,161 4,617,085 4,625,715 4,651,769	3,185,472 3,374,998 3,598,928 3,571,097 3,810,363 3,978,305 3,932,216 3,951,475 4,015,857 4,393,793	3,630,642 3,628,890 3,720,868 3,709,153 3,761,263 3,760,723 3,791,456 3,741,005 3,777,626	3,012,839 3,186,033 3,057,663 3,188,781 3,178,086 3,133,358 3,171,882 3,236,426 3,357,242	2,716,963 2,818,387 2,836,912 2,885,530 2,937,414 2,927,989 2,921,384 2,952,750 2,950,698	2,589,253 2,646,248 2,629,910 2,816,076 2,896,624 2,822,196 2,789,664 2,782,114 2,879,623	3,609,439 3,762,837 3,890,149 3,874,531 4,191,261 4,257,734 4,339,920 4,145,606 4,160,518	2,812,481 2,794,988 2,756,587 2,912,119 2,899,687 2,897,577 2,890,067 3,080,177 3,110,017	3,555,290 4,147,713 4,166,709 4,131,369 4,080,336 4,180,965 4,187,418 4,190,701 4,206,298	4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353 4,411,495 4,403,570 4,356,915	3,286,804 3,511,501 3,418,585 3,401,038 3,370,262 3,381,086 3,382,185 3,507,194 3,729,031	5,501,458 5,575,559 5,632,912 5,757,902 5,864,639 5,841,539 5,950,133	3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
3 4 5 6 7 8 9 10	5,403,000 5,634,000 5,638,000 5,504,000 5,636,000 5,741,000 5,665,000 5,639,000 5,773,000 5,779,000	4,265,000 5,169,000 5,514,000 5,431,000 5,454,000 5,217,000 5,165,000 5,247,000 5,399,000 5,450,000	3,814,000 4,884,000 5,042,000 5,216,951 5,111,218 5,029,268 5,059,712 5,113,134 5,124,726 5,144,115 5,273,693	3,946,197 4,443,755 4,353,568 4,294,114 4,416,259 4,483,826 4,666,919 4,706,403 4,685,434 4,668,534 4,693,740	4,135,165 4,315,884 4,689,720 4,808,246 4,806,190 4,703,865 4,578,161 4,617,085 4,625,715 4,651,769 4,625,953	3,185,472 3,374,998 3,598,928 3,571,097 3,810,363 3,978,305 3,932,216 3,951,475 4,015,857 4,393,793 4,593,238	3,630,642 3,628,890 3,720,868 3,709,153 3,761,263 3,760,723 3,791,456 3,741,005 3,777,626 3,861,559	3,012,839 3,186,033 3,057,663 3,188,781 3,178,086 3,133,358 3,171,882 3,236,426 3,357,242 3,353,094	2,716,963 2,818,387 2,836,912 2,885,530 2,937,414 2,927,989 2,921,384 2,952,750 2,950,698 2,948,865	2,589,253 2,646,248 2,629,910 2,816,076 2,896,624 2,822,196 2,789,664 2,782,114 2,879,623 2,963,075	3,609,439 3,762,837 3,890,149 3,874,531 4,191,261 4,257,734 4,339,920 4,145,606 4,160,518 4,164,525	2,812,481 2,794,988 2,756,587 2,912,119 2,899,687 2,897,577 2,890,067 3,080,177 3,110,017 3,103,090	3,555,290 4,147,713 4,166,709 4,131,369 4,080,336 4,180,965 4,187,418 4,190,701 4,206,298 4,370,336	4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353 4,411,495 4,403,570 4,356,915 4,427,072	3,286,804 3,511,501 3,418,585 3,401,038 3,370,262 3,381,086 3,382,185 3,507,194	5,501,458 5,575,559 5,632,912 5,757,902 5,864,639 5,841,539 5,950,133 5,807,440	3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
3 4 5 6 7 8 9 10 11	5,403,000 5,634,000 5,638,000 5,504,000 5,741,000 5,665,000 5,639,000 5,773,000 5,779,000 5,842,000	4,265,000 5,169,000 5,1314,000 5,431,000 5,454,000 5,217,000 5,191,000 5,165,000 5,247,000 5,399,000 5,450,000 5,295,000	3,814,000 4,884,000 5,042,000 5,216,951 5,111,218 5,029,268 5,059,712 5,113,134 5,124,726 5,144,115 5,273,693 5,295,932	3,946,197 4,443,755 4,353,568 4,294,114 4,416,259 4,483,826 4,666,919 4,706,403 4,685,434 4,668,534 4,693,740 4,815,890	4,135,165 4,315,884 4,689,720 4,808,246 4,806,190 4,703,865 4,578,161 4,617,085 4,625,715 4,651,769 4,625,953 4,594,309	3,185,472 3,374,998 3,598,928 3,571,097 3,810,363 3,978,305 3,932,216 3,951,475 4,015,857 4,393,793 4,593,238 4,586,566	3,630,642 3,628,890 3,720,868 3,709,153 3,761,263 3,760,723 3,791,456 3,741,005 3,777,626 3,861,559 3,843,219	3,012,839 3,186,033 3,057,663 3,188,781 3,178,086 3,133,358 3,171,882 3,236,426 3,357,242 3,353,094 3,409,251	2,716,963 2,818,387 2,836,912 2,885,530 2,937,414 2,927,989 2,921,384 2,952,750 2,950,698 2,948,865 3,021,208	2,589,253 2,646,248 2,629,910 2,816,076 2,896,624 2,822,196 2,789,664 2,782,114 2,879,623 2,963,075 3,005,905	3,609,439 3,762,837 3,890,149 3,874,531 4,191,261 4,257,734 4,339,920 4,145,606 4,160,518 4,164,525 4,194,244	2,812,481 2,794,988 2,756,587 2,912,119 2,899,687 2,897,577 2,890,067 3,080,177 3,110,017 3,103,090 3,209,975	3,555,290 4,147,713 4,166,709 4,131,369 4,080,336 4,180,965 4,187,418 4,190,701 4,206,298 4,370,336 4,350,145	4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353 4,411,495 4,403,570 4,356,915	3,286,804 3,511,501 3,418,585 3,401,038 3,370,262 3,381,086 3,382,185 3,507,194 3,729,031	5,501,458 5,575,559 5,632,912 5,757,902 5,864,639 5,841,539 5,950,133 5,807,440	3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
3 4 5 6 7 8 9 10	5,403,000 5,634,000 5,638,000 5,504,000 5,636,000 5,741,000 5,665,000 5,639,000 5,773,000 5,779,000	4,265,000 5,169,000 5,514,000 5,431,000 5,454,000 5,217,000 5,165,000 5,247,000 5,399,000 5,450,000	3,814,000 4,884,000 5,042,000 5,216,951 5,111,218 5,029,268 5,059,712 5,113,134 5,124,726 5,144,115 5,273,693	3,946,197 4,443,755 4,353,568 4,294,114 4,416,259 4,483,826 4,666,919 4,706,403 4,685,434 4,668,534 4,693,740	4,135,165 4,315,884 4,689,720 4,808,246 4,806,190 4,703,865 4,578,161 4,617,085 4,625,715 4,651,769 4,625,953	3,185,472 3,374,998 3,598,928 3,571,097 3,810,363 3,978,305 3,932,216 3,951,475 4,015,857 4,393,793 4,593,238	3,630,642 3,628,890 3,720,868 3,709,153 3,761,263 3,760,723 3,791,456 3,741,005 3,777,626 3,861,559	3,012,839 3,186,033 3,057,663 3,188,781 3,178,086 3,133,358 3,171,882 3,236,426 3,357,242 3,353,094	2,716,963 2,818,387 2,836,912 2,885,530 2,937,414 2,927,989 2,921,384 2,952,750 2,950,698 2,948,865	2,589,253 2,646,248 2,629,910 2,816,076 2,896,624 2,822,196 2,789,664 2,782,114 2,879,623 2,963,075	3,609,439 3,762,837 3,890,149 3,874,531 4,191,261 4,257,734 4,339,920 4,145,606 4,160,518 4,164,525	2,812,481 2,794,988 2,756,587 2,912,119 2,899,687 2,897,577 2,890,067 3,080,177 3,110,017 3,103,090	3,555,290 4,147,713 4,166,709 4,131,369 4,080,336 4,180,965 4,187,418 4,190,701 4,206,298 4,370,336	4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353 4,411,495 4,403,570 4,356,915 4,427,072	3,286,804 3,511,501 3,418,585 3,401,038 3,370,262 3,381,086 3,382,185 3,507,194 3,729,031	5,501,458 5,575,559 5,632,912 5,757,902 5,864,639 5,841,539 5,950,133 5,807,440	3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
3 4 5 6 7 8 9 10 11 12	5,403,000 5,634,000 5,638,000 5,504,000 5,636,000 5,741,000 5,639,000 5,773,000 5,779,000 5,842,000 5,853,000	4,265,000 5,169,000 5,514,000 5,431,000 5,454,000 5,191,000 5,191,000 5,247,000 5,247,000 5,450,000 5,295,000 5,206,000	3,814,000 4,884,000 5,042,000 5,216,951 5,111,218 5,029,268 5,059,712 5,113,134 5,124,726 5,144,115 5,273,693 5,295,932 5,346,840	3,946,197 4,443,755 4,353,568 4,294,114 4,416,259 4,483,826 4,666,919 4,706,403 4,685,434 4,693,740 4,815,890 4,869,709	4,135,165 4,315,884 4,689,720 4,808,246 4,806,190 4,703,865 4,578,161 4,617,085 4,625,715 4,651,769 4,625,953 4,625,953 4,625,953 4,625,953	3,185,472 3,374,998 3,598,928 3,571,097 3,810,363 3,978,305 3,932,216 4,015,857 4,393,793 4,593,238 4,586,566 4,602,844	3,630,642 3,628,890 3,720,868 3,709,153 3,761,263 3,760,723 3,791,456 3,741,005 3,777,626 3,861,559 3,843,219 3,868,653	3,012,839 3,186,033 3,057,663 3,188,781 3,178,086 3,133,358 3,171,882 3,236,426 3,357,242 3,353,094 3,409,251 3,531,522	2,716,963 2,818,387 2,836,912 2,885,530 2,937,414 2,927,989 2,921,384 2,952,750 2,950,698 2,948,865 3,021,208 3,021,095	2,589,253 2,646,248 2,629,910 2,816,076 2,896,624 2,822,196 2,789,664 2,782,114 2,879,623 3,005,905 3,012,114	3,609,439 3,762,837 3,870,149 3,874,531 4,191,261 4,257,734 4,339,920 4,145,606 4,160,518 4,164,525 4,194,244 4,185,516	2,812,481 2,794,988 2,756,587 2,912,119 2,899,687 2,897,577 2,890,067 3,080,177 3,110,017 3,103,090 3,209,975 3,209,907	3,555,290 4,147,713 4,166,709 4,131,369 4,080,336 4,180,965 4,187,418 4,190,701 4,206,298 4,370,336 4,350,145	4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353 4,411,495 4,403,570 4,356,915 4,427,072	3,286,804 3,511,501 3,418,585 3,401,038 3,370,262 3,381,086 3,382,185 3,507,194 3,729,031	5,501,458 5,575,559 5,632,912 5,757,902 5,864,639 5,841,539 5,950,133 5,807,440	3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
3 4 5 6 7 8 9 10 11 12 13	5,403,000 5,634,000 5,538,000 5,504,000 5,636,000 5,741,000 5,639,000 5,773,000 5,7779,000 5,842,000 5,853,000 5,794,000	4,265,000 5,169,000 5,514,000 5,514,000 5,431,000 5,217,000 5,165,000 5,247,000 5,247,000 5,295,000 5,295,000 5,295,000 5,292,000	3,814,000 4,884,000 5,042,000 5,216,951 5,111,218 5,029,268 5,059,712 5,113,134 5,124,726 5,144,115 5,273,693 5,295,932 5,346,840 5,366,481	3,946,197 4,443,755 4,353,568 4,294,114 4,416,259 4,483,826 4,666,919 4,706,403 4,685,434 4,693,740 4,815,890 4,869,709 4,793,570	4,135,165 4,315,884 4,689,720 4,808,246 4,806,190 4,703,865 4,578,161 4,617,085 4,625,715 4,651,769 4,625,953 4,594,309 4,485,294 4,501,155	3,185,472 3,374,998 3,598,928 3,571,097 3,810,363 3,978,305 3,932,216 3,951,475 4,015,857 4,393,793 4,593,238 4,586,566 4,602,844 4,627,844 4,702,741 4,694,564	3,630,642 3,628,890 3,720,868 3,709,153 3,761,263 3,760,723 3,791,456 3,741,005 3,777,626 3,861,559 3,843,219 3,848,653 3,851,694	3,012,839 3,186,033 3,057,663 3,188,781 3,178,086 3,133,358 3,171,882 3,236,426 3,357,242 3,353,094 3,409,251 3,531,522 3,532,688	2,716,963 2,818,387 2,836,912 2,836,530 2,937,414 2,927,989 2,921,384 2,952,750 2,950,698 2,948,865 3,021,208 3,021,095 3,020,836 3,080,845 3,080,810	2,589,253 2,646,248 2,629,910 2,816,076 2,896,624 2,822,196 2,782,114 2,879,623 2,963,075 3,005,905 3,012,114 3,143,372	3,609,439 3,762,837 3,8790,149 3,874,531 4,191,261 4,257,734 4,339,920 4,145,606 4,160,518 4,164,525 4,194,244 4,185,516 4,205,064	2,812,481 2,794,988 2,756,587 2,912,119 2,899,687 2,897,577 2,890,067 3,080,177 3,110,017 3,103,090 3,209,975 3,209,907	3,555,290 4,147,713 4,166,709 4,131,369 4,080,336 4,180,965 4,187,418 4,190,701 4,206,298 4,370,336 4,350,145	4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353 4,411,495 4,403,570 4,356,915 4,427,072	3,286,804 3,511,501 3,418,585 3,401,038 3,370,262 3,381,086 3,382,185 3,507,194 3,729,031	5,501,458 5,575,559 5,632,912 5,757,902 5,864,639 5,841,539 5,950,133 5,807,440	3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
3 4 5 6 7 8 9 10 11 12 13 14 15 16	5,403,000 5,634,000 5,638,000 5,504,000 5,741,000 5,665,000 5,773,000 5,7779,000 5,842,000 5,842,000 5,849,000 5,784,000 5,789,000 5,778,000	4,265,000 5,169,000 5,514,000 5,431,000 5,454,000 5,191,000 5,191,000 5,191,000 5,247,000 5,399,000 5,295,000 5,206,000 5,292,000 5,397,000 5,292,000 5,397,000 5,492,000 5,492,000 5,492,000	3,814,000 4,884,000 5,042,000 5,216,951 5,111,218 5,029,268 5,059,712 5,113,134 5,124,726 5,144,115 5,273,693 5,295,932 5,346,840 5,366,481 5,364,840 5,366,481 5,384,567 5,423,525 5,290,059	3,946,197 4,443,755 4,353,568 4,294,114 4,416,259 4,686,919 4,706,403 4,685,434 4,668,534 4,693,740 4,815,890 4,869,709 4,793,570 4,836,117 4,865,082 4,865,082 4,863,436	4,135,165 4,315,884 4,689,720 4,808,246 4,806,190 4,703,865 4,578,161 4,617,085 4,625,715 4,651,769 4,625,953 4,594,309 4,485,294 4,501,155 4,491,418 4,520,959 4,514,259	3,185,472 3,374,998 3,598,928 3,571,097 3,810,363 3,978,305 3,932,216 3,951,475 4,015,857 4,393,793 4,593,238 4,586,564 4,602,844 4,702,741 4,694,564 4,723,464	3,630,642 3,628,890 3,720,868 3,709,153 3,761,263 3,761,263 3,791,456 3,741,005 3,777,626 3,861,559 3,843,219 3,868,653 3,851,841 3,851,841 3,852,213 3,852,213	3,012,839 3,186,033 3,057,663 3,188,781 3,178,086 3,133,358 3,171,882 3,236,426 3,357,242 3,353,094 3,531,522 3,532,688 3,533,087 3,539,649 3,539,760	2,716,963 2,818,387 2,836,912 2,885,530 2,937,414 2,927,989 2,921,384 2,952,750 2,950,698 2,948,865 3,021,208 3,021,095 3,020,836 3,080,845	2,589,253 2,646,248 2,629,910 2,816,076 2,896,624 2,822,196 2,789,664 2,782,114 2,879,623 2,963,075 3,005,905 3,012,114 3,143,372 3,237,259	3,609,439 3,762,837 3,8790,149 3,874,531 4,191,261 4,257,734 4,339,920 4,145,606 4,160,518 4,164,525 4,194,244 4,185,516 4,205,064	2,812,481 2,794,988 2,756,587 2,912,119 2,899,687 2,897,577 2,890,067 3,080,177 3,110,017 3,103,090 3,209,975 3,209,907	3,555,290 4,147,713 4,166,709 4,131,369 4,080,336 4,180,965 4,187,418 4,190,701 4,206,298 4,370,336 4,350,145 4,351,280	4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353 4,411,495 4,403,570 4,356,915 4,427,072 4,413,282	3,286,804 3,511,501 3,418,585 3,401,038 3,370,262 3,381,086 3,382,185 3,507,194 3,729,031 3,802,480	5,501,458 5,575,559 5,632,912 5,757,902 5,864,639 5,841,539 5,950,133 5,807,440 5,819,126	3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483 3,608,725	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	5,403,000 5,634,000 5,638,000 5,504,000 5,636,000 5,641,000 5,73,000 5,773,000 5,779,000 5,842,000 5,842,000 5,789,000 5,789,000 5,789,000 5,778,000 5,770,000	4,265,000 5,169,000 5,414,000 5,431,000 5,431,000 5,117,000 5,117,000 5,165,000 5,247,000 5,399,000 5,295,000 5,295,000 5,295,000 5,206,000 5,317,000 5,414,000 5,498,000 5,498,000	3,814,000 4,884,000 5,042,000 5,216,951 5,111,218 5,029,268 5,059,712 5,113,134 5,124,726 5,144,115 5,273,693 5,295,932 5,346,840 5,364,6481 5,384,567 5,423,525 5,290,059 5,370,678	3,946,197 4,443,755 4,353,568 4,294,111 4,416,259 4,483,826 4,666,919 4,706,403 4,685,434 4,693,740 4,815,890 4,869,709 4,793,570 4,865,082 4,845,082 4,834,434 4,833,434	4,135,165 4,315,884 4,689,720 4,808,246 4,806,190 4,703,865 4,578,161 4,617,085 4,625,715 4,651,769 4,625,953 4,594,309 4,485,294 4,501,155 4,691,418 4,520,959 4,514,259 4,514,259 4,514,259	3,185,472 3,374,998 3,598,928 3,571,097 3,810,363 3,978,305 3,932,216 3,951,475 4,393,793 4,593,238 4,593,238 4,586,566 4,602,844 4,627,844 4,702,741 4,694,564 4,723,464 5,023,336	3,630,642 3,628,890 3,720,868 3,709,153 3,761,263 3,761,263 3,791,456 3,741,005 3,741,005 3,861,559 3,861,559 3,864,553 3,851,841 3,852,213 3,851,841 3,852,213 3,838,125 3,835,125	3,012,839 3,186,033 3,057,663 3,188,781 3,178,086 3,133,358 3,171,882 3,236,426 3,357,242 3,353,094 3,531,522 3,532,688 3,533,087 3,539,649 3,539,760	2,716,963 2,818,387 2,836,912 2,836,530 2,937,414 2,927,989 2,921,384 2,952,750 2,950,698 2,948,865 3,021,208 3,021,095 3,020,836 3,080,845 3,080,810	2,589,253 2,646,248 2,629,910 2,816,076 2,896,624 2,822,196 2,789,664 2,782,114 2,879,623 2,963,075 3,005,905 3,012,114 3,143,372 3,237,259	3,609,439 3,762,837 3,8790,149 3,874,531 4,191,261 4,257,734 4,339,920 4,145,606 4,160,518 4,164,525 4,194,244 4,185,516 4,205,064	2,812,481 2,794,988 2,756,587 2,912,119 2,899,687 2,897,577 2,890,067 3,080,177 3,110,017 3,103,090 3,209,975 3,209,907	3,555,290 4,147,713 4,166,709 4,131,369 4,080,336 4,180,965 4,187,418 4,190,701 4,206,298 4,370,336 4,350,145 4,351,280	4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353 4,411,495 4,403,570 4,356,915 4,427,072 4,413,282	3,286,804 3,511,501 3,418,585 3,401,038 3,370,262 3,381,086 3,382,185 3,507,194 3,729,031	5,501,458 5,575,559 5,632,912 5,757,902 5,864,639 5,841,539 5,950,133 5,807,440 5,819,126	3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483 3,608,725	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	5,403,000 5,634,000 5,638,000 5,504,000 5,741,000 5,665,000 5,773,000 5,7779,000 5,842,000 5,842,000 5,849,000 5,784,000 5,789,000 5,778,000	4,265,000 5,169,000 5,514,000 5,431,000 5,454,000 5,191,000 5,191,000 5,191,000 5,247,000 5,399,000 5,295,000 5,206,000 5,292,000 5,397,000 5,292,000 5,397,000 5,492,000 5,492,000 5,492,000	3,814,000 4,884,000 5,042,000 5,216,951 5,111,218 5,029,268 5,059,712 5,113,134 5,124,726 5,144,115 5,273,693 5,295,932 5,346,840 5,366,481 5,364,840 5,366,481 5,384,567 5,423,525 5,290,059	3,946,197 4,443,755 4,353,568 4,294,114 4,416,259 4,686,419 4,706,403 4,685,434 4,685,434 4,668,534 4,697,709 4,793,570 4,885,082 4,886,082 4,886,082 4,886,082 4,883,436 4,927,115 4,927,115	4,135,165 4,315,884 4,689,720 4,808,246 4,806,190 4,703,865 4,578,161 4,617,085 4,625,715 4,651,769 4,625,953 4,594,309 4,485,294 4,501,155 4,491,418 4,520,959 4,514,259	3,185,472 3,374,998 3,598,928 3,571,097 3,810,363 3,978,305 3,932,216 3,951,475 4,015,857 4,393,793 4,593,238 4,586,564 4,602,844 4,702,741 4,694,564 4,723,464	3,630,642 3,628,890 3,720,868 3,709,153 3,761,263 3,761,263 3,791,456 3,741,005 3,777,626 3,861,559 3,843,219 3,868,653 3,851,841 3,851,841 3,852,213 3,852,213	3,012,839 3,186,033 3,057,663 3,188,781 3,178,086 3,133,358 3,171,882 3,236,426 3,357,242 3,353,094 3,531,522 3,532,688 3,533,087 3,539,649 3,539,760	2,716,963 2,818,387 2,836,912 2,836,530 2,937,414 2,927,989 2,921,384 2,952,750 2,950,698 2,948,865 3,021,208 3,021,095 3,020,836 3,080,845 3,080,810	2,589,253 2,646,248 2,629,910 2,816,076 2,896,624 2,822,196 2,789,664 2,782,114 2,879,623 2,963,075 3,005,905 3,012,114 3,143,372 3,237,259	3,609,439 3,762,837 3,8790,149 3,874,531 4,191,261 4,257,734 4,339,920 4,145,606 4,160,518 4,164,525 4,194,244 4,185,516 4,205,064	2,812,481 2,794,988 2,756,587 2,912,119 2,899,687 2,897,577 2,890,067 3,080,177 3,110,017 3,103,090 3,209,975 3,209,907	3,555,290 4,147,713 4,166,709 4,131,349 4,080,336 4,180,965 4,187,418 4,190,701 4,206,298 4,370,336 4,350,145 4,351,280	4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353 4,411,495 4,403,570 4,427,072 4,413,282	3,286,804 3,511,501 3,418,585 3,401,038 3,370,262 3,381,086 3,382,185 3,507,194 3,729,031 3,802,480	5,501,458 5,575,559 5,632,912 5,757,902 5,864,639 5,841,539 5,950,133 5,807,440 5,819,126	3,749,858 3,709,818 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483 3,608,725	3.021.605 2.891.686 2.991.503 2.983.393 2.946.694 2.946.651 2.986.651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084 5,654,038	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291

Source: A. Loss Development Data: CMCRB Database as of 04/30/17 - Validated 08/15/17
B. Act 44 Medical Law Adjusment Factors from Exhibit VI-B Page 2 (A) & VI-D Page 1
C. Medical Incurred Losses Adjusted to Act 44 Law Level = A x B

A. Adjustment to Act 44 Law Level 2012 1.0000 Report 1992 1993 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2007 2008 2009 2010 2011 2013 2014 2015 2016 1.0000 0.892 0.9773 0.8052 0.8934 0.9908 1.0000 0.8062 0.8948 0.9961 1.0000 0.8072 0.8961 1.0000 0.8081 0.8974 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.8091 0.8988 1.0000 1.0000 1.0000 1 0000 1.0000 1.0000 1 0000 1 0000 1.0000 1.0000 1 0000 1.0000 1.0000 1 0000 1 0000 1.0000 1.0000 1.0000 0.8101 0.9001 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1 0000 1.0000 1.0000 1.0000 0.8111 0.9015 1 0000 1 0000 1 0000 1 0000 1.0000 1.0000 1 0000 1 0000 1 0000 1.0000 1 0000 1.0000 1 0000 1 0000 1 0000 1.0000 0.8121 0.9028 1 0000 1.0000 1 0000 1 0000 1.0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1.0000 1 0000 1 0000 1 0000 10 0.8130 0.9041 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1.0000 1 0000 1 0000 0.9055 1 0000 1 0000 1.0000 1 0000 0.8140 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1.0000 1 0000 12 0.8150 0.9068 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 13 0.8160 0.9081 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.8170 0.9095 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 14 1.0000 15 0.8179 0.9108 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.8189 0.9122 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 17 0.8199 0.9135 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.8209 1.0000 18 0.9148 1.0000 1.0000 1.0000 1.0000 1.0000 0.9162 0.8219 1.0000 1.0000 1.0000 1.0000 1.0000 0.8228 0.9175 1.0000 1.0000 1.0000 1.0000 Claim Settlement Level Additions are multiplied by the percentages at the top of each column. 20 85 90 100 B. Claim Settlen nt Adjustm nts Additions 0.0000 0.0180 0.0190 0.0200 0.0200 0.0000 0.0170 0.0360 0.0380 0.0400 0.0400 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0340 0.0540 0.0570 0.0400 0.0550 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0510 0.0720 0.0760 0.0750 0.0690 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0680 0.0900 0.0903 0.0890 0.0820 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0850 0.1035 0.1036 0.1020 0.0940 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 aim Settlement Level Additions 17th Last 0.0978 0.1161 0.1159 0.1140 0.1050 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 2.0% per year 0.1097 0.1278 0.1273 0.1250 0.1150 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 16th Last 2.0% per vear 0.1207 0.1386 0.1378 0.1350 0.1230 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 15th Last 2.0% per vear 10 0.1309 0.1485 0.1473 0.1430 0.1280 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 14th Last 2.0% per vear 0.1403 0.1575 0.1549 0.1480 0.1280 0.0000 0.0000 0.0000 0.0000 0.00000.0000 0.0000 0.0000 0.0000 0.0000 13th Last 2.0% per vear 0.1596 0.0000 0.1488 0 1647 0.1480 0.1280 0.0000 0.0000 0.0000 0.0000 0.00000.0000 0.0000 0.0000 12th Last 1.5% per vear 13 0.1556 0.1692 0.1596 0.1480 0.1280 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 1.4% per vear 0.0000 11th Last 14 0.1598 0.1692 0.1596 0.1480 0.1280 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 Act 44 Discount Factor: 10th Last 1.3% per vear 15 0.1598 0.1692 0.1596 0.1480 0.1280 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 Selected Claim Settlement Factor 9th Last 1.2% per year 0.1598 0.1692 0.1596 0.1480 0.1280 0.0000 0.0000 0.0000 0.0000 0.0000 1.1% per year 16 8th Last 17 0.1692 0.1596 0.1480 0.1280 0.0000 1.0% per year 0.1598 0.0000 0.0000 0.0000 7th Last 18 0.1598 0.1692 0.1596 0.1480 0.1280 0.0000 0.0000 0.0000 Note: Act 44 effective in 1993 0.8% per year 6th Last 0.1692 0.1596 0.1280 0.0000 0.5% per vear 19 0.1598 0.1480 0.0000 5th Last 0.1596 0.1280 0.0000 0.0% per vear 20 0.1598 0.1692 0.1480 4th Last 0.0% per vear 3rd Last 0.0% per vear 2nd Last 1st Last 0.0% per vear C. Sum of Adjustment to Act 44 Law Level and Claim Settlement Adjustments Additions 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 0.7082 0.9101 0.9963 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1.0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1.0000 1 0000 1.0000 0.8222 0 9294 1 0000 1 0000 1 0000 1 0000 1 0000 1.0000 1 0000 1 0000 1 0000 1.0000 1 0000 1 0000 1 0000 1 0000 1 0000 1 0000 1.0000 1 0000 1.0000 1 0000 1.0000 1 0000 0.9488 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.8402 1.0000 1.0000 1.0000 1.0000 1.0000 0.8582 0.9681 1.0000 0.876 0.9874 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.8941 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.9079 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.9207 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.9328 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.9439 1.0000 1.0000 1.0000 1.0000 10 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.9543 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 12 0.9638 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000

Source: A. Adjustment to Act 44 Law Level Exhibit VI-D Pages 1-15

B. Claim Settlement Adjustments Additions Exhibits VI-B-5 (Refer to selected table above.)

C. A+B (with maximum of 1.000)

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Report	1992	1993	1994	1995	1996	<u>1997</u>	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	<u>2016</u>
1	5,963,632	4,780,471	3,903,052	3,946,197	4,135,165	3,185,472	3,370,548	2,714,671	2,468,601	2,225,216	3,150,255	2,579,313	3,189,109	3,700,850	2,871,489	5,478,955	3,509,674	2,761,649	3,630,574	4,362,098	4,806,118	3,639,740	6,225,769	4,054,856	3,963,291
2	6,709,723	5,785,980	4,929,891	4,443,755	4,315,884	3,374,998	3,630,642	3,012,839	2,716,963	2,589,253	3,609,439	2,812,481	3,555,290	4,031,513	3,286,804	5,501,458	3,749,858	3,021,605	3,914,782	5,517,261	5,258,148	4,294,769	6,357,441	3,981,666	
3	6,988,709	6,162,904	5,062,121	4,353,568	4,689,720	3,598,928	3,628,890	3,186,033	2,818,387	2,646,248	3,762,837	2,794,988	4,147,713	4,161,949	3,511,501	5,575,559	3,709,814	2,891,686	4,167,466	5,633,374	5,404,121	4,076,856	6,043,218		
1	6.985.202	6.061,248		4.294.114	4,808,246		3,720,868	3,057,663	2,836,912	2,629,910	3,890,149	2,756,587	4,166,709	4,249,331	3,418,585	5,632,912	3,804,580	2,991,503	4,413,176	5,609,134	5,406,521	3,971,009			
					4,806,190				2,885,530							5,757,902	3,837,840	2,983,393	4,604,796		5,519,600	0,771,007			
5	6,810,575	6,077,440	5,111,218	4,416,259			3,709,153	3,188,781			3,874,531		4,131,369	4,143,155	3,401,038					5,673,084	3,319,600				
6	6,966,052	5,804,110		4,483,826	4,703,865	3,978,305	3,761,263	3,178,086	2,937,414	2,896,624	4,191,261	2,899,687	4,080,336	4,299,151	3,370,262	5,864,639	3,842,096	2,946,694	4,477,330	5,654,038					
7	7,086,080	5,767,492	5,059,712	4,666,919	4,578,161	3,932,216	3,760,723	3,133,358	2,927,989	2,822,196	4,257,734	2,897,577	4,180,965	4,349,353	3,381,086	5,841,539	3,811,253	2,946,651	4,459,354						
8	6,984,759	5,730,009	5,113,134	4,706,403	4,617,085	3,951,475	3,791,456	3,171,882	2,921,384	2,789,664	4,339,920	2,890,067	4,187,418	4,411,495	3,382,185	5,950,133	3,599,483	2,986,651							
9	6,943,552	5,812,365	5,124,726	4,685,434	4,625,715		3,741,005	3,236,426	2,952,750	2,782,114	4,145,606	3,080,177	4,190,701	4,403,570	3,507,194	5,807,440	3,608,725								
10	7,100,992	5,971,283	5,144,115	4,668,534	4,651,769		3,777,626	3,357,242	2,950,698	2,879,623	4,160,518	3,110,017	4,206,298	4,356,915	3,729,031	5.819.126	0,000,720								
																3,017,120									
11	7,099,581	6,018,440	5,273,693	4,693,740	4,625,953	4,593,238	3,861,559	3,353,094	2,948,865	2,963,075	4,164,525	3,103,090	4,370,336	4,427,072	3,802,480										
12	7,167,560	5,838,773	5,295,932	4,815,890	4,594,309	4,586,566	3,843,219	3,409,251	3,021,208	3,005,905	4,194,244	3,209,975	4,350,145	4,413,282											
13	7,173,430	5,732,687	5,346,840	4,869,709	4,485,294	4,602,844	3,868,653	3,531,522	3,021,095	3,012,114	4,185,516	3,209,907	4,351,280												
14	7,091,743	5,818,810	5,366,481	4,793,570	4,501,155	4,627,844	3,851,694	3,532,688	3,020,836		4,205,064	3,209,709													
15	7,140,118	5,859,155	5,384,567	4,836,117	4,491,418		3,851,841	3,533,087	3,080,845	3,237,259	4,202,349	0,207,707													
16	7,140,110	5,935,724	5,423,525	4.865.082	4,520,959	4,694,564	3,852,213	3,539,649		3,220,132	4,202,347														
									3,080,810	3,220,132															
17	7,047,415	6,019,026	5,290,059	4,883,436	4,514,259	4,723,464	3,838,125	3,539,760	2,872,279																
18	7,028,385	6,100,724	5,370,678	4,927,115	4,523,523	5,023,336	3,835,125	3,534,812																	
19	7,029,188	6,154,033	5,371,098	4,917,010	4,536,280	5,023,336	3,834,626																		
20	7,063,572	6,153,930	5,467,814	5,276,620	4,528,080	5,023,209																			
B	Act 44 Medic	al Law Adiu	sment Facto	rs and Claim	Settlement I	Levels																			
1	0.7082	0.9101	0.9963	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
<u>'</u> -		0.9294					1.0000		1.0000			1.0000	1.0000	1.0000	1.0000	1.0000									1.0000
2	0.8222		1.0000	1.0000	1.0000	1.0000		1.0000		1.0000	1.0000						1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
3	0.8402	0.9488	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		
4	0.8582	0.9681	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			
5	0.8761	0.9874	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				
6	0.8941	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000					
7	0.9079	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000						
8	0.9207	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000						
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9	0.9328	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000								
10	0.9439	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000									
														1.0000	1.0000										
11	0.9543	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000										
11	0.9543	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000										
			1.0000							1.0000					1.0000										
12 13	0.9638 0.9715	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000			ount Factor: (	7082								
12 13 14	0.9638 0.9715 0.9768	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000	1.0000	1.0000	Act 44 Disco	ount Factor: (									
12 13 14 15	0.9638 0.9715 0.9768 0.9777	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000	1.0000 1.0000	1.0000	1.0000											
12 13 14 15	0.9638 0.9715 0.9768 0.9777 0.9787	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	1.0000	1.0000	Act 44 Disco										
12 13 14 15	0.9638 0.9715 0.9768 0.9777	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	1.0000	1.0000	Act 44 Disco										
12 13 14 15	0.9638 0.9715 0.9768 0.9777 0.9787	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	1.0000	1.0000 S	Act 44 Disco	m Settlemen									
12 13 14 15 16 17	0.9638 0.9715 0.9768 0.9777 0.9787 0.9797 0.9807	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	1.0000	1.0000 S	Act 44 Disco Selected Clair	m Settlemen									
12 13 14 15 16 17 18	0.9638 0.9715 0.9768 0.9777 0.9787 0.9797 0.9807 0.9817	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	1.0000	1.0000 S	Act 44 Disco Selected Clair	m Settlemen									
12 13 14 15 16 17	0.9638 0.9715 0.9768 0.9777 0.9787 0.9797 0.9807	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	1.0000	1.0000 S	Act 44 Disco Selected Clair	m Settlemen									
12 13 14 15 16 17 18	0.9638 0.9715 0.9768 0.9777 0.9787 0.9797 0.9807 0.9817	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	1.0000	1.0000 S	Act 44 Disco Selected Clair	m Settlemen									
12 13 14 15 16 17 18 19 20	0.9638 0.9715 0.9768 0.9777 0.9787 0.9797 0.9807 0.9817 0.9826	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000 1.0000	1.0000	1.0000 S	Act 44 Disco Selected Clair	m Settlemen									
12 13 14 15 16 17 18 19 20	0.9638 0.9715 0.9768 0.9777 0.9787 0.9797 0.9807 0.9817 0.9826	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000	1.0000	1.0000 S Note: A	Act 44 Disco selected Clain	m Settlemen	t Factor		0.000 57	10/0255		0.400.7.7	4005 7.7	105.105	
12 13 14 15 16 17 18 19 20	0.9638 0.9715 0.9768 0.9777 0.9787 0.9797 0.9807 0.9817 0.9826 Medical Incu	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Adjusted to A	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 3,150,255	1.0000 1.0000 1.0000 2.579,313	1.0000 1.0000	1.0000 S Note: A	Act 44 Disco selected Clair Act 44 effective 2,871,489	m Settlemen ve in 1993 5,478,955	3,509,674	2,761,649	3,630,574	4,362,098		3,639,740	6,225,769	4,054,856	3,963,291
12 13 14 15 16 17 18 19 20	0.9638 0.9715 0.9768 0.9777 0.9787 0.9797 0.9807 0.9817 0.9826 Medical Incu	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 evel and Clai 4,135,165 4,315,884	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 f 04/30/17 2.714.671 3.012,839	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 2,468,601 2,716,963	1.0000 1.0000 1.0000 1.0000 1.0000 2,225,216 2,589,253	1.0000 1.0000 1.0000 1.0000 1.0000 3,150,255 3,609,439	1.0000 1.0000 1.0000 2.579,313 2.812,481	1.0000 1.0000	1.0000 S Note: A 3,700,850 4,031,513	Act 44 Disco selected Clair Act 44 effectiv 2,871,489 3,286,804	m Settlemen  ve in 1993  5,478,955 5,501,458	3,509,674 3,749,858	3,021,605	3,914,782	5,517,261	5,258,148	4,294,769	6,357,441	4,054,856 3,981,666	3,963,291
12 13 14 15 16 17 18 19 20	0.9638 0.9715 0.9768 0.9777 0.9787 0.9797 0.9807 0.9817 0.9826 Medical Incu	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Adjusted to A	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 2.225,216 2.589,253 2,646,248	1.0000 1.0000 1.0000 1.0000 3,150,255	1.0000 1.0000 1.0000 2.579,313	1.0000 1.0000	1.0000 S Note: A	Act 44 Disco selected Clair Act 44 effective 2,871,489	m Settlemen ve in 1993 5,478,955	3,509,674	3,021,605 2,891,686							3,963,291
12 13 14 15 16 17 18 19 20	0.9638 0.9715 0.9768 0.9777 0.9787 0.9797 0.9807 0.9817 0.9826 Medical Incu	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4.0000 4.929,891 5.062,121	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 evel and Clai 4,135,165 4,315,884	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.85472 3.374,998	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 f 04/30/17 2.714.671 3.012.839 3.186.033	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 2.468.601 2.716,963 2.818,387	1.0000 1.0000 1.0000 1.0000 1.0000 2.225,216 2.589,253 2,646,248	1.0000 1.0000 1.0000 1.0000 1.0000 3,150,255 3,609,439 3,762,837	1.0000 1.0000 1.0000 1.0000 2.579,313 2.812,481 2.794,988	3,189,109 3,555,290 4,147,713	1.0000 Note: A 3,700,850 4,031,513 4,161,949	Act 44 Disco selected Clair Act 44 effectiv 2,871,489 3,286,804 3,511,501	m Settlemen ve in 1993  5,478,955 5,501,458 5,575,559	3,509,674 3,749,858 3,709,814	3,021,605 2,891,686	3,914,782 4,167,466	5,517,261	5,258,148	4,294,769	6,357,441		3,963,291
12 13 14 15 16 17 18 19 20	0.9638 0.9715 0.9768 0.9777 0.9787 0.9807 0.9817 0.9826 Medical Incu 4,223,000 5,517,000 5,872,000 5,994,000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 5.378,000 5.847,000 5.848,000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4.0000 4.929,891 5.062,121 5.216,951	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4.441,755 4.443,755 4.353,568 4.294,114	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 evel and Clai 4,135,165 4,315,884 4,689,720 4,808,246	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 im Settlemen 3,185,472 3,374,998 3,598,928	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 2.468,601 2,716,963 2,818,387 2,836,912	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 2,225,216 2,589,253 2,646,248 2,629,910	1.0000 1.0000 1.0000 1.0000 1.0000 3,150,255 3,609,439 3,762,837 3,890,149	1.0000 1.0000 1.0000 1.0000 2.579,313 2.812,481 2.794,988 2.756,587	3,189,109 3,555,290 4,147,713 4,166,709	1.0000 Note: A 3,700,850 4,031,513 4,161,949 4,249,331	Act 44 Disco selected Clair Act 44 effectiv 2,871,489 3,286,804 3,511,501 3,418,585	m Settlemen  ve in 1993  5,478,955 5,501,458 5,575,559 5,632,912	3,509,674 3,749,858 3,709,814 3,804,580	3,021,605 2,891,686 2,991,503	3,914,782 4,167,466 4,413,176	5,517,261 5,633,374 5,609,134	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
12 13 14 15 16 17 18 19 20	0.9638 0.9715 0.9768 0.9777 0.9787 0.9787 0.9807 0.9817 0.9826 Medical Incu 4,223,000 5,517,000 5,972,000 5,994,000 5,967,000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 5.378,000 5.847,000 5.847,000 6.001,000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3.889,000 4,929,891 5,062,121 5,216,951 5,111,218	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3.946,197 4,443,755 4,353,568 4.294,114 4,416,259	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 2evel and Clai 4.135,165 4.315,884 4.689,720 4.808,246 4.806,190	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 im Settlemen 3.185.472 3.374.998 3.598.928 3.571,097 3.810,363	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3.370,548 3.630,642 3.628,890 3.720,868 3.709,153	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 2.468.601 2.716,963 2.818.387 2.836,912 2.835,530	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,225,216 2,589,253 2,644,248 2,629,910 2,816,076	1.0000 1.0000 1.0000 1.0000 1.0000 3.150,255 3,609,439 3,762,837 3,874,531	1.0000 1.0000 1.0000 1.0000 2,579,313 2,812,481 2,794,988 2,756,587 2,912,119	3,189,109 3,555,290 4,147,713 4,166,709 4,131,369	3,700,850 4,031,513 4,161,949 4,249,331 4,143,155	Act 44 Disco selected Clair Act 44 effectiv 2,871,489 3,286,804 3,511,501 3,418,585 3,401,038	5,478,955 5,501,458 5,575,559 5,632,912 5,757,902	3,509,674 3,749,858 3,709,814 3,804,580 3,837,840	3,021,605 2,891,686 2,991,503 2,983,393	3,914,782 4,167,466 4,413,176 4,604,796	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121	4,294,769 4,076,856	6,357,441		3,963,291
12 13 14 15 16 17 18 19 20	0.9638 0.9715 0.9768 0.9777 0.9787 0.9807 0.9817 0.9826 Medical Incu 4.223,000 5.517,000 5.872,000 5.974,000 5.967,000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 5.378,000 5.848,000 5.847,000 5.848,000 5.848,000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4.0000 4.929.891 5.062,121 5.216,951 5.111,218 5.029,268	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 4.0000 1.0000 4.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 2001 4.135,165 4.315,884 4.689,720 4.808,246 4.806,190 4,703,865	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 im Settlemen 3.185.472 3.374.998 3.578.928 3.571.097 3.810.363	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3.370,548 3.630,642 3.628,890 3.720,868 3.799,153	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 2.468,601 2.716,963 2.818,387 2.836,912 2.885,530 2.937,414	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 2.225,216 2.589,253 2.646,248 2.629,910 2.816,076	1,0000 1,0000 1,0000 1,0000 3,150,255 3,609,439 3,762,837 3,874,531 4,191,261	1.0000 1.0000 1.0000 1.0000 2.579,313 2.812,481 2.794,988 2.756,587 2.912,119 2.899,687	3,189,109 3,555,290 4,147,713 4,166,709 4,131,369 4,080,336	1.0000 Note: A 3,700.850 4,031.513 4,161.949 4,249.331 4,143.155 4,299,151	Act 44 Disco selected Clair Act 44 effective 2,871,489 3,286,804 3,511,501 3,418,585 3,401,038 3,370,262	5,478,955 5,501,458 5,575,559 5,632,912 5,757,902 5,864,639	3,509,674 3,749,858 3,709,814 3,804,580 3,837,840 3,842,096	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
12 13 14 14 15 16 17 17 18 19 20 C	0.9638 0.9715 0.9768 0.9777 0.9787 0.9797 0.9817 0.9826 Medical Incu 4.223,000 5.517,000 5.974,000 5.976,000 6.423,000 6.433,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,378,000 5,378,000 5,868,000 6,001,000 5,864,000 6,001,000 5,864,110	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,929,891 5,062,121 5,216,951 5,111,218 5,029,268 5,059,712	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,443,755 4,353,568 4,294,114 4,416,259 4,483,826 4,483,826	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,135,165 4,315,884 4,689,720 4,808,240 4,808,240 4,703,865	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,185,472 3,374,998 3,374,998 3,571,097 3,810,363 3,978,305 3,978,216	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 3.370,548 3.630,642 3.630,642 3.720,868 3.720,963 3.720,863 3.760,723	1.0000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.000000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.000000 1.00000 1.00000 1.00000 1.00000 1.000000 1.000000 1.00000 1.00000 1.000000 1.000000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 2.716,963 2.818,36,912 2.885,530 2.937,414 2.927,989	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,225,216 2,589,253 2,646,248 2,646,248 2,649,910 2,816,076 2,896,624 2,822,196	1.0000 1.0000 1.0000 1.0000 3.150,255 3.609,439 3.762,837 3.890,149 3.874,531 4.191,261	1,0000 1,0000 1,0000 1,0000 2,579,313 2,812,481 2,794,988 2,794,988 2,912,119 2,899,687 2,897,577	3,189,109 3,555,290 4,147,713 4,166,709 4,080,336 4,080,336	3,700.850 4,031,513 4,161,949 4,249,331 4,143,155 4,299,151	Act 44 Disco selected Clair Act 44 effectiv 2.871,489 3.286,804 3.511,501 3.418,585 3.401,038 3.370,262 3.381,086	m Settlemen ve in 1993 5,478,955 5,501,458 5,575,559 5,632,912 5,757,902 5,841,539	3,509,674 3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
12 13 14 15 16 17 18 19 20	0,9438 0,9715 0,9748 0,9777 0,9787 0,9807 0,9817 0,9826 Medical Incu 4,223,000 5,517,000 5,872,000 5,984,000 6,229,000 6,433,000 6,433,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,378,000 5,847,000 5,868,000 6,001,000 5,864,110 5,767,492 5,730,009	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,4468,601 2,716,963 2,818,387 2,885,530 2,937,414 2,927,989 2,921,384	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,225,216 2,589,253 2,646,248 2,629,910 2,816,076 2,816,076 2,816,624 2,822,196	1.0000 1.0000 1.0000 1.0000 1.0000 3.150.255 3.609.439 3.762.837 3.890.149 3.890.149 4.257.734 4.257.734	1,0000 1,0000 1,0000 1,0000 2,579,313 2,812,481 2,794,988 2,756,587 2,912,119 2,889,687 2,897,577 2,897,577	1.0000 1.0000 1.0000 3.189,109 3.555,290 4.147,713 4,166,709 4,181,369 4,080,336 4,180,965	3,700,850 4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353 4,411,495	Act 44 Disco ielected Cloii Act 44 effective 2,871,489 3,286,804 3,511,501 3,401,085 3,370,262 3,381,1086 3,382,185	5,478,955 5,501,458 5,575,559 5,632,912 5,757,902 5,844,639 5,950,133	3,509,674 3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
12 13 14 14 15 16 17 17 18 19 20 C	0.9638 0.9715 0.9768 0.9777 0.9787 0.9797 0.9817 0.9826 Medical Incu 4.223,000 5.517,000 5.974,000 5.976,000 6.423,000 6.433,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,378,000 5,347,000 5,868,000 6,001,000 5,804,110 5,767,492 5,730,009 5,312,365	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,929,891 5,062,121 5,216,951 5,111,218 5,029,248 5,029,248 5,059,712 5,113,134	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,443,755 4,353,568 4,294,114 4,416,259 4,483,826 4,466,919 4,706,403 4,858,434	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,135,145 4,315,884 4,808,720 4,806,190 4,703,845 4,703,845 4,703,845 4,408,721	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,468,601 2,716,963 2,818,387 2,836,712 2,836,712 2,937,414 2,927,989 2,921,384 2,952,750	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,225,216 2,589,253 2,646,248 2,629,910 2,816,076 2,896,624 2,896,624 2,782,146	1.0000 1.0000 1.0000 1.0000 3.150,255 3.609,439 3.762,837 3.890,149 3.874,531 4.257,734 4.339,265	1,0000 1,0000 1,0000 1,0000 2,579,313 2,812,481 2,794,988 2,756,587 2,912,119 2,899,637 2,899,637 2,899,637 3,000,177	1,0000 1,	3.700.850 4.031.513 4.161.949 4.249.331 4.143.155 4.299.151 4.349.353 4.411.495 4.403.570	Act 44 Disco selected Clair Act 44 effectiv 2.871,489 3.286,804 3.511,501 3.418,585 3.401,038 3.370,262 3.381,086	5.478.955 5.501.458 5.575.559 5.632.912 5.757.902 5.844.639 5.841.539 5.950.133 5.807.440	3,509,674 3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
12 13 14 14 15 16 17 17 18 19 20 C	0,9438 0,9715 0,9748 0,9777 0,9787 0,9807 0,9817 0,9826 Medical Incu 4,223,000 5,517,000 5,872,000 5,984,000 6,229,000 6,433,000 6,433,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,378,000 5,847,000 5,868,000 6,001,000 5,864,110 5,767,492 5,730,009	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 Adjusted to A 3,889,000 4,929,891 5,062,121 5,216,951 5,111,218 5,029,248 5,059,712 5,113,134	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,4468,601 2,716,963 2,818,387 2,885,530 2,937,414 2,927,989 2,921,384	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,225,216 2,589,253 2,646,248 2,629,910 2,816,076 2,816,076 2,816,624 2,822,196	1.0000 1.0000 1.0000 1.0000 1.0000 3.150.255 3.609.439 3.762.837 3.890.149 3.890.149 4.257.734 4.257.734	1,0000 1,0000 1,0000 1,0000 2,579,313 2,812,481 2,794,988 2,756,587 2,912,119 2,889,687 2,897,577 2,897,577	1,0000 1,0000 1,0000 3,189,109 3,555,290 4,147,713 4,166,709 4,181,369 4,180,336 4,180,965	3,700,850 4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353 4,411,495	Act 44 Disco ielected Cloii Act 44 effective 2,871,489 3,286,804 3,511,501 3,401,085 3,370,262 3,381,1086 3,382,185	5,478,955 5,501,458 5,575,559 5,632,912 5,757,902 5,844,639 5,950,133	3,509,674 3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
12 13 144 15 166 177 188 199 20	0,9638 0,9715 0,9768 0,9777 0,9787 0,9807 0,9817 0,9826 4,223,000 5,517,000 5,517,000 5,994,000 6,433,000 6,433,000 6,431,000 6,431,000 6,470,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,378,000 5,847,000 5,868,000 6,001,000 5,864,110 5,767,472 5,730,009 5,773,0009 5,773,0009 5,771,283	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,229,891 5,062,121 5,216,951 5,111,218 5,022,248 5,112,18 5,113,134 5,114,115	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,443,755 4,353,568 4,294,1149 4,443,755 4,483,826 4,484,1149 4,416,259 4,486,825 4,666,919 4,706,403 4,668,543 4,668,543	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,135,165 4,315,844 4,889,720 4,808,249 4,808,249 4,808,140 4,708,845 4,617,085 4,625,715	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,468,601 2,716,76 2,818,387 2,835,912 2,885,530 2,937,414 2,927,989 2,921,384 2,922,750 2,950,678	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,225,216 2,589,253 2,646,248 2,629,910 2,816,076 2,879,623 2,821,196 2,789,664 2,782,114 2,879,623	1,0000 1,0000 1,0000 1,0000 1,0000 3,150,255 3,609,439 3,762,837 3,870,139 4,191,261 4,257,734 4,339,920 4,145,606 4,160,518	1.0000 1.0000 1.0000 1.0000 2.579,313 2.812,481 2.794,988 2.756,587 2.912,119 2.899,687 2.897,577 2.890,067 3.080,177 3.080,177	3,189,109 3,555,290 4,147,713 4,166,709 4,080,336 4,180,765 4,187,418 4,190,701 4,206,298	3,700,850 4,031,513 4,161,943 4,143,155 4,299,151 4,349,353 4,411,495 4,403,570 4,356,915	Act 44 Disco letected Clair Act 44 effectiv 2,871,489 3,28,680 3,181,591 3,410,583 3,370,262 3,382,185 3,507,194 3,729,031	5.478.955 5.501.458 5.575.559 5.632.912 5.757.902 5.844.639 5.841.539 5.950.133 5.807.440	3,509,674 3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
12 13 14 15 16 16 17 18 19 20 C	0,9458 0,9715 0,9768 0,9777 0,9807 0,9787 0,9817 0,9826 Medical Incu 4,223,000 5,872,000 5,872,000 6,433,000 6,431,000 6,477,000 6,775,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,378,000 5,847,000 5,848,000 6,001,000 5,784,000 5,804,110 5,767,472 5,730,009 5,812,365 5,771,283	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,929,891 5,042,121 5,216,951 5,113,134 5,124,726 5,144,115 5,273,673	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,443,755 4,443,755 4,466,919 4,483,826 4,666,919 4,706,403 4,685,434 4,668,534 4,693,740	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,135,145 4,315,884 4,899,720 4,808,246 4,808,140 4,808,140 4,808,140 4,170,385 4,473,845 4,473,845 4,473,845 4,473,845 4,473,845 4,473,845 4,473,845	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,716,963 2,818,387 2,836,912 2,885,530 2,937,414 2,927,989 2,921,384 2,921,394 2,921,394 2,921,394	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,225,216 2,589,253 2,646,248 2,646,248 2,646,248 2,896,624 2,896,624 2,789,644 2,789,643 2,963,079	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,150,255 3,609,439 3,762,837 3,874,531 4,191,261 4,191,261 4,191,261 4,145,406 4,146,518 4,164,518	1,0000 1,0000 1,0000 1,0000 2,579,313 2,812,481 2,794,988 2,756,587 2,912,119 2,899,657 3,080,177 3,110,017 3,110,017	3.189,109 3.555,290 4.147,713 4.166,709 4.131,369 4.080,336 4.180,965 4.187,418 4.190,701 4.206,298 4.370,336	3,700.850 4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353 4,411,495 4,411,495 4,411,495	Act 44 Disco ielected Cloii Act 44 effectiv 2.871,489 3.286,804 3.311,501 3.415,585 3.401,038 3.370,262 3.381,086 3.382,185 3.507,194	5.478.955 5.501.458 5.575.559 5.632.912 5.757.902 5.844.639 5.841.539 5.950.133 5.807.440	3,509,674 3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
12 13 144 155 166 177 18 19 20 C 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 10 11 11 12	0,9458 0,9715 0,9768 0,9777 0,9787 0,9807 0,9817 0,9817 0,9826 Medical Incu 4,223,000 5,517,000 5,872,000 5,974,000 6,429,000 6,433,000 6,477,000 6,775,000 6,775,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,848,000 6,001,000 5,864,110 5,767,492 5,730,009 5,812,345 5,912,836 5,912,836	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,443,755 4,353,568 4,294,114 4,416,259 4,483,364 4,666,919 4,706,403 4,685,434 4,668,534 4,668,534 4,693,740	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,135,184 4,185,720 4,703,861 4,617,085 4,651,769 4,625,715 4,651,769 4,625,715	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,468,601 2,716,963 2,818,387 2,836,912 2,836,912 2,927,989 2,927,989 2,927,989 2,921,384 2,927,989 2,927,989 2,926,980 2,950,698 2,948,865 3,021,208	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,225,216 2,589,253 2,646,248 2,629,910 2,816,076 2,826,196 2,789,664 2,782,144 2,879,623 2,963,075 3,005,905	1,0000 1,0000 1,0000 1,0000 1,0000 3,150,255 3,609,439 3,762,837 3,890,149 4,191,261 4,194,244 4,145,406 4,160,518 4,164,525 4,194,244	2.579.313 2.812.481 2.794.988 2.756.587 2.912.119 2.899.687 2.912.119 2.899.067 3.080.177 3.110.017 3.100.173 3.020.975	1,0000 1,	3,700,850 4,031,513 4,161,943 4,143,155 4,299,151 4,349,353 4,411,495 4,403,570 4,356,915	Act 44 Disco letected Clair Act 44 effectiv 2,871,489 3,28,680 3,181,591 3,410,583 3,370,262 3,382,185 3,507,194 3,729,031	5.478.955 5.501.458 5.575.559 5.632.912 5.757.902 5.844.639 5.841.539 5.950.133 5.807.440	3,509,674 3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
12 13 14 15 16 16 17 18 19 20 C. 1 2 2 3 3 4 4 5 6 6 7 7 8 9 9 10 11 11 12 11 12 12 13 14 14 15 15 16 16 16 16 16 16 16 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	0,9638 0,9715 0,9768 0,9777 0,9787 0,9787 0,9807 0,9817 0,9826 Medical Incu 4,223,000 5,941,000 5,942,000 6,431,000 6,431,000 6,475,000 6,703,000 6,703,000 6,703,000 6,703,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,378,000 5,847,000 5,848,000 6,001,000 5,868,000 6,001,000 5,730,009 5,730,009 5,730,009 5,730,009 5,730,009 5,730,009 5,730,009 5,730,009	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,229,891 5,062,121 5,216,951 5,113,134 5,124,726 5,133,144,115 5,273,693 5,273,693 5,273,693 5,273,693	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,443,755 4,294,114 4,416,259 4,483,826 4,264,619 4,4706,403 4,688,543 4,468,534 4,688,543 4,889,709	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,135,145 4,315,884 4,489,720 4,889,720 4,888,246 4,898,140 4,417,03,85 4,452,715 4,417,038 4,451,749 4,451,749 4,451,749 4,451,749 4,451,749 4,451,749	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,716,963 2,818,387 2,836,912 2,885,530 2,937,414 2,927,789 2,921,384 2,922,750 2,921,384 2,926,498 2,948,865 3,021,095	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,225,216 2,589,253 2,646,248 2,629,910 2,816,076 2,896,624 2,789,646 2,789,646 2,789,646 2,789,646 2,789,646 3,000,000 3,000,000 3,000,000 3,000,000	1,0000 1,0000 1,0000 1,0000 1,0000 3,150,255 3,609,439 3,762,837 3,890,149 3,874,531 4,191,261 4,257,734 4,1339,920 4,145,606 4,164,525 4,194,244 4,185,516	2.579,313 2.812,481 2.794,988 2.765,687 2.912,119 2.899,687 3.080,177 3.110,017 3.103,090 3,209,975	3.189,109 3.555,290 4.147,713 4.166,709 4.131,369 4.080,336 4.180,965 4.187,418 4.190,701 4.206,298 4.370,336	3,700.850 4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353 4,411,495 4,411,495 4,411,495	Act 44 Disco letected Clair Act 44 effectiv 2,871,489 3,28,680 3,181,591 3,410,583 3,370,262 3,382,185 3,507,194 3,729,031	5.478.955 5.501.458 5.575.559 5.632.912 5.757.902 5.844.639 5.841.539 5.950.133 5.807.440	3,509,674 3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
12 13 144 15 166 167 18 18 19 20 C	0,9458 0,9715 0,9768 0,9777 0,9787 0,9787 0,9817 0,9817 0,9816 4,223,000 5,872,000 5,994,000 6,433,000 6,431,000 6,477,000 6,775,000 6,775,000 6,975,000 6,989,000 6,969,000 6,969,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,378,000 5,378,000 5,586,000 6,001,000 5,580,110 5,767,492 5,730,009 5,812,365 5,971,283 6,018,480 5,838,773 5,732,687 5,838,873	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,929,891 5,062,121 5,216,951 5,111,218 5,029,248 5,029,248 5,124,726 5,124,726 5,124,726 5,124,726 5,124,726 5,124,726 5,124,726 5,124,726 5,124,726	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,443,755 4,353,568 4,294,114 4,416,259 4,706,403 4,483,824 4,666,919 4,706,403 4,685,434 4,685,434 4,685,834 4,685,834 4,687,09 4,793,570	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,135,145 4,315,884 4,808,246 4,808,190 4,403,485 4,578,161 4,617,085 4,625,753 4,625,753 4,625,430 4,485,294 4,485,1769	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,468,601 2,716,963 2,818,387 2,836,912 2,937,414 2,927,989 2,921,384 2,952,750 2,952,750 3,021,208 3,021,208 3,021,836	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,225,216 2,589,253 2,646,248 2,629,910 2,816,076 2,896,624 2,782,114 2,876,623 2,782,114 3,783,075 3,005,905 3,012,114	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,150,255 3,609,439 3,742,837 3,870,149 4,191,261 4,191,261 4,145,606 4,146,518 4,144,525 4,1194,244 4,185,516 4,205,064	2.579.313 2.812.481 2.794.988 2.756.587 2.912.119 2.899.687 2.912.119 2.899.067 3.080.177 3.110.017 3.100.173 3.020.975	1,0000 1,	3,700.850 4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353 4,411,495 4,411,495 4,411,495	Act 44 Disco letected Clair Act 44 effectiv 2,871,489 3,28,680 3,181,591 3,410,583 3,370,262 3,382,185 3,507,194 3,729,031	5.478.955 5.501.458 5.575.559 5.632.912 5.757.902 5.844.639 5.841.539 5.950.133 5.807.440	3,509,674 3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
12 13 14 15 16 16 17 18 19 20 C. 1 2 2 3 3 4 4 5 6 6 7 7 8 9 9 10 11 11 12 11 12 12 13 14 14 15 15 16 16 16 16 16 16 16 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	0,9458 0,9715 0,9768 0,9777 0,9787 0,9787 0,9807 0,9817 0,9826 Medical Incu 4,223,000 5,587,000 6,229,000 6,431,000 6,477,000 6,477,000 6,775,000 6,982,000 6,998,000 6,998,000 6,998,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,847,000 5,847,000 5,847,000 5,844,100 5,847,472 5,747,472 5,730,079 5,812,345 5,771,283 6,018,440 5,730,079 5,818,103 5,732,687 5,818,810 5,859,155	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,229,891 5,062,121 5,216,951 5,111,218 5,029,248 5,059,712 5,113,134 5,124,726 5,124,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,443,755 4,443,755 4,445,259 4,446,259 4,446,259 4,468,534 4,668,534	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,135,165 4,135,165 4,135,184 4,489,720 4,889,720 4,889,720 4,880,419 4,470,3,865 4,425,715 4,451,749 4,451,7	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,468,601 2,716,963 2,818,387 2,836,912 2,885,530 2,937,414 2,927,750 2,921,384 2,921,384 2,952,750 2,921,384 3,021,095 3,021,095 3,020,834 3,080,845	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,225,216 2,589,253 2,646,248 2,816,076 2,816,076 2,816,076 2,879,623 2,783,646 2,783,646 2,783,646 2,783,646 3,012,114 2,879,623 3,012,114 3,143,372 3,012,114 3,143,372 3,237,259	1,0000 1,0000 1,0000 1,0000 1,0000 3,150,255 3,609,439 3,762,837 3,890,149 3,874,531 4,191,261 4,257,734 4,1339,920 4,145,606 4,164,525 4,194,244 4,185,516	2.579,313 2.812,481 2.794,988 2.765,687 2.912,119 2.899,687 3.080,177 3.110,017 3.103,090 3,209,975	1,0000 1,	3,700.850 4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353 4,411,495 4,411,495 4,411,495	Act 44 Disco letected Clair Act 44 effectiv 2,871,489 3,28,680 3,181,591 3,410,583 3,370,262 3,382,185 3,507,194 3,729,031	5.478.955 5.501.458 5.575.559 5.632.912 5.757.902 5.844.639 5.841.539 5.950.133 5.807.440	3,509,674 3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
12 13 144 15 166 167 18 18 19 20 C	0,9458 0,9715 0,9768 0,9777 0,9787 0,9787 0,9817 0,9817 0,9816 4,223,000 5,872,000 5,994,000 6,433,000 6,431,000 6,477,000 6,775,000 6,775,000 6,975,000 6,989,000 6,969,000 6,969,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,378,000 5,378,000 5,586,000 6,001,000 5,580,110 5,767,492 5,730,009 5,812,365 5,971,283 6,018,480 5,838,773 5,732,687 5,838,873	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,929,891 5,062,121 5,216,951 5,111,218 5,029,248 5,029,248 5,124,726 5,124,726 5,124,726 5,124,726 5,124,726 5,124,726 5,124,726 5,124,726 5,124,726	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,443,755 4,353,568 4,294,114 4,416,259 4,706,403 4,483,824 4,666,919 4,706,403 4,685,434 4,685,434 4,685,834 4,685,834 4,687,09 4,793,570	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,135,145 4,315,884 4,808,246 4,808,190 4,403,485 4,578,161 4,617,085 4,625,753 4,625,753 4,625,430 4,485,294 4,485,1769	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,468,601 2,716,963 2,818,387 2,836,912 2,937,414 2,927,989 2,921,384 2,952,750 2,952,750 3,021,208 3,021,208 3,021,836	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,225,216 2,589,253 2,646,248 2,629,910 2,816,076 2,896,624 2,782,114 2,876,623 2,782,114 3,783,075 3,005,905 3,012,114	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,150,255 3,609,439 3,742,837 3,870,149 4,191,261 4,191,261 4,145,606 4,146,518 4,144,525 4,1194,244 4,185,516 4,205,064	2.579,313 2.812,481 2.794,988 2.765,687 2.912,119 2.899,687 3.080,177 3.110,017 3.103,090 3,209,975	1,0000 1,	3,700.850 4,031,513 4,161,949 4,249,331 4,143,155 4,299,151 4,349,353 4,411,495 4,411,495 4,411,495	Act 44 Disco letected Clair Act 44 effectiv 2,871,489 3,28,680 3,181,591 3,410,583 3,370,262 3,382,185 3,507,194 3,729,031	5.478.955 5.501.458 5.575.559 5.632.912 5.757.902 5.844.639 5.841.539 5.950.133 5.807.440	3,509,674 3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
12 13 14 15 16 16 17 18 19 20 C	0,9458 0,9715 0,9768 0,9777 0,9787 0,9787 0,9807 0,9817 0,9826 Medical Incu 4,223,000 5,587,000 6,229,000 6,431,000 6,477,000 6,477,000 6,775,000 6,982,000 6,998,000 6,998,000 6,998,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,847,000 5,847,000 5,847,000 5,844,100 5,847,472 5,747,472 5,730,079 5,812,345 5,771,283 6,018,440 5,730,079 5,818,103 5,732,687 5,818,810 5,859,155	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,929,891 5,042,121 5,112,144,115 5,029,248 5,009,712 5,113,134 5,124,726 5,114,115 5,273,673 5,273,673 5,273,673 5,273,673 5,346,840 5,346,481 5,346,481	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,443,755 4,443,755 4,445,259 4,446,259 4,446,259 4,468,534 4,668,534	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,135,165 4,315,884 4,489,246 4,808,246 4,808,246 4,808,246 4,703,845 4,617,085 4,625,715 4,625,735 4,852,944 4,852,945 4,485,294 4,485,294 4,450,155	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,468,601 2,716,963 2,818,387 2,836,912 2,885,530 2,937,414 2,927,750 2,921,384 2,921,384 2,952,750 2,921,384 3,021,095 3,021,095 3,020,834 3,080,845	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,225,216 2,589,253 2,646,248 2,816,076 2,816,076 2,816,076 2,879,623 2,783,646 2,783,646 2,783,646 2,783,646 3,012,114 2,879,623 3,012,114 3,143,372 3,012,114 3,143,372 3,237,259	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,150,255 3,609,439 3,742,837 3,870,149 4,191,261 4,191,261 4,145,606 4,146,518 4,144,525 4,1194,244 4,185,516 4,205,064	2.579,313 2.812,481 2.794,988 2.765,687 2.912,119 2.899,687 3.080,177 3.110,017 3.103,090 3,209,975	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,10	1.0000 Note: A 3.700.850 4.031.513 4.161.949 4.249.331 4.143.155 4.299.151 4.349.353 4.11.495 4.403.570 4.356.915 4.427.072 4.413.282	Act 44 Disco letected Clair Act 44 effectiv 2,871,489 3,28,680 3,181,591 3,410,583 3,370,262 3,382,185 3,507,194 3,729,031	m Settlemen  5.478.955 5.501.458 5.575.539 5.632,912 5.767,902 5.864.639 5.841,539 5.950,134 5.807,440 5.819,126	3.509.674 3.749.858 3.709.814 3.804.580 3.837.840 3.837.840 3.811.253 3.599.483 3.608.725	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
12 13 14 15 16 16 17 18 19 20 20 C. 1 2 2 3 3 4 5 5 6 6 7 7 8 8 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10	0,9458 0,9715 0,9768 0,9777 0,9787 0,9807 0,9817 0,9817 0,9826 Medical Incu 4,223,000 5,517,000 5,872,000 5,994,000 6,429,000 6,433,000 6,477,000 6,703,000 6,703,000 6,703,000 6,908,000 6,998,000 6,998,000 6,998,000 6,998,000 6,998,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,847,000 5,847,000 5,847,000 5,847,000 5,848,000 6,001,000 5,804,110 5,747,492	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,229,891 5,062,121 5,216,951 5,111,218 5,029,248 5,112,118 5,029,248 5,113,134 5,114,1726 5,14	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,441,735 4,443,755 4,441,625 4,441,625 4,441,625 4,446,645 4,446,645 4,466,434 4,668,534 4,688,534 4,888,534 5	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,000 4,135,165 4,135,165 4,135,184 4,489,720 4,898,246 4,898,720 4,898,246 4,896,190 4,703,865 4,625,715 4,625,715 4,625,715 4,651,769 4,652,953 4,651,769 4,652,953 4,694,309 4,896,290 4,996,290 4,996,200 4,996,200 4,996,200 4,996,200 4,996,200 4,996,200 4,996,200 4,996,200 4,996,200 4,996,200	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,716,963 2,818,387 2,818,387 2,836,912 2,883,6912 2,883,6912 2,937,414 2,927,789 2,921,384 2,921,384 2,921,384 3,021,095 3,020,836 3,020,836 3,080,815 3,080,815	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,225,216 2,589,253 2,646,248 2,816,076 2,816,076 2,816,076 2,879,623 2,783,646 2,783,646 2,783,646 2,783,646 3,012,114 2,879,623 3,012,114 3,143,372 3,012,114 3,143,372 3,237,259	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,150,255 3,609,439 3,742,837 3,870,149 4,191,261 4,191,261 4,145,606 4,146,518 4,144,525 4,1194,244 4,185,516 4,205,064	2.579,313 2.812,481 2.794,988 2.765,687 2.912,119 2.899,687 3.080,177 3.110,017 3.103,090 3,209,975	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,10	1.0000 Note: A 3.700.850 4.031.513 4.161.949 4.249.331 4.143.155 4.299.151 4.349.353 4.11.495 4.403.570 4.356.915 4.427.072 4.413.282	Act 44 Disco ielected Cloii Act 44 effectiv 2.871,489 3.28,804 3.511,501 3.415,585 3.401,038 3.370,262 3.381,086 3.382,185 3.507,194 3.729,031 3.802,480	m Settlemen  5.478.955 5.501.458 5.575.539 5.632,912 5.767,902 5.864.639 5.841,539 5.950,134 5.807,440 5.819,126	3.509.674 3.749.858 3.709.814 3.804.580 3.837.840 3.837.840 3.811.253 3.599.483 3.608.725	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
12 13 14 15 16 16 17 18 19 20 C. 1 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 10 11 12 12 13 14 14 15 15 16 16 17 17 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	0,9458 0,9715 0,9768 0,9777 0,9807 0,9807 0,9817 0,9826 Medical Incu 4,223,000 5,5872,000 5,5872,000 6,229,000 6,433,000 6,473,000 6,473,000 6,775,000 6,909,000 6,909,000 6,909,000 6,919,000 6,919,000 6,919,000 6,919,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,378,000 5,847,000 5,847,000 5,848,000 6,001,000 5,864,100 5,749,20 5,730,009 5,810,410 5,730,009 5,810,410 5,730,009 5,810,410 5,730,009 5,810,410 5,730,009 5,810,410 5,810,410 5,810,410 5,810,410 5,810,410 5,810,410 5,810,410 5,810,410 5,810,410 5,810,410 5,810,410 5,810,410 5,810,410 5,810,410 5,810,410	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,229,891 5,062,121 5,216,951 5,113,134 5,124,726 5,129,288 5,059,712 5,113,134 5,124,726 5,134,145 5,144,115 5,273,693 5,295,932 5,346,840 5,346,481 5,346,545 5,346,535 5,346,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,443,755 4,454,755 4,454,755 4,466,919 4,706,403 4,685,434 4,885,434 4,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,135,145 4,315,884 4,489,720 4,889,720 4,889,720 4,889,720 4,889,730 4,617,038 4,625,715 4,617,085 4,625,715 4,625,953 4,974,309 4,825,953 4,974,309	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,716,963 2,818,387 2,818,387 2,836,912 2,883,6912 2,883,6912 2,937,414 2,927,789 2,921,384 2,921,384 2,921,384 3,021,095 3,020,836 3,020,836 3,080,815 3,080,815	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,225,216 2,589,253 2,646,248 2,816,076 2,816,076 2,816,076 2,879,623 2,783,646 2,783,646 2,783,646 2,783,646 3,012,114 2,879,623 3,012,114 3,143,372 3,012,114 3,143,372 3,237,259	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,150,255 3,609,439 3,742,837 3,870,149 4,191,261 4,191,261 4,145,606 4,146,518 4,144,525 4,1194,244 4,185,516 4,205,064	2.579,313 2.812,481 2.794,988 2.765,687 2.912,119 2.899,687 3.080,177 3.110,017 3.103,090 3,209,975	1,0000 1,0000 1,0000 1,0000 1,0000 1,1000 1,	3,700.850 4,031,513 4,161,949 4,249,331 4,143,159 4,299,151 4,349,353 4,411,495 4,403,570 4,356,707 4,413,282	Act 44 Disco selected Clair Act 44 effectiv 2.871,489 3.28,804 3.511,501 3.418,585 3.401,038 3.370,262 3.381,086 3.382,185 3.507,194 3.729,031 3.802,480	m Settlemen  5,478,955 5,501,458 5,575,559 5,532,912 5,757,902 5,844,639 5,950,133 5,807,440 5,817,126	3.509,674 3.749,858 3.709,814 3.804,580 3.837,840 3.842,096 3.811,253 3.599,483 3.608,725	3,021,605 2,891,886 2,991,503 2,983,393 2,946,694 2,946,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330	5,517,261 5,633,374 5,609,134 5,673,084	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
12 13 144 15 166 167 17 18 15 166 167 17 18 15 166 17 17 18 18 15 166 17 17 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	0,9458 0,9715 0,9768 0,9777 0,9787 0,9787 0,9807 0,9817 0,9816 0,9817 0,9816 4,223,000 5,517,000 5,872,000 5,594,000 6,433,000 6,433,000 6,433,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,981,000 6,981,000 6,981,000 6,981,000 6,981,000 6,981,000 6,981,000 6,981,000 6,981,000 6,990,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,378,000 5,347,000 5,868,000 6,001,000 5,804,110 5,767,492 5,730,009 5,812,365 5,971,283 6,018,400 5,838,773 5,732,687 5,818,350 5,8	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,929,891 5,062,121 5,216,951 5,111,218 5,029,248 5,029,248 5,029,248 5,124,726 5,144,115 5,243,525 5,244,545 5,2	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,443,755 4,353,568 4,294,114 4,416,259 4,793,504 4,483,826 4,466,919 4,706,403 4,485,434 4,685,434 4,685,434 4,685,434 4,685,434 4,685,434 4,685,434 4,685,434 4,685,434 4,885,435 4,885,436	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,716,963 2,818,387 2,818,387 2,836,912 2,883,6912 2,883,6912 2,937,414 2,927,789 2,921,384 2,921,384 2,921,384 3,021,095 3,020,836 3,020,836 3,080,815 3,080,815	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,225,216 2,589,253 2,646,248 2,816,076 2,816,076 2,816,076 2,879,623 2,783,646 2,783,646 2,783,646 2,783,646 3,012,114 2,879,623 3,012,114 3,143,372 3,012,114 3,143,372 3,237,259	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,150,255 3,609,439 3,742,837 3,870,149 4,191,261 4,191,261 4,145,606 4,146,518 4,144,525 4,1194,244 4,185,516 4,205,064	2.579,313 2.812,481 2.794,988 2.765,687 2.912,119 2.899,687 3.080,177 3.110,017 3.103,090 3,209,975	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,100	1.0000  Note: A  3.700.850 4.031.513 4.161,949 4.249,331 4.143,155 4.249,315 4.349,353 4.411,495 4.403.570 4.403.570 4.403.570 4.413,282	Act 44 Disco ielected Clair Act 44 effectiv 2,871,489 3,286,804 3,311,501 3,418,585 3,401,038 3,370,262 3,381,086 3,382,185 3,507,194 3,729,031 3,802,480	settlemen 5,478,955 5,501,458 5,575,559 5,632,912 5,777,902 5,844,339 5,841,339 5,950,133 5,807,440 5,819,126	3,509,674 3,749,858 3,709,814 3,804,850 3,837,840 3,842,096 3,811,253 3,599,483 3,608,725	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651 2,986,651	3,914,782 4,167,464 4,413,176 4,604,796 4,477,330 4,459,354	5,517,261 5,633,374 5,609,134 5,673,084 5,654,038	5,258,148 5,404,121 5,406,521	4,294,769 4,076,856	6,357,441		3,963,291
12 13 14 15 16 16 17 18 19 20 C. 1 2 3 3 4 4 5 6 6 7 7 8 8 9 9 10 11 12 12 13 14 14 15 15 16 16 17 17 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	0,9458 0,9715 0,9768 0,9777 0,9807 0,9807 0,9817 0,9826 Medical Incu 4,223,000 5,5872,000 5,5872,000 6,229,000 6,433,000 6,431,000 6,431,000 6,775,000 6,909,000 6,909,000 6,909,000 6,919,000 6,919,000 6,919,000 6,919,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,378,000 5,347,000 5,386,000 6,001,000 5,864,000 5,804,110 5,767,492 5,730,009 5,812,365 5,971,283 6,018,400 5,838,773 5,732,687 5,935,744 6,019,026 6,101,002 6,010,002 6,010,002 6,010,003 5,838,773 5,732,687 5,818,810 5,859,155 5,935,744 6,019,026 6,101,026	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,929,891 5,062,121 5,216,951 5,111,218 5,029,248 5,029,248 5,029,248 5,124,726 5,144,115 5,243,525 5,244,545 5,2	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,443,755 4,454,755 4,454,755 4,466,919 4,706,403 4,685,434 4,885,434 4,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,135,145 4,315,884 4,489,720 4,889,720 4,889,720 4,889,720 4,889,730 4,617,038 4,625,715 4,617,085 4,625,715 4,625,953 4,974,309 4,825,953 4,974,309	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,716,963 2,818,387 2,818,387 2,836,912 2,883,6912 2,883,6912 2,937,414 2,927,789 2,921,384 2,921,384 2,921,384 3,021,095 3,020,836 3,020,836 3,080,815 3,080,815	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,225,216 2,589,253 2,646,248 2,816,076 2,816,076 2,816,076 2,879,623 2,783,646 2,783,646 2,783,646 2,783,646 3,012,114 2,879,623 3,012,114 3,143,372 3,012,114 3,143,372 3,237,259	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,150,255 3,609,439 3,742,837 3,870,149 4,191,261 4,191,261 4,145,606 4,146,518 4,144,525 4,1194,244 4,185,516 4,205,064	2.579,313 2.812,481 2.794,988 2.765,687 2.912,119 2.899,687 3.080,177 3.110,017 3.103,090 3,209,975	1,0000 1,0000 1,0000 1,0000 3,155,290 4,147,713 4,166,709 4,131,369 4,180,761 4,187,418 4,190,701 4,206,298 4,370,336 4,350,145 4,351,280	1,0000  Note: A  3,700.850 4,031,513 4,161,949 4,249,331 4,143,155 4,429,151 4,411,495	Act 44 Disco lelected Clair Act 44 effectiv 2.871,489 3.286,804 3.511,501 3.410,33 3.370,262 3.381,086 3.382,185 3.507,194 3.382,185 3.507,194 3.382,185 4.362,480	m Settlemen  5,478,955 5,501,458 5,575,559 5,632,912 5,757,509 5,864,539 5,841,539 5,950,133 5,807,440 5,819,126	3,509,674 3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483 3,608,725	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651 2,986,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330 4,459,354	5,517,261 5,633,374 5,609,134 5,673,084 5,654,038	5,258,148 5,404,121 5,406,521 5,519,600	4,294,769 4,076,856	6,357,441		3,963,291
12 13 144 15 166 167 17 18 15 166 167 17 18 15 166 17 17 18 18 15 166 17 17 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	0,9458 0,9715 0,9768 0,9777 0,9787 0,9787 0,9807 0,9817 0,9816 0,9817 0,9816 4,223,000 5,517,000 5,872,000 5,594,000 6,433,000 6,433,000 6,433,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,970,000 6,981,000 6,981,000 6,981,000 6,981,000 6,981,000 6,981,000 6,981,000 6,981,000 6,981,000 6,990,000	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 5,378,000 5,347,000 5,868,000 6,001,000 5,804,110 5,767,492 5,730,009 5,812,365 5,971,283 6,018,400 5,838,773 5,732,687 5,818,350 5,8	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,929,891 5,062,121 5,216,951 5,111,218 5,029,248 5,029,248 5,029,248 5,124,726 5,144,115 5,243,525 5,244,545 5,2	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 4,443,755 4,353,568 4,294,114 4,416,259 4,793,504 4,483,826 4,466,919 4,706,403 4,485,434 4,685,434 4,685,434 4,685,434 4,685,434 4,685,434 4,685,434 4,685,434 4,685,434 4,885,435 4,885,436	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,716,963 2,818,387 2,818,387 2,836,912 2,883,6912 2,883,6912 2,937,414 2,927,789 2,921,384 2,921,384 2,921,384 3,021,095 3,020,836 3,020,836 3,080,815 3,080,815	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 2,225,216 2,589,253 2,646,248 2,816,076 2,816,076 2,816,076 2,879,623 2,783,646 2,783,646 2,783,646 2,783,646 3,012,114 2,879,623 3,012,114 3,143,372 3,012,114 3,143,372 3,237,259	1,0000 1,0000 1,0000 1,0000 1,0000 1,0000 3,150,255 3,609,439 3,742,837 3,870,149 4,191,261 4,191,261 4,145,606 4,146,518 4,144,525 4,1194,244 4,185,516 4,205,064	2.579,313 2.812,481 2.794,988 2.765,687 2.912,119 2.899,687 3.080,177 3.110,017 3.103,090 3,209,975	1,0000 1,0000 1,0000 1,0000 3,155,290 4,147,713 4,166,709 4,131,369 4,180,761 4,187,418 4,190,701 4,206,298 4,370,336 4,350,145 4,351,280	1,0000  Note: A  3,700.850 4,031,513 4,161,949 4,249,331 4,143,155 4,429,151 4,411,495	Act 44 Disco ielected Clair Act 44 effectiv 2,871,489 3,286,804 3,311,501 3,418,585 3,401,038 3,370,262 3,381,086 3,382,185 3,507,194 3,729,031 3,802,480	m Settlemen  5,478,955 5,501,458 5,575,559 5,632,912 5,757,509 5,864,539 5,841,539 5,950,133 5,807,440 5,819,126	3,509,674 3,749,858 3,709,814 3,804,580 3,837,840 3,842,096 3,811,253 3,599,483 3,608,725	3,021,605 2,891,686 2,991,503 2,983,393 2,946,694 2,946,651 2,986,651	3,914,782 4,167,466 4,413,176 4,604,796 4,477,330 4,459,354	5,517,261 5,633,374 5,609,134 5,673,084 5,654,038	5,258,148 5,404,121 5,406,521 5,519,600	4,294,769 4,076,856	6,357,441		3,963,291

A. Medical Reported Incurred Losses as of 04/30/17

Exhibit V-E-1 and Exhibit VI-B-4

<b>A</b>										IIICUITE	u medicu	11 102262 10	JI All Clus	ses Comb	illeu									EXI	11DIT VI-B-4
Report	1992	orrea incurre 1993	ea Losses Aa, 1994	1995 1995	44 Law Leve 1996	ana Claim 1997	1998	evels as of 0- 1999	4/30/17 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1	4,223,000	4,351,000	3,889,000	3,946,197	4,135,165	3,185,472	3,370,548	2,714,671	2,468,601	2,225,216	3,150,255	2,579,313	3,189,109	3,700,850	2,871,489	5,478,955	3,509,674	2,761,649	3,630,574	4,362,098	4,806,118	3,639,740	6,225,769	4,054,856	3,963,291
	5,517,000 5,872,000	5,378,000 5,847,000	4,929,891 5,062,121	4,443,755 4,353,568	4,315,884 4,689,720	3,374,998 3,598,928	3,630,642 3,628,890	3,012,839 3,186,033	2,716,963 2,818,387	2,589,253 2,646,248	3,609,439 3,762,837	2,812,481 2,794,988	3,555,290 4,147,713	4,031,513 4,161,949	3,286,804 3,511,501	5,501,458 5,575,559	3,749,858 3,709,814	3,021,605 2,891,686	3,914,782 4,167,466	5,517,261 5,633,374	5,258,148 5,404,121	4,294,769 4,076,856	6,357,441 6,043,218	3,981,666	
	5,994,000	5,868,000	5,216,951	4,294,114	4,808,246	3,571,097	3,720,868	3,057,663	2,836,912	2,629,910	3,890,149	2,756,587	4,166,709	4,249,331	3,418,585	5,632,912	3,804,580	2,991,503	4,413,176	5,609,134	5,406,521	3,971,009	0,040,210		
	5,967,000	6,001,000	5,111,218	4,416,259	4,806,190	3,810,363	3,709,153	3,188,781	2,885,530	2,816,076	3,874,531	2,912,119	4,131,369	4,143,155	3,401,038	5,757,902	3,837,840	2,983,393	4,604,796	5,673,084	5,519,600				
	6,229,000 6,433,000	5,804,110 5,767,492	5,029,268 5,059,712	4,483,826 4,666,919	4,703,865 4,578,161	3,978,305 3,932,216	3,761,263 3,760,723	3,178,086 3,133,358	2,937,414 2,927,989	2,896,624 2,822,196	4,191,261 4,257,734	2,899,687 2,897,577	4,080,336 4,180,965	4,299,151 4,349,353	3,370,262 3,381,086	5,864,639 5,841,539	3,842,096 3,811,253	2,946,694 2,946,651	4,477,330 4,459,354	5,654,038					
	6,431,000	5,730,009	5,113,134	4,706,403	4,617,085	3,951,475	3,791,456	3,171,882	2,921,384	2,789,664	4,339,920	2,890,067	4,187,418	4,411,495	3,382,185	5,950,133	3,599,483	2,986,651							
	6,477,000 6,703,000	5,812,365 5,971,283	5,124,726 5,144,115	4,685,434 4,668,534	4,625,715 4,651,769	4,015,857 4,393,793	3,741,005 3,777,626	3,236,426 3,357,242	2,952,750 2,950,698	2,782,114 2,879,623	4,145,606 4,160,518	3,080,177	4,190,701 4,206,298	4,403,570 4,356,915	3,507,194 3,729,031	5,807,440 5,819,126	3,608,725								
11	6,775,000	6,018,440	5,273,693	4,693,740	4,625,953	4,593,238	3,861,559	3,353,094	2,948,865	2,963,075	4,164,525	3,103,090	4,370,336	4,427,072	3,802,480										
	6,908,000 6,969,000	5,838,773 5,732,687	5,295,932 5,346,840	4,815,890 4,869,709	4,594,309 4,485,294	4,586,566 4,602,844	3,843,219 3,868,653	3,409,251 3,531,522	3,021,208 3,021,095	3,005,905 3,012,114	4,194,244 4,185,516	3,209,975	4,350,145 4,351,280	4,413,282											
14	6,927,000	5,818,810	5,366,481	4,793,570	4,501,155	4,627,844	3,851,694	3,532,688	3,020,836	3,143,372	4,205,064	3,209,709	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,												
	6,981,000	5,859,155 5,935,724	5,384,567 5,423,525	4,836,117 4,865,082	4,491,418 4,520,959	4,702,741 4,694,564	3,851,841 3,852,213	3,533,087 3,539,649	3,080,845	3,237,259 3,220,132	4,202,349														
17	6,904,000	6,019,026	5,290,059	4,883,436	4,514,259	4,723,464	3,838,125	3,539,760	2,872,279	0,220,102															
	6,893,000 6,900,000	6,100,724 6,154,033	5,370,678 5,371,098	4,927,115 4,917,010	4,523,523 4,536,280	5,023,336 5,023,336	3,835,125 3,834,626	3,534,812																	
	6,941,000	6,153,930	5,467,814		4,528,080	5,023,209	0,004,020																		
р.	5																								
B. An 1:2	inual Loss D	Developmen	t Ratios												1.1446	1.0041	1.0684	1.0941	1.0783	1.2648	1.0941	1.1800	1.0211	0.9820	
2:3														1.0324	1.0684	1.0135	0.9893	0.9570	1.0645	1.0210	1.0278	0.9493	0.9506		
3:4 4:5												1.0564	1.0046 0.9915	1.0210 0.9750	0.9735 0.9949	1.0103 1.0222	1.0255 1.0087	1.0345 0.9973	1.0590	0.9957 1.0114	1.0004	0.9740			
5:6											1.0817	0.9957	0.9876	1.0377	0.9910	1.0185	1.0011	0.9877	0.9723	0.9966					
6:7 7:8									0.9977	0.9743 0.9885	1.0159 1.0193	0.9993 0.9974	1.0247 1.0015	1.0117 1.0143	1.0032 1.0003	0.9961 1.0186	0.9920 0.9444	1.0000 1.0136	0.9960						
8:9								1.0203	1.0107	0.9973	0.9552	1.0658	1.0008	0.9982	1.0370	0.9760	1.0026	1.0100							
9:10 10:11						1.0454	1.0098 1.0222	1.0373 0.9988	0.9993 0.9994	1.0350 1.0290	1.0036 1.0010	1.0097 0.9978	1.0037 1.0390	0.9894 1.0161	1.0633 1.0197	1.0020									
11:12					0.9932	0.9985	0.9953	1.0167	1.0245	1.0145	1.0071	1.0344	0.9954	0.9969	1.0177										
12:13 13:14			1.0037	1.0112 0.9844	0.9763 1.0035	1.0035 1.0054	1.0066 0.9956	1.0359 1.0003	1.0000 0.9999	1.0021 1.0436	0.9979 1.0047	1.0000 0.9999	1.0003												
14:15		1.0069	1.0034	1.0089	0.9978	1.0162	1.0000	1.0001	1.0199	1.0299	0.9994	0.7777													
15:16 16:17	0.9911 0.9978	1.0131 1.0140	1.0072 0.9754	1.0060 1.0038	1.0066 0.9985	0.9983 1.0062	1.0001 0.9963	1.0019 1.0000	1.0000 0.9323	0.9947															
17:18	0.9984	1.0136	1.0152	1.0030	1.0021	1.0635	0.9992	0.9986	0.7323																
18:19 19:20	1.0010 1.0059	1.0087	1.0001	0.9979 1.0731	1.0028 0.9982	1.0000	0.9999																		
17.20	1.0037	1.0000	1.0100	1.0/31	0.7702	1.0000																			
						10 Year			10 Year	6 Year	6 Year		Average												
						Straight	_	Weighted			_	•	of Middle												
C. <u>Su</u> 1:2	ımmary					Average 1.0932	1.1034	<u>Average</u> 1.0857	Ex. Hi/Lo 1.0856	Ex. Hi/Lo 1.0934	1.0975		Four 1.0924												
2:3						1.0074	0.9950	1.0054	1.0070	0.9891	0.9948		1.0005												
3:4						1.0099	1.0149	1.0089	1.0083	1.0140	1.0121		1.0112												
4:5 5:6						1.0122 1.0070	1.0173 0.9945	1.0121 1.0074	1.0113 1.0020	1.0158 0.9941	1.0186 0.9961		1.0144 0.9999												
6:7						1.0013	0.9998	1.0020	1.0018	0.9988	0.9996		1.0006												
7:8						0.9996	0.9988	1.0011	1.0040	1.0074	1.0003		1.0012												
8:9 9:10						1.0064 1.0153	1.0134	1.0019 1.0132	1.0054 1.0126	1.0097 1.0048	1.0072 1.0098		1.0072 1.0119												
10:11						1.0153	1.0120	1.0132	1.0120	1.0165	1.0078		1.0117												
11:12						1.0077	1.0121	1.0057	1.0061	1.0108	1.0099		1.0086												
12:13 13:14						1.0034	1.0060	1.0027	1.0027	1.0006	1.0057		1.0036												
14:15						1.0041 1.0083	1.0073	1.0030 1.0074	1.0016	1.0012 1.0091	1.0065 1.0101		1.0038 1.0087	l	Large Loss is e	excluded fro	m Accident	Year 1992							
15:16						1.0019	1.0003	1.0020	1.0019	1.0001	1.0005		1.0011												
16:17						0.9916	0.9895	0.9942	0.9969	0.9997	0.9926		0.9938												
17:18 18:19						1.0124	1.0146	1.0125 1.0017	1.0063	1.0064 1.0007	1.0159 1.0019		1.0115	Source:	A. Incurred Lo	nsses Adiuste	d to Act 44 I	aw Level an	d Claim Sett	lement Leve	ls: Exhibit VI-	B-3			
19:20						1.0159	1.0159	1.0149	1.0060	1.0060	1.0149		1.0129	E	B. Annual Los	s Developme	ent Ratios				EXTENSIT VIT				
														(	C, Summary	of Straight Av			ars,						

Weighted Averages for 10 and 6 years,
Straight Averages for 10 and 6 years excluding highest and lowest,
Average of middle 4 of above 6 averages.

File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-06-A,B,C,E.xlsm]B-4 Run Date: September 05, 2017 - 03:57:26 PM

### Coal Mine Compensation Rating Bureau Traumatic Loss Development Medical Claim Settlement Adjustment Factors

Accident <u>Year</u> 1984 1985 1986 1987 1988 1989 1990 1991 1992 Total	(1) (2) 4/30/1994 12 Month ND1L0SS** 7,300 4,469 105 5,192 222 4,941 266 5,722 396 8,405 532 7,754 298 6,824 328 5,389 437 56,076 2,823	2.3%	1986 5,16 1987 4,800 1988 5,866 1989 8,844 1990 7,598 1991 7,200 1992 4,466 1993 5,78	FOV UEV	xx	(1) (2) 30/1996 12 Month 10.1035" 12 Worth 12 Month 10.1035" 12 Worth 12 Wo	(3) (4)  (2] / (1) Selection  1.6% XX  1.5% XX  8.2% XX  6.6% XX  2.8% XX  3.9% XX  6.0% XX  3.1% XX  4.7% XX  4.3% 2.0%	(1) Accident 4/30/199 Year KPILOSS' 1987 4,85 1988 5,31 1989 8,17 1990 7,99 1991 7,31 1992 4,26 1993 6,00 1994 5,00 1995 4,44 Total 53,48	Fav. Dev: (2) 5 93 8 202 77 793 99 274 5 141 44 319 61 216 62 155	(3) (4)  1.9%	
Accident <u>Year</u> 1988 1989 1990 1991 1992 1993 1994 1995 <u>1996</u> Total	(1) (2) 4/30/1998 12 Month Rpt.Loss <sup>inj</sup> Fav Devi <sup>nj</sup> 5,228 70 7,7991 321 7,725 436 7,216 173 4,439 88 6,077 194 5,217 77 4,354 277 4,316 87 52,563 1,715	4.0% × 5.6% × 2.4% × 1.9% × 3.2% × 1.5% × 2.0% × 2.0%	( 1990 7,72) ( 1991 7,14) ( 1992 2,42) ( 1993 5,80 ( 1994 5,11) ( 1995 4,29) ( 1996 4,69) ( 1997 ×	Fov_Dev <sup>™</sup> [2]/[1] 5 96 1.1% 6 83 1.1% 0 208 2.9% 3 74 3.0% 4 322 5.5% 1 198 3.9% 4 164 3.8% 0 106 2.3% ∠ №	xx	(1) (2) 30/2000 12 Month 51.Lossi <sup>[a]</sup> Fov Dev <sup>[a]</sup> 7.808 52 7.176 15 2.327 125 5.767 161 5.029 130 4.416 97 4.808 119 xx xx xx xx xx xx 37.331 699	(3) (4)  (2) / (1) Selection  0.7% xx  0.2% xx  5.4% xx  2.8% xx  2.6% xx  2.2% xx  2.5% xx  xx xx  xx xx  xx xx  xx xx  1.9% 1.4%	1998	Fav Dev <sup>(u)</sup>   (2)   (8)   (	(3) (4)  1.2%	( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (
Accident  Year 1992 1993 1994 1995 1996 1997 1998 1999 2000 Total	(1) (2)  4/30/2002 12 Month  Rpt.Loss <sup>(a)</sup> Fav Dev <sup>(a)</sup> 2,939 16 5,812 57 5,113 46 4,667 101 4,704 242 xx	1.0% x 0.8% x 2.2% x 5.1% x xx x xx x xx x xx x	( 1994 5.12: ( 1995 4.70: ( 1996 4.57: ( 1997 x: ( 1998 x: ( 1999 x: ( 2000 x: ( 2001 x:	Fav_Dev <sup>(a)</sup>   (2) / (1)   (	5 XX	(1) (2) 30/2004 12 Month bt.Loss <sup>(a)</sup> Fov Dev <sup>(a)</sup> 5,179 59 4,740 83 4,702 32 xx	(3) (4)  (2) / (1) Selection 1.1% xx 1.8% xx 0.7% xx	1998 1999 2000 2001 2002	Fav_Dev <sup>(a)</sup>	(3) (4)  (2) / (1) Selection  0.0%	( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (
Accident Year 1996 1997 1998 1999 2000 2001 2002 2003 2004	(1) (2) 4/30/2006 12 Month Rpt.Loss <sup>(a)</sup> Fav Dev <sup>(a)</sup> 4,708 25 XX	XX	x 1998 xx 1999 xx 2000 xx 2000 xx 2001 xx 2002 xx 2002 xx 2003 xx 2003 xx 2003	Fav Dev <sup>(a)</sup> {2} / (1) x xx xx xx xx xx xx xx xx xx xx xx xx xx xx	XX	(1) (2) 30/2008 12 Month ot.Loss (a) Fav Dev (a)  xx xx xx  xx xx  xx xx  xx xx  xx xx  xx xx  xx xx  xx xx  xx xx  xx xx  xx xx  xx xx  xx xx  xx xx  xx xx  xx xx  xx xx  xx xx  xx xx  xx xx	(3) (4)  (2)/(1) Selection  xx	2000 2001 2002 2002 2003 2004 2005 2005		(3) (4)  (2) / (1) Selection	( ( (

(a) All amounts are in thousands of dollars Incurred losses for 1992 exclude effects of large loss. Note: Personnel from the CMCRB have concluded that the impact of Act 57 has waned to the point that the Claim Settlement effect for this year and future years is zero(0.00). Thus this Exhibit will no longer be updated.

Sources: Column (1) Exhibit VI-B p. 1a CMCRB Data Base

2016 140

# Incurred Indemnity and Funeral Claim Counts for All Classes Combined (excl. USLH)

۸.1	ndomnity D	oportod Inci	urred Claims	ac of 04/20/1		iiconea iiic	denning d	na roneic	ii Cidiiii C	OUTIIS IOI	All Clusse	3 COIIIDIII	ieu (exci.	USLII)					
Report 1 2 2 3 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19 20	1997 339 358 358 355 358 357 357 357 357 357 357 357 357 357 357	1998 297 301 314 313 312 312 312 312 312 312 312 312 312	1999 263 269 272 274 274 274 274 274 274 274 274 274	2000 240 250 252 254 254 254 254 254 254 254 254 254	2001 227 238 238 237 237 237 237 237 237 237 237 237 237	2002 241 244 246 246 246 246 246 246 246 246 246	2003 196 196 197 198 199 199 199 199 199 199 199 199	2004 219 227 230 231 231 231 231 231 231 231 231 231 231	2005 203 228 229 230 230 230 230 230 230 230 230 230 230	2006 156 163 165 166 166 166 166 166 166 166	2007 163 164 164 164 164 164 164 164 164	2008 193 206 203 205 204 204 204 204 204 204	2009 170 193 195 195 195 195 195 195 195	2010 168 177 177 177 177 177 177 177	2011 175 182 188 189 189 189	2012 169 195 199 200 200	2013 149 171 174 175	2014 258 286 289	2015 161 181
B. 1:22 2:33 3:44 4:55 5:66 6:7 7:8 8:9 9:10 10:11 11:12 12:13 13:14 14:15 15:16 16:17 17:18 18:19 19:20	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0051 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0043 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0044 1.0044 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0449 1.0123 1.0061 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0061 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0674 0.9854 1.0099 0.9951 1.0000 1.0000 1.0000	1.1353 1.0104 1.0000 1.0000 1.0000 1.0000 1.0000	1.0536 1.0000 1.0000 1.0000 1.0000 1.0000	1.0400 1.0330 1.0053 1.0000 1.0000	1.1538 1.0205 1.0050 1.0000	1.1477 1.0175 1.0057	1.1085 1.0105	1.1242
	Summary 10 Year Straight Average 1.0882 1.0094 1.0004 1.0000	6 Year Straight Average 1.1046 1.0153 1.0043 0.9992 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Weighted  Average 1.0885 1.0892 1.0092 1.0042 1.0000		6 Year  Average Vex. Hi&Lo  1.1085 1.0147 1.0040 1.0000			verage   Middle   Four   1.0968   1.0121   1.0041   0.9998   1.0000   1.000	_	elected 1.0968 1.0121 1.0039 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000		CHCRE DE	_	Cumulative 1.1144 1.0160 1.0039 1.0000	_	2016 2015 2014 2013 2012 2011 2010 2009 2008 2007 2006 2005 2004 2005 2004 2003 2002 2001 2000 1999 1998	Ultimate 156 184 290 175 200 189 177 195 204 164 166 230 231 199 246 237 254 2/4 312 35/		

Source: A. Loss Development Data: CMCRB Database as of 04/30/17 - Validated 08/15/17 B. Annual Loss Development Ratios

C, Summary of Straight Averages for 10 and 6 years,

### Coal Mine Compensation Rating Bureau Traumatic Loss Development

Medical Only Claim Counts for All Classes Combined (excl. USLH)

A. Medical Or	nly Poportod I	nourrod Claim	s Valued as	of 04/20/17	,,	iedicai Oi	ily Cidiiii	Cooms	JI All Cluss	es Comb	neu (exc	i. USLII)							
Report 1979: 1 867 2 865 3 865 4 866 5 866 6 864 7 864 9 864 10 866 11 864 12 864 13 864 14 864 15 864 16 864 17 864 18 864 19 864 20 866	7 1998 7 684 7 685 5 686 8 685 8 44 8 685 4 685 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1999 640 641 643 643 643 643 643 643 643 643 643 643	2000 488 500 503 497 498 498 498 498 498 498 498 498 498 498	2001 519 536 539 535 535 535 535 535 535 535 535 535	2002 487 499 500 500 500 500 500 500 500 500 500 5	2003 453 462 461 461 461 461 461 461 461 461 461 461	2004 516 524 523 522 522 522 522 522 522 522 522 522	2005 476 479 480 479 479 479 479 479 479 479 479 479	2006 456 453 451 450 450 450 450 450 450 450 450	2007 488 494 495 495 495 495 495 495 495 495 495	2008 523 527 528 527 528 528 528 528 528 528	2009 479 469 469 469 469 469 469 469	2010 559 560 559 559 559 559 559 559	2011 628 632 627 627 627 627	2012 563 554 553 553 553 553	2013 472 477 478 478 478	2014 592 583 581	2015 402 399	<u>2016</u> 295
B. Annual Cla 1:2 2:3 3:4 4:5 5:6 6:7 7:8 8:9 9:10 10:11 1.0000 11:12 12:13 1.0000 13:14 1.0000 15:16 1.0000 16:17 1.0000 18:19 1.0000 19:20 1.0000	1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000 0 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	0.9981 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0021 0.9979 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	0.9934 0.9956 0.9978 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0123 1.0020 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0076 1.0019 0.9981 1.0019 1.0000 1.0000 1.0000	0.9791 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	1.0018 0.9982 1.0000 1.0000 1.0000 1.0000	1.0064 0.9921 1.0000 1.0000 1.0000	0.9840 0.9982 1.0000 1.0000	1.0106 1.0021 1.0000	0.9848 0.9966	0.9925	
C. Summary 10 Year Straight Average 1:2 0.9973 2:3 0.9988 3:4 0.9992 4:5 1.0002 5:6 1.0000 6:7 1.0000 7:8 1.0000 10:11 1.0000 11:12 1.0000 12:13 1.0000 12:13 1.0000 12:13 1.0000 14:15 1.0000 14:15 1.0000 15:16 1.0000 16:17 1.0000 16:17 1.0000 17:18 1.0000 18:19 1.0000	6 Year Straight 1 2 Average 2 0,9967 3 0,9967 4 0,9979 2 0,9997 2 1,0000 0 1,0000	10 Year Weighted A Average 9 0.9973 0.9987 0.9992 1.0002 1.0000	Average	Average V			Verage Middle Four 0.9970 0.9984 0.9995 1.0002 1.0000		1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000			_	umulative 1.0000		_	2016 2016 2015 2014 2013 2012 2011 2010 2009 2008 2007 2006 2005 2004 2003 2002 2001 2000 1999 1998	295 399 581 478 553 627 559 469 528 495 450 479 522 461 500 535 498 643 685 864		

Medical Only claims are defined as claims with Medical Incurred dollars greater than zero and Indemnity Incurred dollars equal to zero.

B. Annual Loss Development Ratios

Source: A. Loss Development Data: CMCRB Database as of 04/30/17 - Validated 08/15/17

Exhibit VI-C-2

C, Summary of Straight Averages for 10 and 6 years,

Weighted Averages for 10 and 6 years, Straight Averages for 10 and 6 years excluding highest and lowest, Average of middle 4 of above 6 averages.

#### Exhibit VI-C-3

# Coal Mine Compensation Rating Bureau Traumatic Loss Development

## Medical Only Incurred for All Classes Combined (excl. USLH)

							Medice		onea ioi	All Classe	3 COILIDII	eu (exci.	UJLII)							
A. N	ledical Only	Reported Inc	curred Losses	Valued as o	f 04/30/17															
Report	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1	420,727	438,535	458,539	315,407	291,102	326,965	344,009	440,355	393,342	475,073	645,531	538,996	499,273	689,845	830,417	740,247	657,505	844,733	693,513	566,845
2	386,810	432,746	407,349	296,698	341,613	354,474	343,651	489,659	395,971	492,413	667,028	564,408	475,294	712,909	864,057	723,464	724,288	817,585	644,151	
3	397,114	433,468	409,094	300,203	340,771	351,193	342,029	499,930	570,553	464,396	651,680	574,474	487,309	732,324	846,540	709,906	754,367	819,307		
4	392,071	420,776	409,095	304,117	341,085	343,963	346,252	499,000	577,565	464,210	654,006	561,921	487,349	732,324	850,074	710,429	754,990			
5	392,071	422,132	409,426	304,601	341,085	345,393	346,252	499,175	577,565	464,210	657,948	569,251	487,454	732,324	851,341	710,507				
6	392,408	412,623	409,426	305,104	341,085	345,393	346,252	499,175	577,565	464,210	663,201	578,077	487,454	732,324	851,341					
7	392,408	412,623	409,426	305,104	341,085	345,393	346,252	499,175	577,565	464,210	663,201	584,120	487,454	732,324						
8	392,408	412,623	405,010	305,104	347,675	345,393	346,252	499,182	439,393	464,210	663,201	586,976	487,454							
9	392,408	412,623	405,010	305,104	347,675	345,393	346,318	499,182	439,393	464,210	663,201	593,200								
10	392,408	412,623	405,010	305,104	347,675	345,393	346,318	499,182	439,463	464,210	663,201									
B. A 1:2 2:3	nnual Loss De	evelopment							1.4409	1.0365 0.9431	1.0333 0.9770	1.0471 1.0178	0.9520 1.0253	1.0334 1.0272	1.0405 0.9797	0.9773 0.9813	1.1016 1.0415	0.9679 1.0021	0.9288	
3:4								0.9981	1.0123	0.9996	1.0036	0.9781	1.0001	1.0000	1.0042	1.0007	1.0008			
4:5							1.0000	1.0004	1.0000	1.0000	1.0060	1.0130	1.0002	1.0000	1.0015	1.0001				
5:6						1.0000	1.0000	1.0000	1.0000	1.0000	1.0080	1.0155	1.0000	1.0000	1.0000					
6:7					1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0105	1.0000	1.0000						
7:8				1.0000	1.0193	1.0000	1.0000	1.0000	0.7608	1.0000	1.0000	1.0049	1.0000							
8:9			1.0000	1.0000	1.0000	1.0000	1.0002	1.0000	1.0000	1.0000	1.0000	1.0106								
9:10		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0002	1.0000	1.0000									

	Summ	anı
U.	2011111	IUI y

10 Year	6 Year	10 Year	10 Year	6 Year	6 Year	Average				
Straight	Straight	Weighted	Average	Average	Weighted	of Middle				
<u>Average</u>	<u>Average</u>	<u>Average</u>	ex. Hi&Lo	ex. Hi&Lo	<u>Average</u>	<u>Four</u>	<u>Selected</u>	Cumulative	Acc. Year	<u>Ultimate</u>
1.0118	1.0083	1.0107	1.0110	1.0048	1.0068	1.0092	1.0092	1.0092	2016	572,060
1.0436	1.0095	1.0269	1.0065	1.0090	1.0074	1.0132	1.0000	1.0000	2015	644,151
0.9998	0.9973	1.0001	1.0009	1.0004	0.9981	0.9996	1.0000	1.0000	2014	819,307
1.0021	1.0035	1.0022	1.0010	1.0020	1.0032	1.0024	1.0000	1.0000	2013	754,990
1.0024	1.0039	1.0025	1.0010	1.0020	1.0037	1.0027	1.0000	1.0000	2012	710,507
1.0011	1.0018	1.0012	1.0000	1.0000	1.0017	1.0010	1.0000	1.0000	2011	851,341
0.9785	0.9610	0.9721	1.0006	1.0000	0.9587	0.9779	1.0000	1.0000	2010	732,324
1.0011	1.0018	1.0014	1.0000	1.0001	1.0021	1.0011	1.0000	1.0000	2009	487,454
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2008	593,200
	Straight <u>Average</u> 1.0118 1.0436 0.9998 1.0021 1.0024 1.0011 0.9785 1.0011	Straight         Straight           Average         Average           1.0118         1.0083           1.0436         1.0095           0.9978         0.9973           1.0021         1.0039           1.0011         1.0018           0.9785         0.9610           1.0011         1.0018	Straight Average         Straight Average         Weighted Average Average           1.0118         1.0083         1.0107           1.0436         1.0095         1.0269           0.9998         0.9973         1.0001           1.0021         1.0035         1.0025           1.0014         1.0018         1.0012           0.9785         0.9610         0.9721           1.0011         1.0018         1.0014	Straight Average         Straight Average         Weighted Average ex. Hi&Lo           1.0118         1.0083         1.0107         1.0110           1.0436         1.0095         1.0269         1.0065           0.9998         0.9973         1.0001         1.0009           1.0021         1.0035         1.0022         1.0010           1.0014         1.0039         1.0025         1.0010           1.0011         1.0018         1.0012         1.0000           0.9785         0.9610         0.9721         1.0006           1.0011         1.0018         1.0014         1.0000	Straight Average Average         Average Average Average Average         Average Average Average Average Average         Average Average Average Average Average Average         Average Average Average Average Average Average         Average Avera	Straight Average Average 1.0118         Straight Average Average 2.01018         Average Average Average 2.01010         Average 2.01010         Average 2.01010         Average 2.0100         Average 2.01010         Average 2.0100         Average 2.0100 </td <td>Straight Average Averag</td> <td>Straight Average Four Selected 1.0118 1.0083 1.0107 1.0110 1.0048 1.0068 1.0092 1.0092 1.0092 1.0436 1.0995 1.0269 1.0269 1.0065 1.0090 1.0074 1.0132 1.0000 1.00998 1.00998 1.00998 1.009998 1.009998 1.009998 1.009998 1.009998 1.009998 1.009998 1.009998 1.009998 1.009998 1.0090 1.0090 1.0090 1.0092 1.0092 1.0092 1.0092 1.0092 1.0092 1.0092 1.0092 1.0090 1.0091 1.0090 1.0090 1.0090 1.0091 1.0091 1.0091 1.0091 1.0090 1.0090 1.0090 1.0091 1.0091 1.0091 1.0091 1.0091 1.0091 1.0090 1.0090 1.0091 1.0091 1.0091 1.0091 1.0091 1.0091 1.0091 1.0090 1.0090 1.0090 1.0091 1.0091 1.0091 1.0091 1.0091 1.0091 1.0091 1.0090 1.0090 1.0091 1.0</td> <td>Straight Average Average Average Average Average Weighted 1.0118         Of Middle Average Four Selected Cumulative 1.0118         Selected Cumulative Pour Selected Cumulative Pour Selected Cumulative 1.0092         Cumulative Pour Selected P</td> <td>Straight Average Average Average Average Average Average Average Four Selected         Selected Cumulative Acc. Year Selected         Cumulative Acc. Year Acc. Year Selected           1.0118 1.0083 1.0095 1.0269 1.0065 1.0090 1.0045 1.0090 1.0074 1.0132 1.0000         1.0092 1.0092 1.0000         1.0090 1.0000         2016 1.0000           0.9998 0.9973 1.0001 1.0009 1.0001 1.0009 1.0004 0.9981 1.0024 1.0001 1.0000         0.9996 1.0000         1.0000 1.0000         2014 1.0000           1.0024 1.0039 1.0025 1.0010 1.0020 1.0030 1.0000 1.0000 1.0000         1.0000 1.0000         2013 1.0000         2012 1.0000           1.0011 1.0018 1.0012 1.0000 1.0010 1.0000 1.0000 1.0000 1.0000 1.0000         1.0000 1.0000         2011 1.0000         2011 1.0000           0.9785 0.9610 0.9721 1.0006 1.0000 1.0000 1.0001 1.0001 1.0001 1.0000         1.0000 1.0000         2010 1.0000         2010 1.0000           1.0011 1.0018 1.0014 1.0014 1.0000 1.0001 1.0001 1.0001 1.0001 1.0000         1.0000 1.0000         2010 1.0000         2010 1.0000</td>	Straight Average Averag	Straight Average Four Selected 1.0118 1.0083 1.0107 1.0110 1.0048 1.0068 1.0092 1.0092 1.0092 1.0436 1.0995 1.0269 1.0269 1.0065 1.0090 1.0074 1.0132 1.0000 1.00998 1.00998 1.00998 1.009998 1.009998 1.009998 1.009998 1.009998 1.009998 1.009998 1.009998 1.009998 1.009998 1.0090 1.0090 1.0090 1.0092 1.0092 1.0092 1.0092 1.0092 1.0092 1.0092 1.0092 1.0090 1.0091 1.0090 1.0090 1.0090 1.0091 1.0091 1.0091 1.0091 1.0090 1.0090 1.0090 1.0091 1.0091 1.0091 1.0091 1.0091 1.0091 1.0090 1.0090 1.0091 1.0091 1.0091 1.0091 1.0091 1.0091 1.0091 1.0090 1.0090 1.0090 1.0091 1.0091 1.0091 1.0091 1.0091 1.0091 1.0091 1.0090 1.0090 1.0091 1.0	Straight Average Average Average Average Average Weighted 1.0118         Of Middle Average Four Selected Cumulative 1.0118         Selected Cumulative Pour Selected Cumulative Pour Selected Cumulative 1.0092         Cumulative Pour Selected P	Straight Average Average Average Average Average Average Average Four Selected         Selected Cumulative Acc. Year Selected         Cumulative Acc. Year Acc. Year Selected           1.0118 1.0083 1.0095 1.0269 1.0065 1.0090 1.0045 1.0090 1.0074 1.0132 1.0000         1.0092 1.0092 1.0000         1.0090 1.0000         2016 1.0000           0.9998 0.9973 1.0001 1.0009 1.0001 1.0009 1.0004 0.9981 1.0024 1.0001 1.0000         0.9996 1.0000         1.0000 1.0000         2014 1.0000           1.0024 1.0039 1.0025 1.0010 1.0020 1.0030 1.0000 1.0000 1.0000         1.0000 1.0000         2013 1.0000         2012 1.0000           1.0011 1.0018 1.0012 1.0000 1.0010 1.0000 1.0000 1.0000 1.0000 1.0000         1.0000 1.0000         2011 1.0000         2011 1.0000           0.9785 0.9610 0.9721 1.0006 1.0000 1.0000 1.0001 1.0001 1.0001 1.0000         1.0000 1.0000         2010 1.0000         2010 1.0000           1.0011 1.0018 1.0014 1.0014 1.0000 1.0001 1.0001 1.0001 1.0001 1.0000         1.0000 1.0000         2010 1.0000         2010 1.0000

Source: A. Loss Development Data: CMCRB Database as of 04/30/17 - Validated 08/15/17

B. Annual Loss Development Ratios

C, Summary of Straight Averages for 10 and 6 years,

### Coal Mine Compensation Rating Bureau Traumatic - Medical Losses Summary of Adjustments to Development Factors for Act 44#

																Accio	dent Yea	ır																
Report	1983	1984	<u>1985</u>	<u>1986</u>	<u>1987</u>	1988	1989	<u>1990</u>	1991	<u>1992</u>	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	<u>2011</u>	2012	2013	2014	2015	<u>2016</u>
1	0.7082	0.7082	0.7082	0.7082	0.7082	0.7082	0.7082	0.7082	0.7082	0.7082	0.8921	0.9773	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	0.7082	0.7082	0.7082	0.7082	0.7082	0.7082	0.7082	0.7082	0.7082	0.8052	0.8934	0.9908	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	XX
3	0.7082	0.7082	0.7082	0.7082	0.7082	0.7082	0.7082	0.7082	0.7838	0.8062	0.8948	0.9961	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	XX	XX
4	0.7082	0.7082	0.7082	0.7082	0.7082	0.7082	0.7082	0.7752	0.7853	0.8072	0.8961	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	XX	XX	XX
5	0.7082	0.7082	0.7082	0.7082	0.7082	0.7082	0.7843	0.7762	0.7867	0.8081	0.8974	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	XX	XX	XX	XX
6	0.7082	0.7082	0.7082	0.7082	0.7082	0.7661	0.7842	0.7773	0.7882	0.8091	0.8988	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	XX	XX	XX	XX	XX
7		0.7082							0.7896		0.9001	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	XX	XX	XX	XX	XX	XX
8	0.7082	0.7082	0.7082	0.7652	0.7651	0.7662	0.7840	0.7794	0.7911	0.8111	0.9015	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	XX	XX	XX	XX	XX	XX	XX
9	0.7082	0.7082	0.7651	0.7669	0.7644	0.7662	0.7839	0.7804	0.7925	0.8121	0.9028	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	XX	XX	XX	XX	XX	XX	XX	XX
10	0.7082	0.7913	0.7649	0.7686	0.7638	0.7663	0.7837	0.7815	0.7940	0.8130	0.9041	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	XX	XX	XX	XX	XX	XX	XX	XX	XX
11	0.7630	0.7891	0.7647	0.7702	0.7631	0.7664	0.7836	0.7826	0.7954	0.8140	0.9055	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
12	0.7631	0.7869	0.7646	0.7719	0.7625	0.7664	0.7835	0.7836	0.7969	0.8150	0.9068	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
13	0.7633	0.7848	0.7644	0.7736	0.7618	0.7665	0.7834	0.7847	0.7983	0.8160	0.9081	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	XX	XX	XX	XX	XX	XX						
14	0.7635	0.7826	0.7642	0.7753	0.7612	0.7665	0.7833	0.7857	0.7998	0.8170	0.9095	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	XX	XX	XX	XX	XX	XX							
15	0.7636	0.7804	0.7641	0.7770	0.7605	0.7666	0.7832	0.7868	0.8012	0.8179	0.9108	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	XX	XX	XX	XX	XX	XX								
16	0.7638	0.7782	0.7639	0.7787	0.7599	0.7666	0.7831	0.7879	0.8027	0.8189	0.9122	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	XX	XX	XX	XX	XX	XX									
1 <i>7</i>	0.7640	0.7761	0.7637	0.7804	0.7592	0.7667	0.7830	0.7889	0.8041	0.8199	0.9135	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	XX	XX	XX	XX	XX	XX										
18	0.7641	0.7739	0.7636	0.7821	0.7586	0.7668	0.7829	0.7900	0.8056	0.8209	0.9148	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	XX	XX	XX	XX	XX	XX											
19	0.7643	0.7717	0.7634	0.7838	0.7579	0.7668	0.7828	0.7910	0.8070	0.8219	0.9162	1.0000	1.0000	1.0000	1.0000	1.0000	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
20	0.7645	0.7695	0.7632	0.7855	0.7573	0.7669	0.7827	0.7921	0.8085	0.8228	0.9175	1.0000	1.0000	1.0000	1.0000	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX

Source: For years 1983 through 1994 Exhibit VI-D pages 2-13 columns (T) Unity adjustment for accident years 1995 and subsequent

<sup>#</sup> Adjustments to development factors applicable to medical loss evaluated as of 04/30/2017 Act 44 became effective in 1993.

(A)	(B) Transaction	(C) Incurred	(D) Estimated	(E) Estimated	(F) Estimated	(G) Est. Paid	(H) Est Paid	(I) Est Res	(J) Sample Adi	(K) Actual	(L) Actual	(M) Actual	(N) Act Paid	(O) Act Res	(P) Actual Adi	(Q) Sample	(R) Actual	(S) Selected	(T) Smoothed
Report	<u>Year</u>	Rept Loss	% Paid	Paid Loss	Reserve		Adjustment#			Paid Loss	Reserve		Adjustment#		Rept Loss*	<u>Factor</u>	Factor	<u>Factor</u>	<u>Factor</u>
1	1994	3,903,052	0.6110	2,384,765	1,518,287	2,384,765	2,384,765	1,429,619	3,814,384	0	na	na	2,384,765	na	na	0.9773	xx	0.9773	0.9773
2	1995	4,929,891	0.6836	3,370,073	1,559,818	985,309	985,309	1,514,271	4,884,344	0	na	na	985,309	na	na	0.9908	XX	0.9908	0.9908
3	1996	5,062,121	0.7314	3,702,435	1,359,686	332,362	332,362	1,339,834	5,042,270	0	na	na	332,362	na	na	0.9961	XX	0.9961	0.9961
4	1997	5,216,951	0.7623	3,976,882	1,240,069	274,446	274,446	1,240,069	5,216,951	0	na	na	274,446	na	na	1.0000	XX	1.0000	1.0000
5	1998	5,111,218	0.8197	4,189,665	921,553	212,784	212,784	921,553	5,111,218	0	na	na	212,784	na	na	1.0000	XX	1.0000	1.0000
6	1999	5,029,268	0.8689	4,369,931	659,337	180,266	180,266	659,337	5,029,268	4,389,242	640,026	199,577	199,577	640,026	na	1.0000	XX	1.0000	1.0000
7	2000	5,059,712	0.8827	4,466,208	593,504	96,277	96,277	593,504	5,059,712	4,487,578	572,134	98,336	98,336	572,134	5,059,712	1.0000	1.0000	1.0000	1.0000
8	2001	5,113,134	0.8925	4,563,472	549,662	97,264	97,264	549,662	5,113,134	4,583,303	529,831	95,725	95,725	529,831	5,113,134	1.0000	1.0000	1.0000	1.0000
9	2002	5,124,726	0.9144	4,686,049	438,677	122,577	122,577	438,677	5,124,726	4,686,069	438,657	102,766	102,766	438,657	5,124,726	1.0000	1.0000	1.0000	1.0000
10	2003	5,144,115	0.9266	4,766,537	377,578	80,488	80,488	377,578	5,144,115	4,766,728	377,387	80,659	80,659	377,387	5,144,115	1.0000	1.0000	1.0000	1.0000
11	2004	5,273,693	0.9448	4,982,643	291,050	216,106	216,106	291,050	5,273,693	4,977,633	296,060	210,905	210,905	296,060	5,273,693	1.0000	1.0000	1.0000	1.0000
12	2005	5,295,932	0.9585	5,076,170	219,762	93,527	93,527	219,762	5,295,932	5,050,319	245,613	72,686	72,686	245,613	5,295,932	1.0000	1.0000	1.0000	1.0000
13	2006	5,346,840	0.9688	5,180,014	166,826	103,844	103,844	166,826	5,346,840	5,097,751	249,089	47,432	47,432	249,089	5,346,840	1.0000	1.0000	1.0000	1.0000
14	2007	5,366,481	0.9765	5,240,584	125,897	60,571	60,571	125,897	5,366,481	5,134,011	232,470	36,260	36,260	232,470	5,366,481	1.0000	1.0000	1.0000	1.0000
15	2008	5,384,567	0.9824	5,289,587	94,980	49,003	49,003	94,980	5,384,567	5,173,710	210,857	39,699	39,699	210,857	5,384,567	1.0000	1.0000	1.0000	1.0000
16	2009	5,423,525	0.9867	5,351,593	71,932	62,006	62,006	71,932	5,423,525	5,222,342	201,183	48,632	48,632	201,183	5,423,525	1.0000	1.0000	1.0000	1.0000
17	2010	5,290,059	0.9900	5,237,305	52,754	-114,288	-114,288	52,754	5,290,059	5,243,874	46,185	21,532	21,532	46,185	5,290,059	1.0000	1.0000	1.0000	1.0000
18	2011	5,370,678	0.9925	5,330,408	40,270	93,103	93,103	40,270	5,370,678	5,253,033	117,645	9,159	9,159	117,645	5,370,678	1.0000	1.0000	1.0000	1.0000
19	2012	5,371,098	0.9944	5,340,817	30,281	10,409	10,409	30,281	5,371,098	5,259,632	111,466	6,599	6,599	111,466	5,371,098	1.0000	1.0000	1.0000	1.0000
20	2013	5,467,814	0.9958	5,444,636	23,178	103,819	103,819	23,178	5,467,814	5,329,554	138,260	69,922	69,922	138,260	5,467,814	1.0000	1.0000	1.0000	1.0000

#### # Effects of Act 44 becoming effective in 1993 [from prior filings]

Percentage	Factor		Percentage	Factor
-29.18%	0.7082	1 Reserves Prior to 1993	-29.18%	0.7082
-17.33%	0.8267	2 Reserves as of 1993	-11.67%	0.8833
irst -13.37%	0.8663	3 Reserves as of 1994	-5.84%	0.9416
0.00%	1.0000	4 Reserves as of 1995	-2.92%	0.9708
		5 Reserves as of 1996	-1.46%	0.9854
		6 Reserves after 1996	0.00%	1.0000
	-29.18% -17.33% irst -13.37%	-29.18% 0.7082 -17.33% 0.8267 irst -13.37% 0.8663	-29.18% 0.7082 1 Reserves Prior to 1993 -17.33% 0.8267 2 Reserves as of 1993 irst -13.37% 0.8663 3 Reserves as of 1994 0.00% 1.0000 4 Reserves as of 1995 5 Reserves as of 1996	-29.18% 0.7082 1 Reserves Prior to 1993 -29.18% -17.33% 0.8267 2 Reserves as of 1993 -11.67% 13.37% 0.8663 3 Reserves as of 1994 -5.84% 0.00% 1.0000 4 Reserves as of 1995 -2.92% 5 Reserves as of 1996 -1.46%

\* Current value of adjusted reserves plus sum of adjusted paid amounts from report 1 through current report Where actual data is not available, adjusted estimated paid losses are included in actual reported loss values.

#### Report for accident value, i.e., value as of 4/30/year, where "year" is Accident Year plus report number Sources: (A)

- Year in which most transactions included in report occurred. Values are used in picking correct adjustments for Act 44 from above table.
  - Transactions close at 4/30 so that most transaction years run from 5/1 through 4/30. First reports run from 1/1 through 4/30.
- Reported incurred loss from Exhibit VI-B Page 1
- Value from payment patterns for sampled data presented in Exhibit VI-D page 14. (D)
- (E) (D) x (C)
- (F) (C) - (E)
- (G) Current value of (E) less preceding value of (E)
- (G) x Value from table of Act 44 effects above.
- (F) x Value from table of Act 44 effects above. (J) Sum of Reserve from column (I) plus sum of adjusted paid increments in column (H) from first report through to current report.
- Reported paid loss from Exhibit VI-E
- (L) (C) - (K)
- Current value of (K) less preceding value of (K); values from column (G) based on sample used when actual data not available.
- (M) x Value from table of Act 44 effects (N)
- (0) (L) x Value from table of Act 44 effects
- Sum of Reserve from column (O) plus sum of adjusted paid increments in column (N) from first report through to current report. (P)
- (Q) (J) / (C)
- (P) / (C)
- Average of values in columns (Q) and (R)
- Smoothed values based on values in (S)

(A) Report	(B) Transaction Year	(C) Incurred Rept Loss	(D) Estimated % Paid	(E) Estimated Paid Loss	(F) Estimated Reserve	(G) Est. Paid Increment	(H) Est. Paid Adjustment <sup>#</sup> ,		(J) Sample Adj <u>Rept Loss*</u>	(K) Actual Paid Loss	(L) Actual Reserve	(M) Actual Increment	(N) Act Paid Adjustment#	(O) Act Res Adjustment#	(P) Actual Adj Rept Loss*	(Q) Sample Factor	(R) Actual Factor	(S) Selected Factor	(T) Smoothed Factor
· <u></u>		·	<u> </u>	·														<u></u>	·
1	1993	4,780,471	0.6490	3,102,526	1,677,945	3,102,526	2,564,858	1,482,129	4,046,987	0	na	na	2,564,858	na	na	0.8466	XX	0.8466	0.8921
2	1994	5,785,980	0.7014	4,058,286	1,727,694	955,761	955,761	1,626,796	5,147,415	0	na	na	955,761	na	na	0.8896	XX	0.8896	0.8934
3	1995	6,162,904	0.7310	4,505,083	1,657,821	446,796	446,796	1,609,413	5,576,828	0	na	na	446,796	na	na	0.9049	XX	0.9049	0.8948
4	1996	6,061,248	0.7593	4,602,306	1,458,942	97,223	97,223	1,437,642	5,502,280	0	na	na	97,223	na	na	0.9078	XX	0.9078	0.8961
5	1997	6,077,440	0.8077	4,908,748	1,168,692	306,443	306,443	1,168,692	5,539,772	0	na	na	306,443	na	na	0.9115	XX	0.9115	0.8974
6	1998	5,804,110	0.8678	5,036,807	767,303	128,058	128,058	767,303	5,266,442	0	na	na	128,058	na	na	0.9074	XX	0.9074	0.8988
7	1999	5,767,492	0.8945	5,159,022	608,470	122,215	122,215	608,470	5,229,824	5,149,026	618,466	112,219	112,219	618,466	na	0.9068	XX	0.9068	0.9001
8	2000	5,730,009	0.9182	5,261,294	468,715	102,273	102,273	468,715	5,192,341	5,317,681	412,328	168,655	168,655	412,328	5,192,341	0.9062	0.9062	0.9062	0.9015
9	2001	5,812,365	0.9144	5,314,827	497,538	53,532	53,532	497,538	5,274,697	5,360,316	452,049	42,635	42,635	452,049	5,274,697	0.9075	0.9075	0.9075	0.9028
10	2002	5,971,283	0.9080	5,421,925	549,358	107,098	107,098	549,358	5,433,615	5,431,732	539,551	71,416	71,416	539,551	5,433,615	0.9100	0.9100	0.9100	0.9041
11	2003	6,018,440	0.9272	5,580,133	438,307	158,208	158,208	438,307	5,480,772	5,484,250	534,190	52,518	52,518	534,190	5,480,772	0.9107	0.9107	0.9107	0.9055
12	2004	5,838,773	0.9423	5,502,166	336,607	-77,967	-77,967	336,607	5,301,105	5,515,392	323,381	31,142	31,142	323,381	5,301,105	0.9079	0.9079	0.9079	0.9068
13	2005	5,732,687	0.9544	5,471,069	261,618	-31,096	-31,096	261,618	5,195,019	5,570,940	161,747	55,548	55,548	161,747	5,195,019	0.9062	0.9062	0.9062	0.9081
14	2006	5,818,810	0.9639	5,608,602	210,208	137,532	137,532	210,208	5,281,142	5,630,292	188,518	59,352	59,352	188,518	5,281,142	0.9076	0.9076	0.9076	0.9095
15	2007	5,859,155	0.9714	5,691,600	167,555	82,998	82,998	167,555	5,321,487	5,669,851	189,304	39,559	39,559	189,304	5,321,487	0.9082	0.9082	0.9082	0.9108
16	2008	5,935,724	0.9774	5,801,354	134,370	109,754	109,754	134,370	5,398,056	5,726,344	209,380	56,493	56,493	209,380	5,398,056	0.9094	0.9094	0.9094	0.9122
17	2009	6,019,026	0.9821	5,911,165	107,861	109,812	109,812	107,861	5,481,358	5,786,245	232,781	59,901	59,901	232,781	5,481,358	0.9107	0.9107	0.9107	0.9135
18	2010	6,100,724	0.9858	6,014,182	86,542	103,017	103,017	86,542	5,563,056	5,834,833	265,891	48,588	48,588	265,891	5,563,056	0.9119	0.9119	0.9119	0.9148
19	2011	6,154,033	0.9888	6,084,928	69,105	70,745	70,745	69,105	5,616,365	5,895,287	258,746	60,454	60,454	258,746	5,616,365	0.9126	0.9126	0.9126	0.9162
20	2012	6,153,930	0.9911	6,099,227	54,703	14,299	14,299	54,703	5,616,262	5,945,407	208,523	50,120	50,120	208,523	5,616,262	0.9126	0.9126	0.9126	0.9175

# Effects of Ac	t 44 hecomina	effective in	1993	[from	nrior	filings	:1

	Percentage	Factor		Percentage	Factor
1 Payments before 1993	-29.18%	0.7082	1 Reserves Prior to 1993	-29.18%	0.7082
2 1993 Payments - First Report	-17.33%	0.8267	2 Reserves as of 1993	-11.67%	0.8833
3 1993 Payments - Reports after Firs	t -13.37%	0.8663	3 Reserves as of 1994	-5.84%	0.9416
4 Payments after 1993	0.00%	1.0000	4 Reserves as of 1995	-2.92%	0.9708
			5 Reserves as of 1996	-1.46%	0.9854
			6 Reserves after 1996	0.00%	1.0000

\* Current value of adjusted reserves plus sum of adjusted paid amounts from report 1 through current report Where actual data is not available, adjusted estimated paid losses are included in actual reported loss values.

## Sources: (A) Report for accident value, i.e., value as of 4/30/year, where "year" is Accident Year plus report number

- (B) Year in which most transactions included in report occurred. Values are used in picking correct adjustments for Act 44 from above table.
  - Transactions close at 4/30 so that most transaction years run from 5/1 through 4/30. First reports run from 1/1 through 4/30.
- (C) Reported incurred loss from Exhibit VI-B Page 1
- (D) Value from payment patterns for sampled data presented in Exhibit VI-D page 14.
- (E) (D) x (C)
- (F) (C) (E)
- (G) Current value of (E) less preceding value of (E)
- (H) (G) x Value from table of Act 44 effects above.
- (I) (F) x Value from table of Act 44 effects above.
   (J) Sum of Reserve from column (I) plus sum of adjusted paid increments in column (H) from first report through to current report.
- (K) Reported paid loss from Exhibit VI-E
- (L) (C) (K)
- (M) Current value of (K) less preceding value of (K); values from column (G) based on sample used when actual data not available.
- (N) (M) x Value from table of Act 44 effects
- (O) (L) x Value from table of Act 44 effects
- (P) Sum of Reserve from column (O) plus sum of adjusted paid increments in column (N) from first report through to current report.
- (Q) (J) / (C)
- (R) (P) / (C)
- (S) Average of values in columns (Q) and (R)
- (T) Smoothed values based on values in (S)

(A)	(B) Transaction	(C) Incurred	(D) Estimated	(E) Estimated	(F) Estimated	(G) Est. Paid	(H) Est. Paid	(I) Est Res	(J) Sample Adi	(K) Actual	(L) Actual	(M) Actual	(N) Act Paid	(O) Act Res	(P) Actual Adi	(Q) Sample	(R) Actual	(S) Selected	(T) Smoothed
Report	<u>Year</u>	Rept Loss	% Paid	Paid Loss	Reserve		Adjustment#		Rept Loss*	Paid Loss	Reserve		Adjustment#			<u>Factor</u>	Factor	<u>Factor</u>	<u>Factor</u>
1	1992	5,963,632	0.6295	3,754,106	2,209,526	3,754,106	2,658,658	1,564,786	4,223,444	0	na	na	2,658,658	na	na	0.7082	xx	0.7082	0.7082
2	1993	6,709,723	0.7683	5,155,080	1,554,643	1,400,974	1,213,664	1,373,216	5,245,538	0	na	na	1,213,664	na	na	0.7818	XX	0.7818	0.8052
3	1994	6,988,709	0.8094	5,656,661	1,332,048	501,581	501,581	1,254,256	5,628,159	0	na	na	501,581	na	na	0.8053	XX	0.8053	0.8062
4	1995	6,985,202	0.8343	5,827,754	1,157,448	171,093	171,093	1,123,650	5,668,646	0	na	na	171,093	na	na	0.8115	XX	0.8115	0.8072
5	1996	6,810,575	0.8751	5,959,934	850,641	132,180	132,180	838,221	5,515,397	0	na	na	132,180	na	na	0.8098	XX	0.8098	0.8081
6	1997	6,966,052	0.8828	6,149,631	816,421	189,697	189,697	816,421	5,683,294	0	na	na	189,697	na	na	0.8159	XX	0.8159	0.8091
7	1998	7,086,080	0.8890	6,299,525	786,555	149,894	149,894	786,555	5,803,322	0	na	na	149,894	na	na	0.8190	XX	0.8190	0.8101
8	1999	6,984,759	0.9059	6,327,493	657,266	27,968	27,968	657,266	5,702,001	6,401,003	583,756	101,478	101,478	583,756	na	0.8163	XX	0.8163	0.8111
9	2000	6,943,552	0.9302	6,458,892	484,660	131,399	131,399	484,660	5,660,794	6,494,799	448,753	93,796	93,796	448,753	5,660,794	0.8153	0.8153	0.8153	0.8121
10	2001	7,100,992	0.9261	6,576,229	524,763	117,337	117,337	524,763	5,818,234	6,613,862	487,130	119,063	119,063	487,130	5,818,234	0.8194	0.8194	0.8194	0.8130
11	2002	7,099,581	0.9443	6,704,429	395,152	128,200	128,200	395,152	5,816,823	6,692,320	407,261	78,458	78,458	407,261	5,816,823	0.8193	0.8193	0.8193	0.8140
12	2003	7,167,560	0.9581	6,867,098	300,462	162,669	162,669	300,462	5,884,802	6,804,727	362,833	112,407	112,407	362,833	5,884,802	0.8210	0.8210	0.8210	0.8150
13	2004	7,173,430	0.9684	6,946,949	226,481	79,851	79,851	226,481	5,890,672	6,858,573	314,857	53,846	53,846	314,857	5,890,672	0.8212	0.8212	0.8212	0.8160
14	2005	7,091,743	0.9762	6,923,109	168,634	-23,840	-23,840	168,634	5,808,985	6,879,694	212,049	21,121	21,121	212,049	5,808,985	0.8191	0.8191	0.8191	0.8170
15	2006	7,140,118	0.9821	7,012,243	127,875	89,134	89,134	127,875	5,857,360	6,904,878	235,240	25,184	25,184	235,240	5,857,360	0.8203	0.8203	0.8203	0.8179
16	2007	7,069,470	0.9865	6,974,113	95,357	-38,130	-38,130	95,357	5,786,712	6,918,013	151,457	13,135	13,135	151,457	5,786,712	0.8185	0.8185	0.8185	0.8189
17	2008	7,047,415	0.9898	6,975,820	71,595	1,707	1,707	71,595	5,764,657	6,937,949	109,466	19,936	19,936	109,466	5,764,657	0.8180	0.8180	0.8180	0.8199
18	2009	7,028,385	0.9923	6,974,608	53,777	-1,212	-1,212	53,777	5,745,627	6,961,865	66,520	23,916	23,916	66,520	5,745,627	0.8175	0.8175	0.8175	0.8209
19	2010	7,029,188	0.9942	6,988,681	40,507	14,073	14,073	40,507	5,746,430	6,974,368	54,820	12,503	12,503	54,820	5,746,430	0.8175	0.8175	0.8175	0.8219
20	2011	7,063,572	0.9957	7,032,914	30,658	44,234	44,234	30,658	5,780,814	6,985,460	78,112	11,092	11,092	78,112	5,780,814	0.8184	0.8184	0.8184	0.8228

# Effects of Act 44 becoming effective in 1993 [from prior filings]
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	Percentage	Factor		Percentage	Factor
1 Payments before 1993	-29.18%	0.7082	1 Reserves Prior to 1993	-29.18%	0.7082
2 1993 Payments - First Report	-17.33%	0.8267	2 Reserves as of 1993	-11.67%	0.8833
3 1993 Payments - Reports after First	-13.37%	0.8663	3 Reserves as of 1994	-5.84%	0.9416
4 Payments after 1993	0.00%	1.0000	4 Reserves as of 1995	-2.92%	0.9708
			5 Reserves as of 1996	-1.46%	0.9854
			6 Reserves after 1996	0.00%	1.0000

\* Current value of adjusted reserves plus sum of adjusted paid amounts from report 1 through current report Where actual data is not available, adjusted estimated paid losses are included in actual reported loss values.

- Report for accident value, i.e., value as of 4/30/year, where "year" is Accident Year plus report number Sources: (A)
  - Year in which most transactions included in report occurred. Values are used in picking correct adjustments for Act 44 from above table.

- Reported incurred loss from Exhibit VI-B Page 1
- Value from payment patterns for sampled data presented in Exhibit VI-D page 14. (D)
- (E) (D) x (C)
- (F) (C) - (E)
- (G) Current value of (E) less preceding value of (E)
- (G) x Value from table of Act 44 effects above.
- (F) x Value from table of Act 44 effects above. Sum of Reserve from column (I) plus sum of adjusted paid increments in column (H) from first report through to current report. (J)
- Reported paid loss from Exhibit VI-E (K)
- (L) (C) - (K)
- Current value of (K) less preceding value of (K); values from column (G) based on sample used when actual data not available.
- (M) x Value from table of Act 44 effects (N)
- (0) (L) x Value from table of Act 44 effects
- Sum of Reserve from column (O) plus sum of adjusted paid increments in column (N) from first report through to current report. (P)
- (J) / (C) (Q)
- (R) (P) / (C)
- Average of values in columns (Q) and (R)
- Smoothed values based on values in (S)

(A)	(B) Transaction	(C) Incurred	(D) Estimated	(E) Estimated	(F) Estimated	(G) Est. Paid	(H) Est. Paid	(I) Est Res	(J) Sample Adi	(K) Actual	(L) Actual	(M) Actual	(N) Act Paid	(O) Act Res	(P) Actual Adi	(Q) Sample	(R) Actual	(S) Selected	(T) Smoothed
Report	<u>Year</u>	Rept Loss	% Paid	Paid Loss	Reserve		Adjustment#	44	Rept Loss*	Paid Loss	Reserve		Adjustment#			<u>Factor</u>	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>
1	1991	5,085,069	0.3438	1,748,338	3,336,731	1,748,338	1,238,173	2,363,073	3,601,246	0	na	na	1,238,173	na	na	0.7082	xx	0.7082	0.7082
2	1992	6,471,250	0.7424	4,804,256	1,666,994	3,055,918	2,164,201	1,180,565	4,582,939	0	na	na	2,164,201	na	na	0.7082	XX	0.7082	0.7082
3	1993	6,824,261	0.7867	5,368,646	1,455,615	564,390	488,931	1,285,745	5,177,050	0	na	na	488,931	na	na	0.7586	xx	0.7586	0.7838
4	1994	7,207,603	0.7941	5,723,558	1,484,045	354,911	354,911	1,397,377	5,643,594	0	na	na	354,911	na	na	0.7830	XX	0.7830	0.7853
5	1995	7,239,653	0.8173	5,916,968	1,322,685	193,411	193,411	1,284,062	5,723,690	0	na	na	193,411	na	na	0.7906	XX	0.7906	0.7867
6	1996	7,315,361	0.8302	6,073,213	1,242,148	156,244	156,244	1,224,013	5,819,885	0	na	na	156,244	na	na	0.7956	XX	0.7956	0.7882
7	1997	7,215,882	0.8675	6,259,778	956,104	186,565	186,565	956,104	5,738,541	0	na	na	186,565	na	na	0.7953	XX	0.7953	0.7896
8	1998	7,140,026	0.9047	6,459,582	680,444	199,804	199,804	680,444	5,662,685	0	na	na	199,804	na	na	0.7931	XX	0.7931	0.7911
9	1999	7,175,630	0.9013	6,467,395	708,235	7,814	7,814	708,235	5,698,289	6,527,960	647,670	68,378	68,378	647,670	na	0.7941	XX	0.7941	0.7925
10	2000	7,347,568	0.8891	6,532,723	814,845	65,327	65,327	814,845	5,870,227	6,601,301	746,267	73,341	73,341	746,267	5,870,227	0.7989	0.7989	0.7989	0.7940
11	2001	7,477,095	0.9090	6,796,519	680,576	263,797	263,797	680,576	5,999,754	6,640,700	836,395	39,399	39,399	836,395	5,999,754	0.8024	0.8024	0.8024	0.7954
12	2002	7,453,897	0.9253	6,897,046	556,851	100,527	100,527	556,851	5,976,556	6,688,050	765,847	47,350	47,350	765,847	5,976,556	0.8018	0.8018	0.8018	0.7969
13	2003	7,447,799	0.9387	6,991,137	456,662	94,090	94,090	456,662	5,970,458	6,781,221	666,578	93,171	93,171	666,578	5,970,458	0.8016	0.8016	0.8016	0.7983
14	2004	7,500,265	0.9497	7,122,818	377,447	131,682	131,682	377,447	6,022,924	6,830,913	669,352	49,692	49,692	669,352	6,022,924	0.8030	0.8030	0.8030	0.7998
15	2005	7,500,059	0.9587	7,190,277	309,782	67,459	67,459	309,782	6,022,718	6,883,370	616,689	52,457	52,457	616,689	6,022,718	0.8030	0.8030	0.8030	0.8012
16	2006	7,442,165	0.9661	7,189,874	252,291	-404	-404	252,291	5,964,824	6,922,803	519,362	39,433	39,433	519,362	5,964,824	0.8015	0.8015	0.8015	0.8027
17	2007	7,490,067	0.9722	7,281,666	208,401	91,792	91,792	208,401	6,012,726	6,958,482	531,585	35,679	35,679	531,585	6,012,726	0.8028	0.8028	0.8028	0.8041
18	2008	7,528,919	0.9772	7,356,986	171,933	75,320	75,320	171,933	6,051,578	7,001,143	527,776	42,661	42,661	527,776	6,051,578	0.8038	0.8038	0.8038	0.8056
19	2009	7,453,318	0.9813	7,313,621	139,697	-43,365	-43,365	139,697	5,975,977	7,052,555	400,763	51,412	51,412	400,763	5,975,977	0.8018	0.8018	0.8018	0.8070
20	2010	7,374,324	0.9846	7,260,882	113,442	-52,738	-52,738	113,442	5,896,983	7,088,704	285,620	36,149	36,149	285,620	5,896,983	0.7997	0.7997	0.7997	0.8085

# Effects of Act	44 hecomina	effective in	1993	[from	prior	filinas1

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- (E) (D) x (C)
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(A)	(B) Transaction	(C) Incurred	(D) Estimated	(E) Estimated	(F) Estimated	(G) Est. Paid	(H) Est. Paid	(I) Est Res	(J) Sample Adi	(K) Actual	(L) Actual	(M) Actual	(N) Act Paid	(O) Act Res	(P) Actual Adi	(Q) Sample	(R) Actual	(S) Selected	(T) Smoothed
Report	<u>Year</u>	Rept Loss	% Paid	<u>Paid Loss</u>	Reserve		Adjustment#	44	Rept Loss*	Paid Loss	Reserve	Increment	Adjustment#		Rept Loss*	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>
1	1990	5,121,908	0.3736	1,913,479	3,208,429	1,913,479	1,355,126	2,272,209	3,627,335	0	na	na	1,355,126	na	na	0.7082	XX	0.7082	0.7082
2	1991	5,979,955	0.4784	2,860,943	3,119,012	947,464	670,994	2,208,884	4,235,004	0	na	na	670,994	na	na	0.7082	XX	0.7082	0.7082
3	1992	7,074,053	0.7829	5,538,276	1,535,777	2,677,333	1,896,087	1,087,637	5,009,844	0	na	na	1,896,087	na	na	0.7082	XX	0.7082	0.7082
4	1993	7,753,514	0.7612	5,901,975	1,851,539	363,699	315,072	1,635,465	5,872,744	0	na	na	315,072	na	na	0.7574	XX	0.7574	0.7752
5	1994	7,595,281	0.8179	6,212,180	1,383,101	310,205	310,205	1,302,328	5,849,812	0	na	na	310,205	na	na	0.7702	XX	0.7702	0.7762
6	1995	7,729,893	0.8264	6,387,984	1,341,909	175,803	175,803	1,302,726	6,026,014	0	na	na	175,803	na	na	0.7796	XX	0.7796	0.7773
7	1996	7,929,203	0.8229	6,524,941	1,404,262	136,958	136,958	1,383,760	6,244,005	0	na	na	136,958	na	na	0.7875	XX	0.7875	0.7783
8	1997	7,725,007	0.8733	6,746,249	978,758	221,307	221,307	978,758	6,060,312	0	na	na	221,307	na	na	0.7845	XX	0.7845	0.7794
9	1998	7,725,545	0.8841	6,830,154	895,391	83,906	83,906	895,391	6,060,850	0	na	na	83,906	na	na	0.7845	XX	0.7845	0.7804
10	1999	7,808,315	0.8795	6,867,413	940,902	37,259	37,259	940,902	6,143,620	6,907,575	900,740	77,421	77,421	900,740	na	0.7868	XX	0.7868	0.7815
11	2000	7,818,624	0.8997	7,034,155	784,469	166,742	166,742	784,469	6,153,929	6,987,340	831,284	79,765	79,765	831,284	6,153,929	0.7871	0.7871	0.7871	0.7826
12	2001	7,818,489	0.9165	7,165,318	653,171	131,163	131,163	653,171	6,153,794	7,057,392	761,097	70,052	70,052	761,097	6,153,794	0.7871	0.7871	0.7871	0.7836
13	2002	7,777,708	0.9304	7,236,687	541,021	71,369	71,369	541,021	6,113,013	7,117,858	659,850	60,466	60,466	659,850	6,113,013	0.7860	0.7860	0.7860	0.7847
14	2003	7,799,651	0.9421	7,347,903	451,748	111,216	111,216	451,748	6,134,956	7,207,922	591,729	90,064	90,064	591,729	6,134,956	0.7866	0.7866	0.7866	0.7857
15	2004	7,798,234	0.9518	7,422,158	376,076	74,255	74,255	376,076	6,133,539	7,316,792	481,442	108,870	108,870	481,442	6,133,539	0.7865	0.7865	0.7865	0.7868
16	2005	7,789,301	0.9598	7,476,523	312,778	54,365	54,365	312,778	6,124,606	7,357,567	431,734	40,775	40,775	431,734	6,124,606	0.7863	0.7863	0.7863	0.7879
17	2006	7,822,500	0.9666	7,560,958	261,542	84,435	84,435	261,542	6,157,805	7,400,977	421,523	43,410	43,410	421,523	6,157,805	0.7872	0.7872	0.7872	0.7889
18	2007	7,870,056	0.9722	7,650,961	219,095	90,003	90,003	219,095	6,205,361	7,440,981	429,075	40,004	40,004	429,075	6,205,361	0.7885	0.7885	0.7885	0.7900
19	2008	7,847,501	0.9768	7,665,596	181,905	14,635	14,635	181,905	6,182,806	7,484,561	362,940	43,580	43,580	362,940	6,182,806	0.7879	0.7879	0.7879	0.7910
20	2009	7,852,764	0.9807	7,701,201	151,563	35,605	35,605	151,563	6,188,069	7,545,066	307,698	60,505	60,505	307,698	6,188,069	0.7880	0.7880	0.7880	0.7921

# Effects of	Act 44 becomin	a effective in	1993	[from	prior filings

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\* Current value of adjusted reserves plus sum of adjusted paid amounts from report 1 through current report Where actual data is not available, adjusted estimated paid losses are included in actual reported loss values.

- Sources: (A) Report for accident value, i.e., value as of 4/30/year, where "year" is Accident Year plus report number
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- (C) Reported incurred loss from Exhibit VI-B Page 1
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- (E) (D) x (C)
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- (J) Sum of Reserve from column (I) plus sum of adjusted paid increments in column (H) from first report through to current report.
- (K) Reported paid loss from Exhibit VI-E
- (L) (C) (K)
- (M) Current value of (K) less preceding value of (K); values from column (G) based on sample used when actual data not available.
- (N) (M) x Value from table of Act 44 effects
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- (Q) (J) / (C)
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- (S) Average of values in columns (Q) and (R)
- (T) Smoothed values based on values in (S)

(A)	(B) Transaction	(C) Incurred	(D) Estimated	(E) Estimated	(F) Estimated	(G) Est. Paid	(H) Est. Paid	(I) Est Res	(J) Sample Adj	(K) Actual	(L) Actual	(M) Actual	(N) Act Paid	(O) Act Res	(P) Actual Adj	(Q) Sample	(R) Actual	(S) Selected	(T) Smoothed
Report	<u>Year</u>	Rept Loss	% Paid	<u>Paid Loss</u>	Reserve		Adjustment#		Rept Loss*	Paid Loss	Reserve		Adjustment#		Rept Loss*	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>
1	1989	4,771,196	0.4402	2,100,145	2,671,051	2,100,145	1,487,323	1,891,638	3,378,961	0	na	na	1,487,323	na	na	0.7082	XX	0.7082	0.7082
2	1990	5,836,016	0.5050	2,947,066	2,888,950	846,922	599,790	2,045,954	4,133,067	0	na	na	599,790	na	na	0.7082	XX	0.7082	0.7082
3	1991	6,363,979	0.5623	3,578,366	2,785,613	631,300	447,086	1,972,771	4,506,970	0	na	na	447,086	na	na	0.7082	XX	0.7082	0.7082
4	1992	7,933,751	0.7318	5,805,919	2,127,832	2,227,553	1,577,553	1,506,931	5,618,682	0	na	na	1,577,553	na	na	0.7082	XX	0.7082	0.7082
5	1993	8,404,823	0.7262	6,103,582	2,301,241	297,663	257,866	2,032,686	6,402,303	0	na	na	257,866	na	na	0.7617	XX	0.7617	0.7843
6	1994	8,841,749	0.7210	6,374,901	2,466,848	271,319	271,319	2,322,784	6,963,720	0	na	na	271,319	na	na	0.7876	XX	0.7876	0.7842
7	1995	8,720,012	0.7461	6,506,001	2,214,011	131,100	131,100	2,149,362	6,921,398	0	na	na	131,100	na	na	0.7937	XX	0.7937	0.7841
8	1996	8,176,532	0.8160	6,672,050	1,504,482	166,049	166,049	1,482,516	6,420,602	0	na	na	166,049	na	na	0.7852	XX	0.7852	0.7840
9	1997	7,991,002	0.8563	6,842,695	1,148,307	170,645	170,645	1,148,307	6,257,037	0	na	na	170,645	na	na	0.7830	XX	0.7830	0.7839
10	1998	8,524,905	0.8150	6,947,798	1,577,107	105,103	105,103	1,577,107	6,790,940	0	na	na	105,103	na	na	0.7966	XX	0.7966	0.7837
11	1999	8,210,154	0.8364	6,867,106	1,343,048	-80,692	-80,692	1,343,048	6,476,189	6,555,195	1,654,959	-392,603	-392,603	1,654,959	na	0.7888	XX	0.7888	0.7836
12	2000	7,853,295	0.8554	6,717,341	1,135,954	-149,765	-149,765	1,135,954	6,119,330	6,639,919	1,213,376	84,724	84,724	1,213,376	6,119,330	0.7792	0.7792	0.7792	0.7835
13	2001	7,996,833	0.8721	6,974,022	1,022,811	256,681	256,681	1,022,811	6,262,868	6,775,110	1,221,723	135,191	135,191	1,221,723	6,262,868	0.7832	0.7832	0.7832	0.7834
14	2002	8,316,349	0.8869	7,375,806	940,543	401,784	401,784	940,543	6,582,384	6,868,344	1,448,005	93,234	93,234	1,448,005	6,582,384	0.7915	0.7915	0.7915	0.7833
15	2003	7,936,277	0.9000	7,142,623	793,654	-233,183	-233,183	793,654	6,202,312	6,931,264	1,005,013	62,920	62,920	1,005,013	6,202,312	0.7815	0.7815	0.7815	0.7832
16	2004	7,914,050	0.9116	7,214,237	699,813	71,614	71,614	699,813	6,180,085	7,002,976	911,074	71,712	71,712	911,074	6,180,085	0.7809	0.7809	0.7809	0.7831
17	2005	7,910,771	0.9218	7,292,227	618,544	77,990	77,990	618,544	6,176,806	7,026,490	884,281	23,514	23,514	884,281	6,176,806	0.7808	0.7808	0.7808	0.7830
18	2006	7,927,236	0.9309	7,379,159	548,077	86,931	86,931	548,077	6,193,271	7,045,334	881,902	18,844	18,844	881,902	6,193,271	0.7813	0.7813	0.7813	0.7829
19	2007	7,905,531	0.9389	7,422,228	483,303	43,069	43,069	483,303	6,171,566	7,105,802	799,729	60,468	60,468	799,729	6,171,566	0.7807	0.7807	0.7807	0.7828
20	2008	7,888,944	0.9459	7,462,486	426,458	40,258	40,258	426,458	6,154,979	7,122,679	766,265	16,877	16,877	766,265	6,154,979	0.7802	0.7802	0.7802	0.7827

# EII6	ECIS OF ACT 44 DE	ecoming effect	ive in 1993 [irom prior illings]		
	Percentage	Factor		Percentage	Factor
1 Payments before 1993	-29.18%	0.7082	1 Reserves Prior to 1993	-29.18%	0.7082
2 1993 Payments - First Report	-17.33%	0.8267	2 Reserves as of 1993	-11.67%	0.8833
3 1993 Payments - Reports after First	-13.37%	0.8663	3 Reserves as of 1994	-5.84%	0.9416
4 Payments after 1993	0.00%	1.0000	4 Reserves as of 1995	-2.92%	0.9708
			5 Reserves as of 1996	-1.46%	0.9854
			6 Reserves after 1996	0.00%	1.0000

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- Sources: (A) Report for accident value, i.e., value as of 4/30/year, where "year" is Accident Year plus report number
  - B) Year in which most transactions included in report occurred. Values are used in picking correct adjustments for Act 44 from above table.

- (C) Reported incurred loss from Exhibit VI-B Page 1
- (D) Value from payment patterns for sampled data presented in Exhibit VI-D page 14.
- (E) (D) x (C)
- (F) (C) (E)
- (G) Current value of (E) less preceding value of (E)
- (H) (G) x Value from table of Act 44 effects above.
- (I) (F) x Value from table of Act 44 effects above.
- (J) Sum of Reserve from column (I) plus sum of adjusted paid increments in column (H) from first report through to current report.
- (K) Reported paid loss from Exhibit VI-E
- (L) (C) (K)
- (M) Current value of (K) less preceding value of (K); values from column (G) based on sample used when actual data not available.
- (N) (M) x Value from table of Act 44 effects
- (O) (L) x Value from table of Act 44 effects
- (P) Sum of Reserve from column (O) plus sum of adjusted paid increments in column (N) from first report through to current report.
- (Q) (J) / (C)
- (R) (P) / (C)
- (S) Average of values in columns (Q) and (R)
- (T) Smoothed values based on values in (S)

(A)	(B) Transaction	(C) Incurred	(D) Estimated	(E) Estimated	(F) Estimated	(G) Est. Paid	(H) Est. Paid	(I) Est Res	(J) Sample Adj	(K) Actual	(L) Actual	(M) Actual	(N) Act Paid	(O) Act Res	(P) Actual Adj	(Q) Sample	(R) Actual	(S) Selected	(T) Smoothed
Report	<u>Year</u>	Rept Loss	% Paid	Paid Loss	Reserve		Adjustment#		Rept Loss*	Paid Loss	Reserve		Adjustment#		Rept Loss*	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>
1	1988	3,561,960	0.3386	1,206,133	2,355,827	1,206,133	854,183	1,668,397	2,522,580	0	na	na	854,183	na	na	0.7082	xx	0.7082	0.7082
2	1989	4,334,347	0.4584	1,986,900	2,347,447	780,767	552,939	1,662,462	3,069,585	0	na	na	552,939	na	na	0.7082	XX	0.7082	0.7082
3	1990	4,812,640	0.5565	2,678,253	2,134,387	691,353	489,616	1,511,573	3,408,312	0	na	na	489,616	na	na	0.7082	XX	0.7082	0.7082
4	1991	4,994,294	0.6368	3,180,526	1,813,768	502,273	355,710	1,284,510	3,536,959	0	na	na	355,710	na	na	0.7082	XX	0.7082	0.7082
5	1992	5,713,182	0.7200	4,113,491	1,599,691	932,965	660,726	1,132,901	4,046,075	0	na	na	660,726	na	na	0.7082	XX	0.7082	0.7082
6	1993	5,721,504	0.7525	4,305,432	1,416,072	191,941	166,278	1,250,817	4,330,269	0	na	na	166,278	na	na	0.7568	XX	0.7568	0.7661
7	1994	5,860,153	0.7484	4,385,739	1,474,414	80,307	80,307	1,388,309	4,548,068	0	na	na	80,307	na	na	0.7761	XX	0.7761	0.7661
8	1995	5,470,183	0.8283	4,530,953	939,230	145,214	145,214	911,805	4,216,778	0	na	na	145,214	na	na	0.7709	XX	0.7709	0.7662
9	1996	5,318,132	0.8600	4,573,594	744,538	42,641	42,641	733,668	4,081,283	0	na	na	42,641	na	na	0.7674	XX	0.7674	0.7662
10	1997	5,227,686	0.8905	4,655,254	572,432	81,661	81,661	572,432	4,001,707	0	na	na	81,661	na	na	0.7655	XX	0.7655	0.7663
11	1998	5,185,032	0.9103	4,720,107	464,925	64,852	64,852	464,925	3,959,053	0	na	na	64,852	na	na	0.7636	XX	0.7636	0.7664
12	1999	5,142,378	0.9266	4,764,794	377,584	44,687	44,687	377,584	3,916,399	4,278,680	863,698	-441,427	-441,427	863,698	na	0.7616	XX	0.7616	0.7664
13	2000	5,297,391	0.9399	4,978,876	318,515	214,082	214,082	318,515	4,071,412	4,312,042	985,349	33,362	33,362	985,349	4,071,412	0.7686	0.7686	0.7686	0.7665
14	2001	5,159,483	0.9508	4,905,449	254,034	-73,427	-73,427	254,034	3,933,504	4,338,559	820,924	26,517	26,517	820,924	3,933,504	0.7624	0.7624	0.7624	0.7665
15	2002	5,288,513	0.9597	5,075,289	213,224	169,840	169,840	213,224	4,062,534	4,387,743	900,770	49,184	49,184	900,770	4,062,534	0.7682	0.7682	0.7682	0.7666
16	2003	5,230,743	0.9670	5,058,046	172,697	-17,243	-17,243	172,697	4,004,764	4,401,565	829,178	13,822	13,822	829,178	4,004,764	0.7656	0.7656	0.7656	0.7666
17	2004	5,324,275	0.9730	5,180,329	143,946	122,283	122,283	143,946	4,098,296	4,442,368	881,907	40,803	40,803	881,907	4,098,296	0.7697	0.7697	0.7697	0.7667
18	2005	5,253,219	0.9779	5,136,918	116,301	-43,411	-43,411	116,301	4,027,240	4,457,682	795,537	15,314	15,314	795,537	4,027,240	0.7666	0.7666	0.7666	0.7668
19	2006	5,261,599	0.9819	5,166,211	95,388	29,293	29,293	95,388	4,035,620	4,470,503	791,096	12,821	12,821	791,096	4,035,620	0.7670	0.7670	0.7670	0.7668
20	2007	5,264,773	0.9852	5,186,615	78,158	20,404	20,404	78,158	4,038,794	4,484,522	780,251	14,019	14,019	780,251	4,038,794	0.7671	0.7671	0.7671	0.7669

# Effe	ects of Act 44 be	ecoming effective	e in 1993 [from prior filings]		
	Percentage	Factor		Percentage	Factor
1 Payments before 1993	-29.18%	0.7082	1 Reserves Prior to 1993	-29.18%	0.7082
2 1993 Payments - First Report	-17.33%	0.8267	2 Reserves as of 1993	-11.67%	0.8833
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			5 Reserves as of 1996	-1.46%	0.9854

6 Reserves after 1996

0.00%

1.0000

- Sources: (A) Report for accident value, i.e., value as of 4/30/year, where "year" is Accident Year plus report number
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- (C) Reported incurred loss from Exhibit VI-B Page 1
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- (E) (D) x (C)
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- (M) Current value of (K) less preceding value of (K); values from column (G) based on sample used when actual data not available.
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<sup>\*</sup> Current value of adjusted reserves plus sum of adjusted paid amounts from report 1 through current report Where actual data is not available, adjusted estimated paid losses are included in actual reported loss values.

(A)	(B) Transaction	(C) Incurred	(D) Estimated	(E) Estimated	(F) Estimated	(G) Est. Paid	(H) Est. Paid		(J) Sample Adj	(K) Actual	(L) Actual	(M) Actual	(N) Act Paid	(O) Act Res	(P) Actual Adj	(Q) Sample	(R) Actual	(S) Selected	(T) Smoothed
Report	<u>Year</u>	Rept Loss	<u>% Paid</u>	Paid Loss	Reserve	<u>Increment</u>	Adjustment*	Adjustment"	Rept Loss	Paid Loss	Reserve	Increment	Adjustment*	Adjustment"	Rept Loss	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>
1	1987	2,739,229	0.4407	1,207,109	1,532,120	1,207,109	854,874	1,085,048	1,939,922	0	na	na	854,874	na	na	0.7082	xx	0.7082	0.7082
2	1988	3,422,132	0.5022	1,718,464	1,703,668	511,355	362,142	1,206,538	2,423,554	0	na	na	362,142	na	na	0.7082	XX	0.7082	0.7082
3	1989	4,133,004	0.5569	2,301,627	1,831,377	583,163	412,996	1,296,981	2,926,993	0	na	na	412,996	na	na	0.7082	XX	0.7082	0.7082
4	1990	4,275,055	0.6056	2,588,978	1,686,077	287,351	203,502	1,194,079	3,027,594	0	na	na	203,502	na	na	0.7082	XX	0.7082	0.7082
5	1991	4,317,883	0.6490	2,802,124	1,515,759	213,146	150,950	1,073,460	3,057,925	0	na	na	150,950	na	na	0.7082	XX	0.7082	0.7082
6	1992	4,982,816	0.7417	3,695,755	1,287,061	893,630	632,869	911,497	3,528,830	0	na	na	632,869	na	na	0.7082	XX	0.7082	0.7082
7	1993	4,940,684	0.7692	3,800,374	1,140,310	104,620	90,632	1,007,236	3,715,201	0	na	na	90,632	na	na	0.7520	XX	0.7520	0.7657
8	1994	4,804,855	0.7979	3,833,794	971,061	33,420	33,420	914,351	3,655,736	0	na	na	33,420	na	na	0.7608	XX	0.7608	0.7651
9	1995	4,959,273	0.7903	3,919,313	1,039,960	85,520	85,520	1,009,593	3,836,497	0	na	na	85,520	na	na	0.7736	XX	0.7736	0.7644
10	1996	4,894,675	0.8039	3,934,829	959,846	15,516	15,516	945,832		0	na	na		na	na	0.7740	XX	0.7740	0.7638
11	1997	4,763,939	0.8255	3,932,429	831,510	-2,400	-2,400	831,510	3,671,531	0	na	na	-2,400	na	na	0.7707	XX	0.7707	0.7631
12	1998	4,633,204	0.8446	3,913,413	719,791	-19,017	-19,017	719,791	3,540,795	0	na	na	-19,017	na	na	0.7642	XX	0.7642	0.7625
13	1999	4,502,468	0.8617	3,879,882	622,586	-33,531	-33,531	622,586	3,410,059	4,040,554	461,914	127,141	127,141	461,914	na	0.7574	XX	0.7574	0.7618
14	2000	4,534,654	0.8769	3,976,548	558,106	96,666	96,666	558,106	3,442,245	4,071,521	463,133	30,967	30,967	463,133	3,442,245	0.7591	0.7591	0.7591	0.7612
15	2001	4,624,176	0.8905	4,117,617	506,559	141,068	141,068	506,559	3,531,767	4,116,924	507,252	45,403	45,403	507,252	3,531,767	0.7638	0.7638	0.7638	0.7605
16	2002	4,496,393	0.9025	4,057,980	438,413	-59,637	-59,637	438,413	3,403,984	4,148,184	348,209	31,260	31,260	348,209	3,403,984	0.7570	0.7570	0.7570	0.7599
17	2003	4,453,397	0.9132	4,066,910	386,487	8,931	8,931	386,487	3,360,988	4,171,593	281,804	23,409	23,409	281,804	3,360,988	0.7547	0.7547	0.7547	0.7592
18	2004	4,502,357	0.9228	4,154,575	347,782	87,665	87,665	347,782	3,409,948	4,196,461	305,896	24,868	24,868	305,896	3,409,948	0.7574	0.7574	0.7574	0.7586
19	2005	4,507,507	0.9312	4,197,603	309,904	43,028	43,028	309,904	3,415,098	4,237,619	269,888	41,158	41,158	269,888	3,415,098	0.7576	0.7576	0.7576	0.7579
20	2006	4,528,084	0.9388	4,250,989	277,095	53,386	53,386	277,095	3,435,675	4,262,450	265,634	24,831	24,831	265,634	3,435,675	0.7587	0.7587	0.7587	0.7573

# Effe	ects of Act 44 be	ecoming effe	ctive in 1993 [trom prior tilings]		
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\* Current value of adjusted reserves plus sum of adjusted paid amounts from report 1 through current report Where actual data is not available, adjusted estimated paid losses are included in actual reported loss values.

- Sources: (A) Report for accident value, i.e., value as of 4/30/year, where "year" is Accident Year plus report number
  - (B) Year in which most transactions included in report occurred. Values are used in picking correct adjustments for Act 44 from above table.
    - Transactions close at 4/30 so that most transaction years run from 5/1 through 4/30. First reports run from 1/1 through 4/30.
  - (C) Reported incurred loss from Exhibit VI-B Page 1
  - (D) Value from payment patterns for sampled data presented in Exhibit VI-D page 14.
  - (E) (D) x (C)
  - (F) (C) (E)
  - (G) Current value of (E) less preceding value of (E)
  - (H) (G) x Value from table of Act 44 effects above.
  - (I) (F) x Value from table of Act 44 effects above.
  - (J) Sum of Reserve from column (I) plus sum of adjusted paid increments in column (H) from first report through to current report.
  - (K) Reported paid loss from CMCRB database
  - (L) (C) (K)
  - (M) Current value of (K) less preceding value of (K); values from column (G) based on sample used when actual data not available.
  - (N) (M) x Value from table of Act 44 effects
  - (O) (L) x Value from table of Act 44 effects
  - (P) Sum of Reserve from column (O) plus sum of adjusted paid increments in column (N) from first report through to current report.
  - (Q) (J) / (C)
  - (R) (P) / (C)
  - (S) Average of values in columns (Q) and (R)
  - (T) Smoothed values based on values in (S)

(A)	(B) Transaction	(C)	(D) Estimated	(E) Estimated	(F) Estimated	(G) Est. Paid	(H)	(I)	(J)	(K) Actual	(L)	(M)	(N)	(O)	(P)	(Q)	(R) Actual	(S) Selected	(T)
Report	<u>Year</u>	Incurred Rept Loss	% Paid	Paid Loss	<u>Reserve</u>		Est. Paid <u>Adjustment<sup>#</sup>/</u>		Sample Adj Rept Loss*	Paid Loss	Actual <u>Reserve</u>	Actual Increment	Act Paid Adjustment <sup>#</sup>	Act Res Adjustment#	Actual Adj <u>Rept Loss*</u>	Sample <u>Factor</u>	<u>Factor</u>	<u>Factor</u>	Smoothed <u>Factor</u>
1	1986	3,231,344	0.4403	1,422,835	1,808,509	1,422,835	1,007,652	1,280,786	2,288,438	0	na	na	1,007,652	na	na	0.7082	xx	0.7082	0.7082
2	1987	3,764,068	0.5047	1,899,774	1,864,294	476,939	337,768	1,320,293	2,665,713	0	na	na	337,768	na	na	0.7082	XX	0.7082	0.7082
3	1988	3,969,908	0.5617	2,229,878	1,740,030	330,103	233,779	1,232,290	2,811,489	0	na	na	233,779	na	na	0.7082	XX	0.7082	0.7082
4	1989	4,285,779	0.6121	2,623,417	1,662,362	393,539	278,704	1,177,285	3,035,189	0	na	na	278,704	na	na	0.7082	XX	0.7082	0.7082
5	1990	4,561,019	0.6567	2,995,432	1,565,587	372,015	263,461	1,108,749	3,230,114	0	na	na	263,461	na	na	0.7082	XX	0.7082	0.7082
6	1991	4,618,916	0.6962	3,215,860	1,403,056	220,428	156,107	993,644	3,271,116	0	na	na	156,107	na	na	0.7082	XX	0.7082	0.7082
7	1992	5,232,436	0.7199	3,766,831	1,465,605	550,970	390,197	1,037,942	3,705,611	0	na	na	390,197	na	na	0.7082	XX	0.7082	0.7082
8	1993	5,192,135	0.7859	4,080,499	1,111,636	313,668	271,731	981,908	3,921,308	0	na	na	271,731	na	na	0.7552	XX	0.7552	0.7652
9	1994	5,165,763	0.7846	4,053,058	1,112,705	-27,441	-27,441	1,047,723	3,959,682	0	na	na	-27,441	na	na	0.7665	XX	0.7665	0.7669
10	1995	5,126,161	0.8137	4,171,157	955,004	118,100	118,100	927,118	3,957,176	0	na	na	118,100	na	na	0.7720	XX	0.7720	0.7686
11	1996	5,114,580	0.8351	4,271,357	843,223	100,200	100,200	830,912	3,961,170	0	na	na	100,200	na	na	0.7745	XX	0.7745	0.7702
12	1997	5,102,998	0.8541	4,358,477	744,521	87,120	87,120	744,521	3,961,899	0	na	na	87,120	na	na	0.7764	XX	0.7764	0.7719
13	1998	5,091,417	0.8709	4,434,046	657,370	75,570	75,570	657,370	3,950,318	0	na	na	75,570	na	na	0.7759	XX	0.7759	0.7736
14	1999	5,079,835	0.8857	4,499,418	580,417	65,371	65,371	580,417	3,938,736	4,104,539	975,296	-329,507	-329,507	975,296	na	0.7754	XX	0.7754	0.7753
15	2000	5,138,858	0.8989	4,619,249	519,609	119,831	119,831	519,609	3,997,759	4,184,779	954,079	80,240	80,240	954,079	3,997,759	0.7779	0.7779	0.7779	0.7770
16	2001	5,152,905	0.9105	4,691,819	461,086	72,570	72,570	461,086	4,011,806	4,223,527	929,378	38,748	38,748	929,378	4,011,806	0.7786	0.7786	0.7786	0.7787
17	2002	5,173,669	0.9208	4,763,986	409,683	72,167	72,167	409,683	4,032,570	4,245,465	928,204	21,938	21,938	928,204	4,032,570	0.7794	0.7794	0.7794	0.7804
18	2003	5,232,915	0.9299	4,866,214	366,701	102,228	102,228	366,701	4,091,816	4,285,306	947,609	39,841	39,841	947,609	4,091,816	0.7819	0.7819	0.7819	0.7821
19	2004	5,240,670	0.9380	4,915,676	324,994	49,463	49,463	324,994	4,099,571	4,325,037	915,633	39,731	39,731	915,633	4,099,571	0.7823	0.7823	0.7823	0.7838
20	2005	5,266,277	0.9451	4,977,268	289,009	61,592	61,592	289,009	4,125,178	4,346,756	919,521	21,719	21,719	919,521	4,125,178	0.7833	0.7833	0.7833	0.7855

# Effects of Act	44 becomina	effective in	1993	[from	prior filings)

	Percentage	Factor		Percentage	Factor
1 Payments before 1993	-29.18%	0.7082	1 Reserves Prior to 1993	-29.18%	0.7082
2 1993 Payments - First Report	-17.33%	0.8267	2 Reserves as of 1993	-11.67%	0.8833
3 1993 Payments - Reports after First	-13.37%	0.8663	3 Reserves as of 1994	-5.84%	0.9416
4 Payments after 1993	0.00%	1.0000	4 Reserves as of 1995	-2.92%	0.9708
			5 Reserves as of 1996	-1.46%	0.9854
			6 Reserves after 1996	0.00%	1.0000

\* Current value of adjusted reserves plus sum of adjusted paid amounts from report 1 through current report Where actual data is not available, adjusted estimated paid losses are included in actual reported loss values.

- Sources: (A) Report for accident value, i.e., value as of 4/30/year, where "year" is Accident Year plus report number
  - (B) Year in which most transactions included in report occurred. Values are used in picking correct adjustments for Act 44 from above table.

- (C) Reported incurred loss from Exhibit VI-B Page 1
- (D) Value from payment patterns for sampled data presented in Exhibit VI-D page 14.
- (E) (D) x (C)
- (F) (C) (E)
- (G) Current value of (E) less preceding value of (E)
- (H) (G) x Value from table of Act 44 effects above.
- (I) (F) x Value from table of Act 44 effects above.
- (J) Sum of Reserve from column (I) plus sum of adjusted paid increments in column (H) from first report through to current report.
- (K) Reported paid loss from CMCRB database
- (L) (C) (K)
- (M) Current value of (K) less preceding value of (K); values from column (G) based on sample used when actual data not available.
- (N) (M) x Value from table of Act 44 effects
- (O) (L) x Value from table of Act 44 effects
- (P) Sum of Reserve from column (O) plus sum of adjusted paid increments in column (N) from first report through to current report.
- (Q) (J) / (C)
- (R) (P) / (C)
- (S) Average of values in columns (Q) and (R)
- (T) Smoothed values based on values in (S)

(A)	(B) Transaction	(C) Incurred	(D) Estimated	(E) Estimated	(F) Estimated	(G) Est. Paid	(H) Est Paid	(I) Est Res	(J) Sample Adj	(K) Actual	(L) Actual	(M) Actual	(N) Act Paid	(O) Act Res	(P) Actual Adj	(Q) Sample	(R) Actual	(S) Selected	(T) Smoothed
Report	<u>Year</u>	Rept Loss	<u>% Paid</u>	Paid Loss	Reserve	<u>Increment</u>	Adjustment#	Adjustment#	Rept Loss*	Paid Loss	Reserve	Increment	Adjustment#	Adjustment#	Rept Loss*	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>
1	1985	2,349,761	0.4397	1,033,161	1,316,600	1,033,161	731,685	932,416	1,664,101	0	na	na	731,685	na	na	0.7082	xx	0.7082	0.7082
2	1986	2,862,841	0.4985	1,427,000	1,435,841	393,839	278,917	1,016,862	2,027,464	0	na	na	278,917	na	na	0.7082	XX	0.7082	0.7082
3	1987	3,135,723	0.5511	1,727,973		300,972	213,149	996,969	2,220,719	0	na	na	213,149	na	na	0.7082	XX	0.7082	0.7082
4	1988	3,566,071	0.5981	2,133,036	1,433,035	405,063	286,866	1,014,876	2,525,491	0	na	na	286,866	na	na	0.7082	XX	0.7082	0.7082
5	1989	3,753,871	0.6403	2,403,587	1,350,284	270,551	191,604	956,271	2,658,491	0	na	na	,	na	na	0.7082	XX	0.7082	0.7082
6	1990	3,924,573	0.6780	2,660,951	1,263,622	257,364	182,265	894,897	2,779,383	0	na	na	182,265	na	na	0.7082	XX	0.7082	0.7082
7	1991	3,921,802	0.7118	2,791,513	1,130,289	130,562	92,464	800,470	2,777,420	0	na	na	92,464	na	na	0.7082	XX	0.7082	0.7082
8	1992	4,524,996	0.7080	3,203,697	1,321,299	412,184	291,909	935,744	3,204,602	0	na	na	291,909	na	na	0.7082	XX	0.7082	0.7082
9	1993	4,469,292	0.7552	3,375,209	1,094,083	171,512	148,581	966,403	3,383,843	0	na	na	148,581	na	na	0.7571	XX	0.7571	0.7651
10	1994	4,302,643	0.7933	3,413,287	889,356	38,077	38,077	837,418	3,292,935	0	na	na	38,077	na	na	0.7653	XX	0.7653	0.7649
11	1995	4,247,450	0.8150	3,461,585	785,865	48,299	48,299	762,917	3,266,733	0	na	na	48,299	na	na	0.7691	XX	0.7691	0.7647
12	1996	4,192,257	0.8344	3,497,958	694,299	36,373	36,373	684,162	3,224,350	0	na	na	36,373	na	na	0.7691	XX	0.7691	0.7646
13	1997	4,137,064	0.8518	3,523,769	613,295	25,810	25,810	613,295	3,179,294	0	na	na	25,810	na	na	0.7685	XX	0.7685	0.7644
14	1998	4,081,871	0.8673	3,540,225	541,646	16,456	16,456	541,646	3,124,101	0	na	na	16,456	na	na	0.7654	XX	0.7654	0.7642
15	1999	4,026,678	0.8812	3,548,398	478,280	8,173	8,173	478,280	3,068,908	3,643,969	382,709	103,744	103,744	382,709	na	0.7621	XX	0.7621	0.7641
16	2000	4,010,264	0.8937	3,583,894	426,370	35,495	35,495	426,370	3,052,494	3,661,081	349,183	17,112	17,112	349,183	3,052,494	0.7612	0.7612	0.7612	0.7639
17	2001	4,020,761	0.9048	3,638,111	382,650	54,218	54,218	382,650	3,062,991	3,677,363	343,398	16,282	16,282	343,398	3,062,991	0.7618	0.7618	0.7618	0.7637
18	2002	4,036,486	0.9148	3,692,631	343,855	54,520	54,520	343,855	3,078,716	3,692,944	343,542	15,581	15,581	343,542	3,078,716	0.7627	0.7627	0.7627	0.7636
19	2003	4,056,469	0.9237	3,747,155	309,314	54,524	54,524	309,314	3,098,699	3,706,101	350,368	13,157	13,157	350,368	3,098,699	0.7639	0.7639	0.7639	0.7634
20	2004	4,051,228	0.9317	3,774,714	276,514	27,559	27,559	276,514	3,093,458	3,715,650	335,578	9,549	9,549	335,578	3,093,458	0.7636	0.7636	0.7636	0.7632

# Effects of Act 44 becom	ina effective ir	1993	from prio	or filinas1

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(A)	(B) Transaction	(C) Incurred	(D) Estimated	(E) Estimated	(F) Estimated	(G) Est. Paid	(H) Est Paid	(I) Est Res	(J) Sample Adj	(K) Actual	(L) Actual	(M) Actual	(N) Act Paid	(O) Act Res	(P) Actual Adj	(Q) Sample	(R) Actual	(S) Selected	(T) Smoothed
Report	<u>Year</u>	Rept Loss	% Paid	<u>Paid Loss</u>	Reserve		Adjustment <sup>#</sup>			Paid Loss	Reserve		Adjustment#		Rept Loss*	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>
1	1984	3,166,777	0.3407	1,078,930	2,087,847	1,078,930	764,098	1,478,613	2,242,711	0	na	na	764,098	na	na	0.7082	XX	0.7082	0.7082
2	1985	3,937,953	0.3806	1,498,869	2,439,084	419,939	297,401	1,727,359	2,788,858	0	na	na	297,401	na	na	0.7082	XX	0.7082	0.7082
3	1986	4,285,484	0.4181	1,791,859	2,493,625	292,990	207,495	1,765,985	3,034,980	0	na	na	207,495	na	na	0.7082	XX	0.7082	0.7082
4	1987	4,578,195	0.4534	2,075,542	2,502,653	283,683	200,904	1,772,379	3,242,278	0	na	na	200,904	na	na	0.7082	XX	0.7082	0.7082
5	1988	4,961,373	0.4865	2,413,468	2,547,905	337,926	239,319	1,804,427	3,513,644	0	na	na	239,319	na	na	0.7082	XX	0.7082	0.7082
6	1989	5,094,623	0.5175	2,636,698	2,457,925	223,231	158,092	1,740,702	3,608,012	0	na	na	158,092	na	na	0.7082	XX	0.7082	0.7082
7	1990	5,367,145	0.5468	2,934,522	2,432,623	297,823	210,918	1,722,784	3,801,012	0	na	na	210,918	na	na	0.7082	XX	0.7082	0.7082
8	1991	5,505,438	0.5742	3,161,217	2,344,221	226,696	160,546	1,660,177	3,898,951	0	na	na	160,546	na	na	0.7082	XX	0.7082	0.7082
9	1992	6,518,693	0.6980	4,550,048	1,968,645	1,388,830	983,570	1,394,195	4,616,538	0	na	na	983,570	na	na	0.7082	XX	0.7082	0.7082
10	1993	7,380,313	0.6242	4,606,791	2,773,522	56,744	49,157	2,449,852	5,721,352	0	na	na	49,157	na	na	0.7752	XX	0.7752	0.7913
11	1994	7,125,760	0.6470	4,610,036	2,515,724	3,244	3,244	2,368,806	5,643,551	0	na	na	3,244	na	na	0.7920	XX	0.7920	0.7891
12	1995	6,871,206	0.6683	4,592,230	2,278,977	-17,806	-17,806	2,212,431	5,469,370	0	na	na	-17,806	na	na	0.7960	XX	0.7960	0.7869
13	1996	6,616,653	0.6884	4,554,977	2,061,676	-37,252	-37,252	2,031,575	5,251,262	0	na	na	-37,252	na	na	0.7936	XX	0.7936	0.7848
14	1997	6,362,100	0.7073	4,499,766	1,862,334	-55,211	-55,211	1,862,334	5,026,809	0	na	na	-55,211	na	na	0.7901	XX	0.7901	0.7826
15	1998	6,107,546	0.7250	4,427,973	1,679,573	-71,793	-71,793	1,679,573	4,772,256	0	na	na	-71,793	na	na	0.7814	XX	0.7814	0.7804
16	1999	5,852,993	0.7417	4,340,877	1,512,116	-87,097	-87,097	1,512,116	4,517,702	5,268,674	584,319	840,701	840,701	584,319	na	0.7719	XX	0.7719	0.7782
17	2000	5,833,597	0.7573	4,417,742	1,415,855	76,866	76,866	1,415,855	4,498,306	5,300,930	532,667	32,256	32,256	532,667	4,498,306	0.7711	0.7711	0.7711	0.7761
18	2001	5,804,575	0.7720	4,481,063	1,323,512	63,321	63,321	1,323,512	4,469,284	5,344,452	460,123	43,522	43,522	460,123	4,469,284	0.7700	0.7700	0.7700	0.7739
19	2002	5,815,319	0.7858	4,569,641	1,245,678	88,577	88,577	1,245,678	4,480,028	5,385,665	429,654	41,213	41,213	429,654	4,480,028	0.7704	0.7704	0.7704	0.7717
20	2003	5,880,080	0.7988	4,696,791	1,183,289	127,151	127,151	1,183,289	4,544,789	5,452,262	427,818	66,597	66,597	427,818	4,544,789	0.7729	0.7729	0.7729	0.7695

# Effe	ects of Act 44 be	ecoming effect	ive in 1993 [from prior filings]		
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(A) Report	(B) Transaction Year	(C) Incurred Rept Loss	(D) Estimated % Paid	(E) Estimated Paid Loss	(F) Estimated Reserve	(G) Est. Paid Increment	(H) Est Paid Adjustment#,		(J) Sample Adj Rept Loss*	(K) Actual Paid Loss	(L) Actual Reserve	(M) Actual Increment	(N) Act Paid Adjustment#.	(O) Act Res Adjustment#	(P) Actual Adj Rept Loss*	(Q) Sample Factor	(R) Actual Factor	(S) Selected Factor	(T) Smoothed Factor
Корон	<u> </u>	NODI EGGS	70 1 GIG	1 010 2000	11000110	incromment.				. Gra E000	11000110					1 40.01	1 40101	1 00101	1 00.01
1	1983	2,904,955	0.4216	1,224,770	1,680,185	1,224,770	867,382	1,189,907	2,057,289	0	na	na	867,382	na	na	0.7082	XX	0.7082	0.7082
2	1984	3,422,045	0.4713	1,612,823	1,809,222	388,053	274,819	1,281,291	2,423,492	0	na	na	274,819	na	na	0.7082	XX	0.7082	0.7082
3	1985	3,826,880	0.5167	1,977,443	1,849,437	364,620	258,224	1,309,771	2,710,196	0	na	na	258,224	na	na	0.7082	XX	0.7082	0.7082
4	1986	4,161,259	0.5582	2,322,995	1,838,264	345,552	244,720	1,301,859	2,947,004	0	na	na	244,720	na	na	0.7082	XX	0.7082	0.7082
5	1987	4,362,065	0.5962	2,600,641	1,761,424	277,646	196,629	1,247,440	3,089,214	0	na	na	,	na	na	0.7082	XX	0.7082	0.7082
6	1988	4,530,051	0.6309	2,857,947	1,672,104	257,306	182,224	1,184,184	3,208,182	0	na	na		na	na	0.7082	XX	0.7082	0.7082
7	1989	4,552,487	0.6626	3,016,465	1,536,022	158,518	112,262	1,087,811	3,224,071	0	na	na	/	na	na	0.7082	XX	0.7082	0.7082
8	1990	4,810,845	0.6916	3,327,102	1,483,743	310,637	219,993	1,050,787	3,407,040	0	na	na	219,993	na	na	0.7082	XX	0.7082	0.7082
9	1991	4,923,632	0.7181	3,535,562	1,388,070	208,460	147,631	983,031	3,486,916	0	na	na	147,631	na	na	0.7082	XX	0.7082	0.7082
10	1992	5,960,458	0.7423	4,424,448	1,536,010	888,886	629,509	1,087,802	4,221,196	0	na	na	629,509	na	na	0.7082	XX	0.7082	0.7082
11	1993	5,895,732	0.7644	4,506,929	1,388,803	82,481	71,453	1,226,730	4,431,577	0	na	na	71,453	na	na	0.7517	XX	0.7517	0.7630
12	1994	5,831,006	0.7847	4,575,453	1,255,553	68,524	68,524	1,182,228	4,455,600	0	na	na	68,524	na	na	0.7641	XX	0.7641	0.7631
13	1995	5,766,280	0.8032	4,631,332	1,134,947	55,879	55,879	1,101,807	4,431,058	0	na	na	55,879	na	na	0.7684	XX	0.7684	0.7633
14	1996	5,701,553	0.8201	4,675,756	1,025,798	44,423	44,423	1,010,821	4,384,495	0	na	na	44,423	na	na	0.7690	XX	0.7690	0.7635
15	1997	5,636,827	0.8355	4,709,802	927,026	34,046	34,046	927,026	4,334,746	0	na	na	34,046	na	na	0.7690	XX	0.7690	0.7636
16	1998	5,572,101	0.8497	4,734,447	837,654	24,646	24,646	837,654	4,270,020	0	na	na	24,646	na	na	0.7663	XX	0.7663	0.7638
17	1999	5,507,375	0.8626	4,750,579	756,796	16,132	16,132	756,796	4,205,293	4,834,456	672,919	100,009	100,009	672,919	na	0.7636	XX	0.7636	0.7640
18	2000	5,423,917	0.8744	4,742,621	681,296	-7,958	-7,958	681,296	4,121,835	4,886,798	537,119	52,342	52,342	537,119	4,121,835	0.7599	0.7599	0.7599	0.7641
19	2001	5,464,846	0.8852	4,837,382	627,464	94,760	94,760	627,464	4,162,764	4,920,676	544,170	33,878	33,878	544,170	4,162,764	0.7617	0.7617	0.7617	0.7643
20	2002	5,503,371	0.8950	4,925,769	577,602	88,388	88,388	577,602	4,201,289	4,950,134	553,237	29,458	29,458	553,237	4,201,289	0.7634	0.7634	0.7634	0.7645

# Effe	ects of Act 44 be	ecoming effec	tive in 1993 [trom prior tilings]		
	Percentage	Factor		Percentage	Factor
1 Payments before 1993	-29.18%	0.7082	1 Reserves Prior to 1993	-29.18%	0.7082
2 1993 Payments - First Report	-17.33%	0.8267	2 Reserves as of 1993	-11.67%	0.8833
3 1993 Payments - Reports after First	-13.37%	0.8663	3 Reserves as of 1994	-5.84%	0.9416
4 Payments after 1993	0.00%	1.0000	4 Reserves as of 1995	-2.92%	0.9708
			5 Reserves as of 1996	-1.46%	0.9854
			6 Reserves after 1996	0.00%	1.0000

\* Current value of adjusted reserves plus sum of adjusted paid amounts from report 1 through current report Where actual data is not available, adjusted estimated paid losses are included in actual reported loss values.

- Sources: (A) Report for accident value, i.e., value as of 4/30/year, where "year" is Accident Year plus report number
  - (B) Year in which most transactions included in report occurred. Values are used in picking correct adjustments for Act 44 from above table.

- (C) Reported incurred loss from Exhibit VI-B Page 1
- (D) Value from payment patterns for sampled data presented in Exhibit VI-D page 14.
- (E) (D) x (C)
- (F) (C) (E)
- (G) Current value of (E) less preceding value of (E)
- (H) (G) x Value from table of Act 44 effects above.
- (I) (F) x Value from table of Act 44 effects above.
- (J) Sum of Reserve from column (I) plus sum of adjusted paid increments in column (H) from first report through to current report.
- (K) Reported paid loss from CMCRB database
- (L) (C) (K)
- (M) Current value of (K) less preceding value of (K); If no preceding value of (K) use preceding value of (E).
- (N) (M) x Value from table of Act 44 effects
- (O) (L) x Value from table of Act 44 effects
- (P) Sum of Reserve from column (O) plus sum of adjusted paid increments in column (N) from first report through to current report.
- (Q) (J) / (C)
- (R) (P) / (C)
- (S) Average of values in columns (Q) and (R)
- (T) Smoothed values based on values in (S)

### Coal Mine Compensation Rating Bureau Traumatic - Medical Losses

## Extrapolation of Sample Payment Patterns to Twenty-One Reports #

Sample Payment D													
	Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr
Report	1983	1984	1985	1986	<u>1987</u>	<u>1988</u>	1989	<u>1990</u>	1991	1992	1993	1994	1995
1 2	na	na na	na na	na	na na	na na	na na	na na	na 0.7424	0.6295 0.7683	0.6490 0.7014	0.6110 0.6836	0.6217 0.7402
3	na na	na	na	na na	na	na	na	0.7829	0.7867	0.8094	0.7310	0.7314	0.7402
4	na	na	na	na	na	na	0.7318	0.7612	0.7941	0.8343	0.7593	0.7623	0.8892
5		na		na	na	0.7200	0.7262	0.8179	0.8173	0.8751	0.8077	0.8197	0.9069
6	na na	na	na na	na	0.7417	0.7525	0.7210	0.8264	0.8302	0.8828	0.8678	0.8689	0.9142
7	na	na	na	0.7199	0.7692	0.7484	0.7461	0.8229	0.8675	0.8890	0.8945	0.8827	0.8829
8	na	na	0.7080	0.7859	0.7979	0.8283	0.8160	0.8733	0.9047	0.9059	0.9182	0.8925	0.8978
9	na	0.6980	0.7552	0.7846	0.7903	0.8600	0.8563	0.8841	0.9013	0.9302	0.9144	0.9144	0.9132
10	0.7423	0.6242	0.7933	0.8137	0.8039	0.8905	0.8150	0.8795	0.8891	0.9261	0.9080	0.9266	0.9326
11	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd
12	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd
13	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd
14	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd
15	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd
16	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd
17	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd
18	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd
19	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd
20	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd
Fitting Parameters													
Last report	10	10	10	10	10	10	10	10	10	10	10	10	10
Last ratio	0.7423	0.6242	0.7933	0.8137	0.8039	0.8905	0.8150	0.8795	0.8891	0.9261	0.9080	0.9266	0.9326
1-Last ratio	0.2577	0.3758	0.2067	0.1863	0.1961	0.1095	0.1850	0.1205	0.1109	0.0739	0.0920	0.0734	0.0674
Last increment	na	na	0.0381	0.0291	0.0136	0.0305	na	na	na	na	na	0.0122	0.0194
Avg increment	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242
Decay factor	0.9141	0.9395	0.8951	0.8850	0.8901	0.8189	0.8842	0.8326	0.8208	0.7532	0.7916	0.7519	0.7356
Extension of Sample			0.0731	0.0000	0.0701	0.0107	0.0042	0.0020	0.0200	0.7 002	0.7710	0.7017	
Extension of Sample			Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr
	e Payment Patter Acc Yr	rn to Report 20 Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr	Acc Yr		Acc Yr	Acc Yr	Acc Yr
Extension of Sample  Report	<u>e Payment Patter</u> Acc Yr <u>1983</u>	rn to Report 20 Acc Yr 1984				Acc Yr <u>1988</u>		Acc Yr <u>1990</u>	Acc Yr <u>1991</u>	Acc Yr <u>1992</u>		Acc Yr <u>1994</u>	Acc Yr <u>1995</u>
Report 1	<u>e Payment Patter</u> Acc Yr <u>1983</u> 0.4216	n to Report 20 Acc Yr 1984 0.3407	Acc Yr <u>1985</u> 0.4397	Acc Yr <u>1986</u> 0.4403	Acc Yr <u>1987</u> 0.4407	Acc Yr <u>1988</u> 0.3386	Acc Yr <u>1989</u> 0.4402	Acc Yr 1990 0.3736	Acc Yr <u>1991</u> 0.3438	Acc Yr <u>1992</u> 0.6295	Acc Yr <u>1993</u> 0.6490	Acc Yr 1994 0.6110	Acc Yr <u>1995</u> 0.6217
Report	e Payment Patter Acc Yr 1983 0.4216 0.4713	n to Report 20 Acc Yr 1984 0.3407 0.3806	Acc Yr <u>1985</u> 0.4397 0.4985	Acc Yr 1986 0.4403 0.5047	Acc Yr <u>1987</u> 0.4407 0.5022	Acc Yr <u>1988</u> 0.3386 0.4584	Acc Yr 1989 0.4402 0.5050	Acc Yr <u>1990</u> 0.3736 0.4784	Acc Yr 1991 0.3438 0.7424	Acc Yr 1992 0.6295 0.7683	Acc Yr 1993 0.6490 0.7014	Acc Yr 1994 0.6110 0.6836	Acc Yr 1995 0.6217 0.7402
Report 1 2 3	e Payment Patter Acc Yr 1983 0.4216 0.4713 0.5167	n to Report 20 Acc Yr 1984 0.3407 0.3806 0.4181	Acc Yr 1985 0.4397 0.4985 0.5511	Acc Yr 1986 0.4403 0.5047 0.5617	Acc Yr 1987 0.4407 0.5022 0.5569	Acc Yr 1988 0.3386 0.4584 0.5565	Acc Yr 1989 0.4402 0.5050 0.5623	Acc Yr 1990 0.3736 0.4784 0.7829	Acc Yr 1991 0.3438 0.7424 0.7867	Acc Yr 1992 0.6295 0.7683 0.8094	Acc Yr 1993 0.6490 0.7014 0.7310	Acc Yr 1994 0.6110 0.6836 0.7314	Acc Yr 1995 0.6217 0.7402 0.8365
Report 1 2 3 4	e Payment Patter Acc Yr 1983 0.4216 0.4713 0.5167 0.5582	n to Report 20 Acc Yr 1984 0.3407 0.3806 0.4181 0.4534	Acc Yr <u>1985</u> 0.4397 0.4985 0.5511 0.5981	Acc Yr 1986 0.4403 0.5047 0.5617 0.6121	Acc Yr <u>1987</u> 0.4407 0.5022 0.5569 0.6056	Acc Yr 1988 0.3386 0.4584 0.5565 0.6368	Acc Yr 1989 0.4402 0.5050 0.5623 0.7318	Acc Yr 1990 0.3736 0.4784 0.7829 0.7612	Acc Yr 1991 0.3438 0.7424 0.7867 0.7941	Acc Yr 1992 0.6295 0.7683 0.8094 0.8343	Acc Yr 1993 0.6490 0.7014 0.7310 0.7593	Acc Yr 1994 0.6110 0.6836 0.7314 0.7623	Acc Yr 1995 0.6217 0.7402 0.8365 0.8892
Report 1 2 3 4 5	e Payment Patter Acc Yr 1983 0.4216 0.4713 0.5167 0.5582 0.5962	Acc Yr 1984 0.3407 0.3806 0.4181 0.4534 0.4865	Acc Yr 1985 0.4397 0.4985 0.5511 0.5981 0.6403	Acc Yr 1986 0.4403 0.5047 0.5617 0.6121 0.6567	Acc Yr 1987 0.4407 0.5022 0.5569 0.6056 0.6490	Acc Yr 1988 0.3386 0.4584 0.5565 0.6368 0.7200	Acc Yr 1989 0.4402 0.5050 0.5623 0.7318 0.7262	Acc Yr 1990 0.3736 0.4784 0.7829 0.7612 0.8179	Acc Yr 1991 0.3438 0.7424 0.7867 0.7941 0.8173	Acc Yr 1992 0.6295 0.7683 0.8094 0.8343 0.8751	Acc Yr 1993 0.6490 0.7014 0.7310 0.7593 0.8077	Acc Yr 1994 0.6110 0.6836 0.7314 0.7623 0.8197	Acc Yr 1995 0.6217 0.7402 0.8365 0.8892 0.9069
Report 1 2 3 4 5	e Payment Patter ACC Yr 1983 0.4216 0.4713 0.5167 0.5582 0.5962 0.6309	n to Report 20 Acc Yr 1984 0.3407 0.3806 0.4181 0.4534 0.4865 0.5175	Acc Yr 1985 0.4397 0.4985 0.5511 0.5981 0.6403 0.6780	Acc Yr 1986 0.4403 0.5047 0.5617 0.6121 0.6567 0.6962	Acc Yr 1987 0.4407 0.5022 0.5569 0.6056 0.6490 0.7417	Acc Yr 1988 0.3386 0.4584 0.5565 0.6368 0.7200 0.7525	Acc Yr 1989 0.4402 0.5050 0.5623 0.7318 0.7262 0.7210	Acc Yr 1990 0.3736 0.4784 0.7829 0.7612 0.8179 0.8264	Acc Yr 1991 0.3438 0.7424 0.7867 0.7941 0.8173 0.8302	Acc Yr 1992 0.6295 0.7683 0.8094 0.8343 0.8751 0.8828	Acc Yr 1993 0.6490 0.7014 0.7310 0.7593 0.8077 0.8678	Acc Yr 1994 0.6110 0.6836 0.7314 0.7623 0.8197 0.8689	Acc Yr 1995 0.6217 0.7402 0.8365 0.8892 0.9069 0.9142
Report 1 2 3 4 5 6 7	e Payment Patter Acc Yr 1983 0.4216 0.4713 0.5167 0.5582 0.5962 0.6309 0.6626	n to Report 20 Acc Yr 1984 0.3407 0.3806 0.4181 0.4534 0.4865 0.5175 0.5468	Acc Yr 1985 0.4397 0.4985 0.5511 0.5981 0.6403 0.6780 0.7118	Acc Yr 1986 0.4403 0.5047 0.5617 0.6121 0.6567 0.6962 0.7199	Acc Yr 1987 0.4407 0.5022 0.5569 0.6056 0.6490 0.7417 0.7692	Acc Yr 1988 0.3386 0.4584 0.5565 0.6368 0.7200 0.7525 0.7484	Acc Yr 1989 0.4402 0.5050 0.5623 0.7318 0.7262 0.7210 0.7461	Acc Yr 1990 0.3736 0.4784 0.7829 0.7612 0.8179 0.8264 0.8229	Acc Yr 1991 0.3438 0.7424 0.7867 0.7941 0.8173 0.8302 0.8675	Acc Yr 1992 0.6295 0.7683 0.8094 0.8343 0.8751 0.8828 0.8890	Acc Yr 1993 0.6490 0.7014 0.7310 0.7593 0.8077 0.8678 0.8945	Acc Yr 1994 0.6110 0.6836 0.7314 0.7623 0.8197 0.8689 0.8827	Acc Yr 1995 0.6217 0.7402 0.8365 0.8892 0.9069 0.9142 0.8829
Report  1  2  3  4  5  6  7  8	e Payment Patter Acc Yr 1983  0.4216 0.4713 0.5167 0.5582 0.5962 0.6309 0.6626 0.6916	n to Report 20 ACC Yr 1984 0.3407 0.3806 0.4181 0.4534 0.4865 0.5175 0.5468 0.5742	Acc Yr 1985 0.4397 0.4985 0.5511 0.5981 0.6403 0.6780 0.7118 0.7080	Acc Yr 1986 0.4403 0.5047 0.5617 0.6121 0.6567 0.6962 0.7199 0.7859	Acc Yr 1987 0.4407 0.5022 0.5569 0.6056 0.6490 0.7417 0.7692 0.7979	Acc Yr 1988 0.3386 0.4584 0.5565 0.6368 0.7200 0.7525 0.7484 0.8283	Acc Yr 1989 0.4402 0.5050 0.5623 0.7318 0.7262 0.7210 0.7461 0.8160	Acc Yr 1990 0.3736 0.4784 0.7829 0.7612 0.8179 0.8264 0.8229 0.8733	Acc Yr 1991 0.3438 0.7424 0.7867 0.7941 0.8173 0.8302 0.8675 0.9047	Acc Yr 1992 0.6295 0.7683 0.8094 0.8343 0.8751 0.8828 0.8890 0.9059	Acc Yr 1993 0.6490 0.7014 0.7310 0.7593 0.8077 0.8678 0.8945 0.9182	Acc Yr 1994 0.6110 0.6836 0.7314 0.7623 0.8197 0.8689 0.8827 0.8925	Acc Yr 1995 0.6217 0.7402 0.8365 0.8892 0.9069 0.9142 0.8829 0.8978
Report  1  2  3  4  5  6  7  8  9	E Payment Patter ACC Yr 1983 0.4216 0.4713 0.5167 0.5582 0.5962 0.6309 0.6626 0.6916 0.7181	n to Report 20 Acc Yr 1984 0.3407 0.3806 0.4181 0.4534 0.4865 0.5175 0.5468 0.5742 0.6980	Acc Yr 1985 0.4397 0.4985 0.5511 0.5981 0.6403 0.6780 0.7118 0.7080 0.7552	Acc Yr 1986 0.4403 0.5047 0.6121 0.6567 0.6962 0.7199 0.7859 0.7846	Acc Yr 1987 0.4407 0.5022 0.5569 0.6056 0.6490 0.7417 0.7692 0.7979 0.7903	Acc Yr 1988 0.3386 0.4584 0.5565 0.6368 0.7200 0.7525 0.7484 0.8283 0.8600	Acc Yr 1989 0.4402 0.5050 0.5623 0.7318 0.7262 0.7210 0.7461 0.8160 0.8563	Acc Yr 1990 0.3736 0.4784 0.7829 0.7612 0.8179 0.8264 0.8229 0.8733 0.8841	Acc Yr 1991 0.3438 0.7424 0.7867 0.7941 0.8173 0.8302 0.8675 0.9047 0.9013	Acc Yr 1992 0.6295 0.7683 0.8094 0.8343 0.8751 0.8828 0.8890 0.9059 0.9302	Acc Yr 1993 0.6490 0.7014 0.7310 0.7593 0.8077 0.8678 0.8945 0.9182 0.9144	Acc Yr 1994 0.6110 0.6836 0.7314 0.7623 0.8197 0.8689 0.8827 0.8925 0.9144	Acc Yr 1995 0.6217 0.7402 0.8365 0.8892 0.9069 0.9142 0.8829 0.8829 0.8829 0.8829
Report 1 2 3 4 5 6 7 8 9 10	Payment Patter Acc Yr 1983 0.4216 0.4713 0.5167 0.5582 0.5962 0.6309 0.6626 0.6916 0.7181 0.7423	n to Report 20 Acc Yr 1984 0.3407 0.3806 0.4181 0.4534 0.4865 0.5175 0.5468 0.5742 0.6980 0.6242	Acc Yr 1985 0.4397 0.4985 0.5511 0.5981 0.6403 0.6780 0.7118 0.7080 0.7552 0.7933	Acc Yr 1986 0.4403 0.5047 0.5617 0.6121 0.6567 0.6962 0.7199 0.7859 0.7846 0.8137	Acc Yr 1987 0.4407 0.5022 0.5569 0.6056 0.6490 0.7417 0.7692 0.7979 0.7903 0.8039	Acc Yr 1988 0.3386 0.4584 0.5565 0.6368 0.7200 0.7525 0.7484 0.8283 0.8600 0.8905	Acc Yr 1989 0.4402 0.5050 0.5623 0.7318 0.7262 0.7210 0.7461 0.8160 0.8563 0.8150	Acc Yr 1990 0.3736 0.4784 0.7829 0.7612 0.8179 0.8264 0.8229 0.8733 0.8841 0.8795	Acc Yr 1991 0.3438 0.7424 0.7867 0.7941 0.8173 0.8302 0.8675 0.9047 0.9013 0.8891	Acc Yr 1992 0.6295 0.7683 0.8094 0.8343 0.8751 0.8828 0.8890 0.9059 0.9302 0.9261	Acc Yr 1993 0.6490 0.7014 0.7310 0.7593 0.8077 0.8678 0.8945 0.9182 0.9144 0.9080	Acc Yr 1994 0.6110 0.6836 0.7314 0.7623 0.8197 0.8689 0.8827 0.8925 0.9144 0.9266	Acc Yr 1995 0.6217 0.7402 0.8365 0.8892 0.9069 0.9142 0.8829 0.8978 0.9132
Report  1 2 3 4 5 6 7 8 9 10	Payment Patter Acc Yr 1983 0.4216 0.4713 0.5167 0.5582 0.5962 0.6309 0.6626 0.6916 0.7181 0.7423	71 to Report 20 Acc Yr 1984 0.3407 0.3806 0.4181 0.4534 0.4865 0.5175 0.5468 0.5742 0.6980 0.6242	Acc Yr 1985 0.4397 0.4985 0.5511 0.5981 0.6403 0.6780 0.7118 0.7080 0.7552 0.7933 0.8150	Acc Yr 1986 0.4403 0.5047 0.5617 0.6121 0.6567 0.6962 0.7199 0.7859 0.7846 0.8137 0.8351	Acc Yr 1987 0.4407 0.5022 0.5569 0.6056 0.4490 0.7417 0.7692 0.7979 0.7903 0.8039 0.8255	Acc Yr 1988 0.3386 0.4584 0.5565 0.6368 0.7200 0.7525 0.7484 0.8283 0.8600 0.8905 0.9103	Acc Yr 1989 0.4402 0.5050 0.5623 0.7318 0.7262 0.7210 0.7461 0.8160 0.8563 0.8150 0.8364	Acc Yr 1990 0.3736 0.4784 0.7829 0.7612 0.8179 0.8264 0.8229 0.8733 0.8841 0.8795 0.8997	Acc Yr 1991 0.3438 0.7424 0.7867 0.7941 0.8173 0.8302 0.8675 0.9047 0.9013 0.8891	Acc Yr 1992 0.6295 0.7683 0.8094 0.8343 0.8751 0.8828 0.8890 0.9059 0.9302 0.9261	Acc Yr 1993 0.6490 0.7014 0.7310 0.7593 0.8077 0.8678 0.8945 0.9182 0.9144 0.9080 0.9272	Acc Yr 1994 0.6110 0.6836 0.7314 0.7623 0.8197 0.8689 0.8827 0.8925 0.9144 0.9266 0.9448	Acc Yr 1995 0.6217 0.7402 0.8365 0.8892 0.9069 0.9142 0.8829 0.8978 0.9132 0.9326 0.9504
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Report  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Payment Patter Acc Yr 1983 0.4216 0.4713 0.5167 0.5582 0.5962 0.6309 0.6626 0.6916 0.7181 0.7423 0.7644 0.7847 0.8032 0.8201 0.8355 0.8497 0.8626	7. to Report 20 ACC Yr 1984 0.3407 0.3806 0.4181 0.4534 0.4865 0.5175 0.5468 0.5742 0.6980 0.6242 0.6470 0.6683 0.6884 0.7073 0.7250 0.7417 0.7573	Acc Yr 1985 0.4397 0.4985 0.5511 0.5981 0.6403 0.7118 0.7080 0.7552 0.7933 0.8150 0.8344 0.8518 0.8673 0.8812 0.8937 0.9048	Acc Yr 1986 0.4403 0.5047 0.5617 0.6121 0.6567 0.6962 0.7199 0.7859 0.7846 0.8137 0.8351 0.8541 0.8709 0.8857 0.8989 0.9105 0.9208	Acc Yr 1987 0.4407 0.5022 0.5569 0.6056 0.4490 0.7417 0.7692 0.7979 0.7903 0.8039 0.8255 0.8446 0.8617 0.8769 0.8905 0.9025 0.90132	Acc Yr 1988 0.3386 0.4584 0.5565 0.6368 0.7200 0.7525 0.7484 0.8283 0.8600 0.8905 0.9103 0.9266 0.9399 0.9508 0.9597 0.9670 0.9730	Acc Yr 1989 0.4402 0.5050 0.5623 0.7318 0.7262 0.7210 0.7461 0.8160 0.8563 0.8150 0.8364 0.8554 0.8721 0.8869 0.9000 0.9116 0.9218	Acc Yr 1990 0.3736 0.4784 0.7829 0.7612 0.8179 0.8264 0.8229 0.8733 0.8841 0.8795 0.8997 0.9165 0.9304 0.7421 0.9518 0.9598 0.9666	Acc Yr 1991 0.3438 0.7424 0.7867 0.7941 0.8173 0.8302 0.8675 0.9047 0.9013 0.8891 0.9090 0.9253 0.9387 0.9497 0.9587 0.9661	Acc Yr 1992 0.6295 0.7683 0.8094 0.8343 0.8751 0.8828 0.8890 0.9059 0.9302 0.9261 0.9443 0.9581 0.9684 0.9762 0.9821 0.9865 0.9898	Acc Yr 1993 0.6490 0.7014 0.7310 0.7593 0.8077 0.8678 0.8945 0.9182 0.9144 0.9080 0.9272 0.9423 0.9544 0.9639 0.9714 0.9774	Acc Yr 1994 0.6110 0.6836 0.7314 0.7623 0.8197 0.8689 0.8827 0.8925 0.9144 0.9266 0.9448 0.9585 0.9688 0.9765 0.9824 0.9867 0.9900	Acc Yr 1995 0.6217 0.7402 0.8365 0.8892 0.9069 0.9142 0.8829 0.8978 0.9132 0.9326 0.9504 0.9635 0.9732 0.9803 0.9803 0.9855 0.9893 0.9921
Report  1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17	E Payment Patter Acc Yr 1983  0.4216 0.4713 0.5167 0.5582 0.5962 0.6309 0.6626 0.7181  0.7444 0.7847 0.8032 0.8201 0.8355 0.8497 0.8626 0.8744	7. to Report 20 ACC Yr 1984  0.3407 0.3806 0.4181 0.4534 0.4865 0.5175 0.5468 0.5742 0.6980 0.6242 0.6470 0.6683 0.8884 0.7073 0.7250 0.7417 0.7573 0.7720	Acc Yr 1985 0.4397 0.4985 0.5511 0.5981 0.6403 0.7118 0.7080 0.7552 0.7933 0.8150 0.8344 0.8518 0.8673 0.8812 0.8937 0.9048 0.9148	Acc Yr 1986 0.4403 0.5047 0.6617 0.6121 0.6567 0.7199 0.7859 0.7846 0.8137 0.8351 0.8541 0.8709 0.8857 0.8989 0.9105 0.9208 0.9299	Acc Yr 1987 0.4407 0.5022 0.5569 0.6056 0.6490 0.7417 0.7692 0.7979 0.7903 0.8039 0.8255 0.8446 0.8617 0.8769 0.8905 0.9025 0.9132 0.9228	Acc Yr 1988 0.3386 0.4584 0.5565 0.6368 0.7200 0.7525 0.7484 0.8283 0.8600 0.8905 0.9103 0.9266 0.9399 0.9597 0.9597 0.9670 0.9730 0.9779	Acc Yr 1989 0.4402 0.5050 0.5623 0.7318 0.7262 0.7210 0.7461 0.8160 0.8563 0.8150 0.8354 0.8721 0.8869 0.9000 0.9116 0.9218 0.9309	Acc Yr 1990 0.3736 0.4784 0.7829 0.7612 0.8179 0.8264 0.8229 0.8733 0.8841 0.8795 0.8997 0.9165 0.9304 0.9421 0.9518 0.9598 0.9666 0.9722	Acc Yr 1991 0.3438 0.7424 0.7867 0.7941 0.8173 0.8302 0.8675 0.9047 0.9013 0.8891 0.9090 0.9253 0.9387 0.9497 0.9587 0.9661 0.9722 0.9772	Acc Yr 1992 0.6295 0.7683 0.8094 0.8343 0.8751 0.8828 0.8890 0.9059 0.9302 0.9261 0.9443 0.9581 0.9684 0.9762 0.9821 0.9865 0.9898	Acc Yr 1993 0.6490 0.7014 0.7310 0.7593 0.8077 0.8678 0.8945 0.9182 0.9144 0.9080 0.9272 0.9423 0.9544 0.9639 0.9714 0.9774 0.9821 0.9858	Acc Yr 1994 0.6110 0.6836 0.7314 0.7623 0.8197 0.8689 0.8827 0.8925 0.9144 0.9266 0.9448 0.9585 0.9688 0.9765 0.9824 0.9867 0.9900 0.9925	Acc Yr 1995 0.6217 0.7402 0.8365 0.8892 0.9069 0.9142 0.8978 0.9132 0.9326 0.9504 0.9635 0.9732 0.9803 0.9803 0.9893 0.9921
Report  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	E Payment Patter Acc Yr 1983 0.4216 0.4713 0.5167 0.5582 0.5962 0.6309 0.6626 0.6916 0.7181 0.7423 0.7644 0.7847 0.8032 0.8201 0.8355 0.8497 0.8626 0.8744 0.8852	n to Report 20 Acc Yr 1984 0.3407 0.3806 0.4181 0.4534 0.4865 0.5175 0.5468 0.5742 0.6980 0.6242 0.6470 0.6683 0.6884 0.7073 0.7250 0.7417 0.7573 0.7720 0.7858	Acc Yr 1985 0.4397 0.4985 0.5511 0.5981 0.6403 0.7780 0.7080 0.7552 0.7933 0.8150 0.8344 0.8518 0.8673 0.8812 0.8937 0.9048 0.9148 0.9237	Acc Yr 1986 0.4403 0.5047 0.5617 0.6121 0.6567 0.7859 0.7859 0.7846 0.8137 0.8351 0.8541 0.8709 0.8857 0.8989 0.9105 0.9208 0.9299 0.9380	Acc Yr 1987 0.4407 0.5022 0.5569 0.6056 0.6490 0.7417 0.7692 0.7979 0.7903 0.8039 0.8255 0.8446 0.8617 0.8769 0.8905 0.9025 0.9132 0.9228 0.9312	Acc Yr 1988 0.3386 0.4584 0.5565 0.6368 0.7200 0.7525 0.7484 0.8283 0.8600 0.8905 0.9103 0.9266 0.9399 0.9597 0.9597 0.9670 0.9730 0.9779 0.9819	Acc Yr 1989 0.4402 0.5050 0.5623 0.7318 0.7262 0.7210 0.7461 0.8160 0.8563 0.8150 0.8364 0.8554 0.8721 0.8869 0.9000 0.9116 0.9218 0.9309 0.9389	Acc Yr 1990 0.3736 0.4784 0.7829 0.7612 0.8179 0.8264 0.8229 0.8733 0.8841 0.8795 0.8997 0.9165 0.9304 0.9421 0.9518 0.9598 0.9666 0.9722 0.9768	Acc Yr 1991 0.3438 0.7424 0.7867 0.7941 0.8173 0.8302 0.8675 0.9047 0.9013 0.8891 0.9090 0.9253 0.9387 0.9497 0.9587 0.9661 0.9722 0.9772 0.9713	Acc Yr 1992 0.6295 0.7683 0.8094 0.8343 0.8751 0.8828 0.8890 0.9059 0.9302 0.9261 0.9443 0.9581 0.9684 0.9762 0.9821 0.9865 0.9898 0.9923 0.9942	Acc Yr 1993 0.6490 0.7014 0.7310 0.7593 0.8077 0.8678 0.8945 0.9182 0.9144 0.9080 0.9272 0.9423 0.9544 0.9639 0.9714 0.9774 0.9821 0.9858 0.9888	Acc Yr 1994 0.6110 0.6836 0.7314 0.7623 0.8197 0.8689 0.8827 0.8925 0.9144 0.9266 0.9448 0.9585 0.9688 0.9765 0.9824 0.9867 0.9900 0.9925 0.9944	Acc Yr 1995 0.6217 0.7402 0.8365 0.8892 0.9069 0.9142 0.8829 0.9326 0.9326 0.9504 0.9635 0.9732 0.9803 0.9803 0.9803 0.9803 0.9803 0.9803 0.9803 0.9893 0.9921 0.9942 0.9957
Report  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	E Payment Patter Acc Yr 1983  0.4216 0.4713 0.5167 0.5582 0.5962 0.6309 0.6626 0.7181  0.7444 0.7847 0.8032 0.8201 0.8355 0.8497 0.8626 0.8744	7. to Report 20 ACC Yr 1984  0.3407 0.3806 0.4181 0.4534 0.4865 0.5175 0.5468 0.5742 0.6980 0.6242 0.6470 0.6683 0.8884 0.7073 0.7250 0.7417 0.7573 0.7720	Acc Yr 1985 0.4397 0.4985 0.5511 0.5981 0.6403 0.7118 0.7080 0.7552 0.7933 0.8150 0.8344 0.8518 0.8673 0.8812 0.8937 0.9048 0.9148	Acc Yr 1986 0.4403 0.5047 0.6617 0.6121 0.6567 0.7199 0.7859 0.7846 0.8137 0.8351 0.8541 0.8709 0.8857 0.8989 0.9105 0.9208 0.9299	Acc Yr 1987 0.4407 0.5022 0.5569 0.6056 0.6490 0.7417 0.7692 0.7979 0.7903 0.8039 0.8255 0.8446 0.8617 0.8769 0.8905 0.9025 0.9132 0.9228	Acc Yr 1988 0.3386 0.4584 0.5565 0.6368 0.7200 0.7525 0.7484 0.8283 0.8600 0.8905 0.9103 0.9266 0.9399 0.9597 0.9597 0.9670 0.9730 0.9779	Acc Yr 1989 0.4402 0.5050 0.5623 0.7318 0.7262 0.7210 0.7461 0.8160 0.8563 0.8150 0.8354 0.8721 0.8869 0.9000 0.9116 0.9218 0.9309	Acc Yr 1990 0.3736 0.4784 0.7829 0.7612 0.8179 0.8264 0.8229 0.8733 0.8841 0.8795 0.8997 0.9165 0.9304 0.9421 0.9518 0.9598 0.9666 0.9722	Acc Yr 1991 0.3438 0.7424 0.7867 0.7941 0.8173 0.8302 0.8675 0.9047 0.9013 0.8891 0.9090 0.9253 0.9387 0.9497 0.9587 0.9661 0.9722 0.9772	Acc Yr 1992 0.6295 0.7683 0.8094 0.8343 0.8751 0.8828 0.8890 0.9059 0.9302 0.9261 0.9443 0.9581 0.9684 0.9762 0.9821 0.9865 0.9898	Acc Yr 1993 0.6490 0.7014 0.7310 0.7593 0.8077 0.8678 0.8945 0.9182 0.9144 0.9080 0.9272 0.9423 0.9544 0.9639 0.9714 0.9774 0.9821 0.9858	Acc Yr 1994 0.6110 0.6836 0.7314 0.7623 0.8197 0.8689 0.8827 0.8925 0.9144 0.9266 0.9448 0.9585 0.9688 0.9765 0.9824 0.9867 0.9900 0.9925	Acc Yr 1995 0.6217 0.7402 0.8365 0.8892 0.9069 0.9142 0.8978 0.9132 0.9326 0.9504 0.9635 0.9732 0.9803 0.9803 0.9893 0.9921
Report  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	E Payment Patter Acc Yr 1983  0.4216  0.4713  0.5167  0.5582  0.5962  0.6309  0.6626  0.7181  0.7423  0.7644  0.7847  0.8032  0.8201  0.8355  0.8497  0.8626  0.8744  0.8852  0.8950  0.9041	n to Report 20 Acc Yr 1984 0.3407 0.3806 0.4181 0.4534 0.4865 0.5175 0.5468 0.5742 0.6980 0.6242 0.6470 0.6683 0.8884 0.7073 0.7250 0.7417 0.7573 0.7720 0.7858 0.7988 0.8109	Acc Yr 1985 0.4397 0.4985 0.5511 0.5981 0.6403 0.718 0.7080 0.7552 0.7933 0.8150 0.8344 0.8518 0.8673 0.8812 0.8937 0.9048 0.9148 0.9237 0.9317 0.9389	Acc Yr 1986 0.4403 0.5047 0.6121 0.6567 0.9962 0.7199 0.7859 0.7846 0.8137 0.8351 0.8541 0.8709 0.8857 0.9208 0.9208 0.9299 0.9380 0.9451 0.9514	Acc Yr 1987 0.4407 0.5022 0.5569 0.6056 0.6490 0.7417 0.7692 0.7979 0.7903 0.8039 0.8255 0.8446 0.8617 0.8769 0.8905 0.9132 0.9132 0.9228 0.9312 0.9388 0.9455	Acc Yr 1988 0.3386 0.4584 0.5565 0.6368 0.7200 0.7525 0.7484 0.8283 0.8600 0.8905 0.9103 0.9266 0.9399 0.9597 0.9597 0.9770 0.9730 0.9779 0.9819 0.9852 0.9878	Acc Yr 1989 0.4402 0.5050 0.5623 0.7318 0.7262 0.7210 0.7461 0.8160 0.8563 0.8150 0.8364 0.8554 0.8721 0.8869 0.9000 0.9116 0.9218 0.9389 0.9389 0.9459 0.9522	Acc Yr 1990 0.3736 0.4784 0.7829 0.7612 0.8179 0.8264 0.8229 0.8733 0.8841 0.8795 0.8997 0.9165 0.9304 0.9421 0.9518 0.9598 0.9666 0.9722 0.9768 0.9807 0.9839	Acc Yr 1991 0.3438 0.7424 0.7867 0.7941 0.8173 0.8302 0.8675 0.9047 0.9013 0.8891 0.9090 0.9253 0.9387 0.9497 0.9587 0.9661 0.9722 0.9772 0.9813 0.9846	Acc Yr 1992 0.6295 0.7683 0.8094 0.8343 0.8751 0.8828 0.8890 0.9059 0.9302 0.9261 0.9443 0.9581 0.9884 0.9762 0.9821 0.9865 0.9898 0.9923 0.9942 0.9957	Acc Yr 1993 0.6490 0.7014 0.7310 0.7593 0.8077 0.8678 0.8945 0.9182 0.9144 0.9080 0.9272 0.9423 0.9544 0.9639 0.9714 0.9774 0.9821 0.9858 0.9888 0.9981	Acc Yr 1994 0.6110 0.6836 0.7314 0.7623 0.8197 0.8689 0.8827 0.8925 0.9144 0.9266 0.9448 0.9585 0.9688 0.9765 0.9824 0.9867 0.9900 0.9925 0.9944 0.9958	Acc Yr 1995 0.6217 0.7402 0.8365 0.8892 0.9069 0.9142 0.8829 0.8978 0.9132 0.9504 0.9535 0.9732 0.9803 0.9803 0.9803 0.9803 0.9921 0.9942 0.9957 0.9969
Report  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	Payment Patter Acc Yr 1983  0.4216 0.4713 0.5167 0.5582 0.5962 0.6309 0.6626 0.6916 0.7181 0.7423 0.7644 0.7847 0.8032 0.8201 0.8355 0.8497 0.8626 0.8744 0.8852 0.8950 0.9041	71 to Report 20 Acc Yr 1984 0.3407 0.3806 0.4181 0.4534 0.4865 0.5175 0.5468 0.5742 0.6980 0.6242 0.6470 0.6683 0.6884 0.7073 0.7250 0.7417 0.7573 0.7720 0.7858 0.7988 0.8109	Acc Yr 1985 0.4397 0.4985 0.5511 0.5981 0.6403 0.6780 0.7118 0.7080 0.7552 0.7933 0.8150 0.8344 0.8518 0.8673 0.8812 0.8937 0.9048 0.9148 0.9237 0.9317	Acc Yr 1986 0.4403 0.5047 0.5617 0.6121 0.6567 0.6962 0.7199 0.7859 0.7846 0.8137 0.8351 0.8541 0.8709 0.8857 0.8989 0.9105 0.9208 0.9299 0.9380 0.9451 0.9514	Acc Yr 1987 0.4407 0.5022 0.5569 0.6056 0.4490 0.7417 0.7692 0.7979 0.7903 0.8039 0.8255 0.8446 0.8617 0.8769 0.8905 0.9025 0.9132 0.9228 0.9312 0.9388 0.9455	Acc Yr 1988 0.3386 0.4584 0.5565 0.6368 0.7200 0.7525 0.7484 0.8283 0.8600 0.8905 0.9103 0.9266 0.9399 0.9597 0.9597 0.9770 0.9730 0.9779 0.9819 0.9852 0.9878	Acc Yr 1989 0.4402 0.5050 0.5623 0.7318 0.7262 0.7210 0.7461 0.8160 0.8563 0.8150 0.8364 0.8554 0.8721 0.8869 0.9000 0.9116 0.9218 0.9389 0.9389 0.9459 0.9522	Acc Yr 1990 0.3736 0.4784 0.7829 0.7612 0.8179 0.8264 0.8229 0.8733 0.8841 0.8795 0.8997 0.9165 0.9304 0.9421 0.9518 0.9598 0.9666 0.9722 0.9768 0.9807 0.9839	Acc Yr 1991 0.3438 0.7424 0.7867 0.7941 0.8173 0.8302 0.8675 0.9047 0.9013 0.8891 0.9090 0.9253 0.9387 0.9497 0.9587 0.9661 0.9722 0.9772 0.9813 0.9846	Acc Yr 1992 0.6295 0.7683 0.8094 0.8343 0.8751 0.8828 0.8890 0.9059 0.9302 0.9261 0.9443 0.9581 0.9884 0.9762 0.9821 0.9865 0.9898 0.9923 0.9942 0.9957	Acc Yr 1993 0.6490 0.7014 0.7310 0.7593 0.8077 0.8678 0.8945 0.9182 0.9144 0.9080 0.9272 0.9423 0.9544 0.9639 0.9714 0.9774 0.9821 0.9858 0.9888 0.9981	Acc Yr 1994 0.6110 0.6836 0.7314 0.7623 0.8197 0.8689 0.8827 0.8925 0.9144 0.9266 0.9448 0.9585 0.9688 0.9765 0.9824 0.9867 0.9900 0.9925 0.9944 0.9958	Acc Yr 1995 0.6217 0.7402 0.8365 0.8892 0.9069 0.9142 0.8829 0.8978 0.9132 0.9504 0.9535 0.9732 0.9803 0.9803 0.9803 0.9803 0.9921 0.9942 0.9957 0.9969

B = .0242

At report 11 cumulative payment rato for 1984 is (1-A)+BC or .6242 + .0242x,9395]=.6470

At report 12 cumulative payment rato for 1984 is (1-A)+B(C+C^2) or .6242 + .0242x [.9395+.8826]=.6683

At report 13 cumulative payment rato for 1984 is (1-A)+B(C+C^2+C^3) or .6242 + .0242x [.9395+.8826+.8291]=.6884

and

C = A / (A+B).

so that

Source: Exhibit VI-D Page 15

For example: For 1984: A = .3758

## Coal Mine Compensation Rating Bureau Traumatic - Medical Losses

## Payment Patterns based on Relation of Paid to Reported Losses for Sample #

Medical Losses as of 4-30-93		cal Losses as a					osses as o					Losses as of				l Losses as a	
Acc. Paid O/S Total	Acc. Paid	O/S	Total		Acc.	Paid	O/S	Total		Acc.	Paid	O/S	Total	Acc.	Paid	O/S	Total
<u>Year Losses Losses</u> <u>Losses</u>	Year Losse		Losses ( 040 700		Year 1005	Losses	Losses	Losses		Year 1007	Losses 2 (27 475	Losses	Losses	<u>Year</u>	Losses	Losses	Losses
1983 3,593,056 1,247,215 4,840,271 1984 3,635,897 1,572,958 5,208,855	1984 3,770,7 1985 2,241,7				1985 1986		592,983 703,796	2,868,504 3,267,519			2,627,475 3,335,177	601,432 885,063			37 3,128,219 38 3,223,663		3,891,523 3,748,439
1985 2,180,035 899,294 3,079,329	1986 2,522,8		3,210,266		1987	3,311,135		4,150,020		1988	3,262,933		3,939,197		3,223,663 39 5,801,157		7,108,848
1986 2,390,521 930,238 3,320,759	1987 3,243,1				1988	3,221,252				1989		1,960,033			0 5,994,292		
1987 3,164,726 1,102,091 4,266,817	1988 3,144,2		4,178,677			5,624,130				1990		1,234,867			70 5,774,272		
1988 3,005,631 1,169,106 4,174,737	1989 5,539,3					5,653,864						1,183,464			2 5,469,644		6,250,562
1989 5,171,723 1,894,952 7,066,675		13 1,673,604				5,105,265					5,371,615				3 4,244,152		
1990 4,988,099 1,383,343 6,371,442	1991 4,777,3					5,234,023					4,161,675				4 3,518,063		
1991 4,155,610 1,441,756 5,597,366	1992 4,719,2					3,796,107					3,194,721				25 2,894,764		
1992 3,417,548 2,011,232 5,428,780	1993 2,820,4					2,260,605					2,205,072				6 2,486,791		
1772 67117/616 2/6117/262 67126/766	1770 2,020,	1,020,200	1,0 10,070		.,,,	2,200,000	1,107,011	0,0,7,0.0		.,,,	2,200,072	.,	0,0 10,7 10	.,,	2,100,771	1,000,201	0,7,0,002
Medical Losses as of 4-30-98	Medi	cal Losses as a	f 4-30-99			Medical La	osses as of	4-30-2000			Medical La	osses as of	4-30-2001		Medical	Losses as of	f 4-30-2002
Acc. Paid O/S Total	Acc. Paid	O/S	Total		Acc.	Paid	O/S	Total	•	Acc.	Paid	O/S	Total	Acc.	Paid	O/S	Total
Year Losses Losses Losses	Year Losse	Losses	Losses		<u>Year</u>	Losses	Losses	Losses		Year	Losses	Losses	Losses	<u>Year</u>	Losses	Losses	Losses
1988 3,289,816 404,363 3,694,179	1989 6,179,8		7,582,764			6,264,568		7,122,834		1991	5,983,048		6,729,555		2 6,091,978		6,578,248
1989 6,003,061 1,007,133 7,010,194	1990 6,294,2	36 825,406	7,119,642		1991	5,673,497	621,263	6,294,760		1992	5,972,915	447,893	6,420,808	199	3 4,767,316	446,071	5,213,387
1990 6,185,121 897,556 7,082,677	1991 5,697,6		6,297,604			5,819,201	604,606	6,423,807				420,747	5,145,505		4,400,461		4,930,292
1991 5,554,784 848,200 6,402,984	1992 5,833,0	10 728,123	6,561,133		1993	4,617,165	544,279	5,161,444		1994	4,304,736	572,134	4,876,870	199	5 3,600,867	477,739	4,078,606
1992 5,689,456 755,496 6,444,952	1993 4,663,2	95 710,514	5,373,809		1994	4,185,282	631,401	4,816,683		1995	3,535,494	331,935	3,867,429	199	6 3,814,393	583,462	4,397,855
1993 4,551,509 1,083,707 5,635,216	1994 4,028,2	94 885,823	4,914,117		1995	3,480,029	357,268	3,837,297		1996	3,734,865	726,810	4,461,675	199	7 2,962,959	501,313	3,464,272
1994 3,799,152 1,184,953 4,984,105	1995 3,347,9	14 417,186	3,765,100		1996	3,640,989	870,454	4,511,443		1997	2,811,693	504,982	3,316,675	199	8 3,180,315	532,014	3,712,329
1995 3,190,562 623,518 3,814,080	1996 3,482,0		4,368,769		1997	2,724,704	611,091	3,335,795		1998	3,061,322	556,829	3,618,151	199	9 2,657,390	528,738	3,186,128
1996 3,184,587 875,309 4,059,896	1997 2,455,2		3,145,142			2,800,503		3,620,736			2,438,830		3,012,934		00 2,180,533		2,710,166
1997 1,830,550 1,043,667 2,874,217	1998 21253	11 1,229,373	3,354,684		1999	1,808,223	914,936	2,723,159		2000	1,675,345	792,474	2,467,819	200	1,390,454	799,916	2,190,370
1777 1,030,330 1,043,007 2,074,217	1770 2,125,0	, ,,,,,															
Medical Losses as of 4-30-2003	Medic	al Losses as of	4-30-2004		•	Medical La			=								
Acc. Medical Losses as of 4-30-2003 Paid O/S Total	Acc. Medic	al Losses as of O/S	4-30-2004 Total		Acc.	Paid	O/S	Total	-								
Medical Losses as of 4-30-2003           Acc.         Paid O/S Total           Year         Losses Losses Losses	Acc. Paid Year Losse	al Losses as of O/S Losses	4-30-2004 Total Losses		Year	Paid Losses	O/S Losses	Total Losses	-								
Medical Losses as of 4-30-2003           Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283	Acc. Paid Year Losse 1994 4,766,7	O/S Losses 28 377,387	4-30-2004 Total Losses 5,144,115		<u>Year</u> 1995	Paid <u>Losses</u> 4,354,014	O/S Losses 314,520	Total Losses 4,668,534									
Acc.         Paid O/S Total           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726	Acc. Paid Year Losse 1994 4,766,7 1995 4,278,8	O/S O/S Losses 28 377,387 16 406,618	4-30-2004 Total Losses 5,144,115 4,685,434		<u>Year</u> 1995 1996	Paid <u>Losses</u> 4,354,014 4,239,562	O/S Losses 314,520 386,153	Total <u>Losses</u> 4,668,534 4,625,715									
Acc.         Paid O/S Total           1993         5,421,732         549,551         5,971,283           1995         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403	Acc. Poid Year Losse 1994 4,766,7 1995 4,278,8 1996 4,217,4	O/S Losses 28 377,387 16 406,618 81 399,604	4-30-2004 Total <u>Losses</u> 5,144,115 4,685,434 4,617,085		<u>Year</u> 1995 1996 1997	Paid Losses 4,354,014 4,239,562 3,648,054	O/S Losses 314,520 386,153 303,421	Total <u>Losses</u> 4,668,534 4,625,715 3,951,475	·								
Medical Losses as of 4-30-2003           Acc.         Paid         O/S         Total           Year         Losses         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161	Acc. Paid Year Losse 1994 4,766,7 1995 4,278,8 1996 4,217,4 1997 3,596,6	O/S Losses 28 377,387 16 406,618 81 399,604 16 335,600	4-30-2004 Total <u>Losses</u> 5,144,115 4,685,434 4,617,085 3,932,216		<u>Year</u> 1995 1996 1997 1998	Paid <u>Losses</u> 4,354,014 4,239,562 3,648,054 3,494,885	O/S <u>Losses</u> 314,520 386,153 303,421 265,838	Total <u>Losses</u> 4,668,534 4,625,715 3,951,475 3,760,723									
Medical Losses as of 4-30-2003           Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161           1997         3,474,497         503,808         3,978,305	Acc. Paid Year Losse 1994 4,766,7 1995 4,278,8 1996 4,217,4 1997 3,596,6 1998 3,456,7	O/S Losses 28 377,387 16 406,618 81 399,604 16 335,600 30 304,533	4-30-2004 Total Losses 5,144,115 4,685,434 4,617,085 3,932,216 3,761,263		<u>Year</u> 1995 1996 1997 1998 1999	Paid <u>Losses</u> 4,354,014 4,239,562 3,648,054 3,494,885 3,075,426	O/S <u>Losses</u> 314,520 386,153 303,421 265,838 102,660	Total <u>Losses</u> 4,668,534 4,625,715 3,951,475 3,760,723 3,178,086									
Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161           1997         3,474,497         503,808         3,978,305           1998         3,333,995         375,158         3,709,153	Acc. Poid Year Losse 1994 4,766,7 1995 4,278,8 1996 4,217,4 1997 3,596,6 1998 3,456,7 1999 3,021,4	al Losses as of O/S Losses 28 377,387 16 406,618 81 399,604 16 335,600 30 304,533 24 167,357	4-30-2004 Total <u>Losses</u> 5,144,115 4,685,434 4,617,085 3,932,216 3,761,263 3,188,781		<u>Year</u> 1995 1996 1997 1998 1999 2000	Paid <u>Losses</u> 4,354,014 4,239,562 3,648,054 3,494,885 3,075,426 2,617,138	O/S <u>Losses</u> 314,520 386,153 303,421 265,838 102,660 268,392	Total <u>Losses</u> 4,668,534 4,625,715 3,951,475 3,760,723 3,178,086 2,885,530									
Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161           1997         3,474,497         503,808         3,978,305           1998         3,333,995         375,158         3,709,153           1999         2,844,763         212,900         3,057,663	Acc. Poid   Medic   Acc. Poid   Year   Losse   1994   4,766,7   1995   4,217,4   1997   3,596,6   1998   3,456,7   1999   3,021,4   2000   2,491,7	al Losses as of O/S	4-30-2004 Total Losses 5,144,115 4,685,434 4,617,085 3,732,216 3,761,263 3,188,781 2,836,912		Year 1995 1996 1997 1998 1999 2000 2001	Paid <u>Losses</u> 4,354,014 4,239,562 3,648,054 3,494,885 3,075,426 2,617,138 2,326,207	O/S Losses 314,520 386,153 303,421 265,838 102,660 268,392 303,703	Total <u>Losses</u> 4,668,534 4,625,715 3,951,475 3,760,723 3,178,086 2,885,530 2,629,910									
Medical Losses as of 4-30-2003           Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161           1997         3,474,497         503,808         3,978,305           1998         3,333,995         375,158         3,709,153           1999         2,844,763         212,900         3,057,663           2000         2,352,615         465,772         2,818,387	Acc. Paid Year Losse 1994 4,766,7 1995 4,278,8 1996 4,217,1 1997 3,596,6 1998 3,456,7 1999 3,021,4 2000 2,491,7 2001 2,236,3	al Losses as of O/S  C/S  Losses  28 377.387  16 406,618  81 399,604  16 335,600  304,533  24 167,357  59 345,153  99 409,939	4-30-2004 Total Losses 5,144,115 4,685,434 4,617,085 3,932,216 3,761,263 3,188,781 2,836,912 2,646,248		Year 1995 1996 1997 1998 1999 2000 2001 2002	Paid Losses 4,354,014 4,239,562 3,648,054 3,494,885 3,075,426 2,617,138 2,326,207 3,007,596	O/S Losses 314,520 386,153 303,421 265,838 102,660 268,392 303,703 755,241	Total <u>Losses</u> 4,668,534 4,625,715 3,951,475 3,760,723 3,178,086 2,885,530 2,629,910 3,762,837									
Medical Losses as of 4-30-2003           Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161           1997         3,474,497         503,808         3,978,305           1998         3,333,995         375,158         3,709,153           1999         2,844,763         212,900         3,057,663           2000         2,352,615         465,772         2,818,387           2001         2,027,699         561,554         2,589,253	Acc. Pedic Acc. 1994 4,766,7 1995 4,278,8 1996 4,217,4 1997 3,596,6 1998 3,456,7 1999 3,021,4 2000 2,491,7 2001 2,236,6 2002 2,673,5 2002 2,673,5 2002	Coll Losses as of O/S  Coll Losses 28 377,387 16 406,618 81 399,604 16 335,600 30 304,533 24 167,357 345,153 09 409,939 10 935,929	4-30-2004 Total Losses 5,144,115 4,685,434 4,617,085 3,932,216 3,761,263 3,188,781 2,836,912 2,646,248 3,609,439		Year 1995 1996 1997 1998 1999 2000 2001 2002 2003	Paid Losses 4,354,014 4,239,562 3,648,054 3,494,885 3,075,426 2,617,138 2,326,207 3,007,596 2,121,377	O/S Losses 314,520 386,153 303,421 265,838 102,660 268,392 303,703 755,241 691,104	Total <u>Losses</u> 4,668,534 4,625,715 3,951,475 3,760,723 3,178,086 2,885,530 2,629,910 3,762,837 2,812,481									
Medical Losses as of 4-30-2003           Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161           1997         3,474,497         503,808         3,978,305           1998         3,333,995         375,158         3,709,153           1999         2,844,763         212,900         3,057,663           2000         2,352,615         465,772         2,818,387	Acc. Paid Year Losse 1994 4,766,7 1995 4,278,8 1996 4,217,1 1997 3,596,6 1998 3,456,7 1999 3,021,4 2000 2,491,7 2001 2,236,3	Coll Losses as of O/S  Coll Losses 28 377,387 16 406,618 81 399,604 16 335,600 30 304,533 24 167,357 345,153 09 409,939 10 935,929	4-30-2004 Total Losses 5,144,115 4,685,434 4,617,085 3,932,216 3,761,263 3,188,781 2,836,912 2,646,248		Year 1995 1996 1997 1998 1999 2000 2001 2002 2003	Paid Losses 4,354,014 4,239,562 3,648,054 3,494,885 3,075,426 2,617,138 2,326,207 3,007,596	O/S Losses 314,520 386,153 303,421 265,838 102,660 268,392 303,703 755,241 691,104	Total <u>Losses</u> 4,668,534 4,625,715 3,951,475 3,760,723 3,178,086 2,885,530 2,629,910 3,762,837									
Medical Losses as of 4-30-2003           Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161           1997         3,474,497         503,808         3,978,305           1998         3,333,995         375,158         3,709,153           1999         2,844,763         212,900         3,057,663           2000         2,352,615         465,772         2,818,387           2001         2,027,699         561,554         2,589,253	Acc. Pedic Acc. 1994 4,766,7 1995 4,278,8 1996 4,217,4 1997 3,596,6 1998 3,456,7 1999 3,021,4 2000 2,491,7 2001 2,236,6 2002 2,673,5 2002 2,673,5 2002	Coll Losses as of O/S  Coll Losses 28 377,387 16 406,618 81 399,604 16 335,600 30 304,533 24 167,357 345,153 09 409,939 10 935,929	4-30-2004 Total Losses 5,144,115 4,685,434 4,617,085 3,932,216 3,761,263 3,188,781 2,836,912 2,646,248 3,609,439		Year 1995 1996 1997 1998 1999 2000 2001 2002 2003	Paid Losses 4,354,014 4,239,562 3,648,054 3,494,885 3,075,426 2,617,138 2,326,207 3,007,596 2,121,377	O/S Losses 314,520 386,153 303,421 265,838 102,660 268,392 303,703 755,241 691,104	Total <u>Losses</u> 4,668,534 4,625,715 3,951,475 3,760,723 3,178,086 2,885,530 2,629,910 3,762,837 2,812,481									
Medical Losses as of 4-30-2003           Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161           1997         3,474,497         503,808         3,978,305           1998         3,333,995         375,158         3,709,153           1999         2,844,763         212,900         3,057,663           2000         2,352,615         465,772         2,818,387           2001         2,027,699         561,554         2,589,253	Acc. Pedic Acc. 1994 4,766,7 1995 4,278,8 1996 4,217,4 1997 3,596,6 1998 3,456,7 1999 3,021,4 2000 2,491,7 2001 2,236,6 2002 2,673,5 2002 2,673,5 2002	Coll Losses as of O/S  Coll Losses 28 377,387 16 406,618 81 399,604 16 335,600 30 304,533 24 167,357 345,153 09 409,939 10 935,929	4-30-2004 Total Losses 5,144,115 4,685,434 4,617,085 3,932,216 3,761,263 3,188,781 2,836,912 2,646,248 3,609,439		Year 1995 1996 1997 1998 1999 2000 2001 2002 2003	Paid Losses 4,354,014 4,239,562 3,648,054 3,494,885 3,075,426 2,617,138 2,326,207 3,007,596 2,121,377	O/S Losses 314,520 386,153 303,421 265,838 102,660 268,392 303,703 755,241 691,104	Total <u>Losses</u> 4,668,534 4,625,715 3,951,475 3,760,723 3,178,086 2,885,530 2,629,910 3,762,837 2,812,481									
Medical Losses as of 4-30-2003           Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161           1997         3,474,497         503,808         3,978,305           1998         3,333,995         375,158         3,709,153           1999         2,844,763         212,900         3,057,663           2000         2,352,615         465,772         2,818,387           2001         2,027,699         561,554         2,589,253	Acc. Point Acc. Point Acc. Losse 1994 4,766,7 1995 4,278,8 1996 4,217,4 1997 3,596,6 1998 3,456,7 1999 3,021,4 2000 2,491,7 2001 2,2363,2 2002 2,673,2 2003 1,481,5 As of	Coll Losses as of O/S  Cosses  28 377,387  16 406,618  399,604  16 335,600  30 304,533  24 167,357  59 345,153  09 409,939  10 935,929  66 1,097,747  As of	4-30-2004 Total Losses 5,144,115 4,685,434 4,617,085 3,932,216 3,761,263 3,188,781 2,836,912 2,646,248 3,609,439 2,579,313	As of	Year 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004	Paid <u>Losses</u> 4,354,014 4,239,562 3,648,054 3,075,426 2,617,138 2,326,207 3,007,596 2,121,377 2,435,389 As of	O/S Losses 314,520 386,153 303,421 265,838 102,660 268,392 303,703 755,241 691,104 753,720	Total <u>Losses</u> 4,668,534 4,625,715 3,751,475 3,760,723 3,178,086 2,885,530 2,629,910 3,762,837 2,812,481 3,189,109	As of	As of	As of	<b>As of</b>	As of				
Medical Losses as of 4-30-2003           Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161           1997         3,474,497         503,808         3,978,305           1998         3,333,995         375,158         3,709,153           1999         2,844,763         212,900         3,057,663           2000         2,352,615         465,772         2,818,387           2001         2,027,699         561,554         2,589,253	Acc. Post Post Post Post Post Post Post Post	Coll Losses as of O/S  Coll Losses 28 377,387 16 406,618 81 399,604 16 335,600 30 304,533 24 167,357 59 345,153 910 935,929 66 1,097,747  As of 3	4-30-2004 Total Losses 5,144,115 4,685,434 4,617,085 3,932,216 3,761,263 3,188,781 2,836,912 2,646,248 3,609,439 2,579,313 As of 4-30-95	4-30-96	Year 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 As of 4-30-97	Paid <u>Losses</u> 4,354,014 4,239,562 3,648,054 3,494,885 3,075,426 2,617,138 2,326,207 3,007,596 2,121,377 2,435,389 As of 4-30-98	O/S Losses 314,520 386,153 303,421 265,838 102,669 268,392 303,703 755,241 691,104 753,720	Total Losses 4,668,538 4,625,715 3,951,475 3,760,723 3,178,086 2,885,530 2,629,910 3,762,837 2,812,481 3,189,109 As of 4-30-00	4-30-01	4-30-02	4-30-03	4-30-04	4-30-05				
Medical Losses as of 4-30-2003           Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161           1997         3,474,497         503,808         3,978,305           1998         3,333,995         375,158         3,709,153           1999         2,844,763         212,900         3,057,663           2000         2,352,615         465,772         2,818,387           2001         2,027,699         561,554         2,589,253	Acc. Pictor Acc. P	al Losses as of O/S	4-30-2004 Total Losses 5,144,115 4,685,434 4,617,085 3,782,216 3,761,263 3,188,781 2,836,912 2,646,248 3,609,439 2,579,313 As of 4-30-95 0,7933	<u>4-30-96</u> 0.8137	Year 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 As of 4-30-97 0.8039	Paid Losses 4,354,014 4,239,562 3,648,054 3,494,885 3,075,426 2,617,138 2,326,207 3,007,596 2,121,377 2,435,389 As of 4-30-98 0.8905	O/S Losses 314,520 386,153 303,421 265,838 102,660 268,392 303,703 755,241 691,104 753,720 As of 4-30-99 0.8150	Total Losses 4,668,534 4,625,715 3,951,475 3,760,723 3,178,086 2,885,530 2,629,910 3,762,837 2,812,481 3,189,109 As of 4-30-00 0,8795	<u>4-30-01</u> 0.8891	<u>4-30-02</u> 0.9261	<u>4-30-03</u> 0.9080	<u>4-30-04</u> 0.9266	<u>4-30-05</u> 0.9326				
Medical Losses as of 4-30-2003           Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161           1997         3,474,497         503,808         3,978,305           1998         3,333,995         375,158         3,709,153           1999         2,844,763         212,900         3,057,663           2000         2,352,615         465,772         2,818,387           2001         2,027,699         561,554         2,589,253	Acc. Point Acc. Point Acc. Losse 1994 4,766,7 1995 4,278,8 1996 4,217,4 1997 3,596,6 1998 3,456,7 1999 3,021,4 2000 2,491,7 2001 2,236,5 2002 2,673,5 2003 1,481,5 Report 4-30-9 10th 0,65	al Losses as of O/S	4-30-2004 Total Losses 5,144,115 4,685,434 4,617,085 3,782,216 3,761,263 3,188,781 2,836,912 2,646,248 3,609,439 2,579,313 As of 4-30-95 0,7933 0,7846	4-30-96 0.8137 0.7903	Year 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004  As of 4-30-97 0.8039 0.8600	Paid Losses 4,354,014 4,239,562 3,648,054 3,494,885 3,075,426 2,617,138 2,326,207 3,007,596 2,121,377 2,435,389 As of 4-30-98 0,8563	O/S Losses 314,520 386,153 303,421 265,838 102,660 268,392 303,703 755,241 691,104 753,720 As of 4-30-99 0.8150 0.8841	Total <u>Losses</u> 4,668,534 4,668,534 4,625,715 3,951,475 3,760,723 3,178,086 2,885,530 2,629,910 3,762,837 2,812,481 3,189,109 As of 4-30-00 0,8795 0,9013	4-30-01 0.8891 0.9302	4-30-02 0.9261 0.9144	4-30-03 0.9080 0.9144	4-30-04 0.9266 0.9132	<u>4-30-05</u> 0.9326 0.9165				
Medical Losses as of 4-30-2003           Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161           1997         3,474,497         503,808         3,978,305           1998         3,333,995         375,158         3,709,153           1999         2,844,763         212,900         3,057,663           2000         2,352,615         465,772         2,818,387           2001         2,027,699         561,554         2,589,253	Acc. Poster 1994 4,766,7 1995 4,278,8 1996 4,217,4 1997 3,594,6 1998 3,456,7 1999 3,021,4 2000 2,491,7 2001 2,2363,2 2002 2,673,2 2003 1,481,5 As of Report 4-30-9 10th 0.74 9th 0.65 8th 0.70	DI Losses as of O/S  O/S  Losses 28 377,387 16 406,618 81 399,604 16 335,600 30 304,533 24 167,357 59 345,153 09 409,939 10 935,929 66 1,097,747  As of 4-30-94 0.6242 80 0.7552 80 0.7859	4-30-2004 Total Losses 5,144,115 4,685,434 4,617,085 3,932,216 3,761,263 3,188,781 2,836,912 2,646,248 3,609,439 2,579,313 As of 4-30-95 0,7933 0,7846 0,7979	4-30-96 0.8137 0.7903 0.8283	Year 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004  As of 4-30-97 0.8039 0.84600 0.8160	Paid <u>Losses</u> 4,354,014 4,239,562 3,648,054 3,494,885 3,075,426 2,617,138 2,326,207 3,007,596 2,121,377 2,435,389 As of <u>4-30-98</u> 0,8905 0,8563 0,8733	O/S Losses 314,520 386,153 303,421 265,838 102,660 268,392 303,703 755,241 691,104 753,720 As of 4-30-99 0.850 0.8841 0.9047	Total Losses 4.668,534 4,625,715 3,951,475 3,760,723 3,178,086 2,885,530 2,629,910 3,762,837 2,812,481 3,189,109 As of 4-30-00 0,8795 0,9013 0,9059	4-30-01 0.8891 0.9302 0.9182	4-30-02 0.9261 0.9144 0.8925	4-30-03 0.9080 0.9144 0.8978	4-30-04 0.9266 0.9132 0.9135	4-30-05 0.9326 0.9165 0.9232				
Medical Losses as of 4-30-2003           Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161           1997         3,474,497         503,808         3,978,305           1998         3,333,995         375,158         3,709,153           1999         2,844,763         212,900         3,057,663           2000         2,352,615         465,772         2,818,387           2001         2,027,699         561,554         2,589,253	Acc. Poster As of Report 10th No.77 1th 0.77 17964 1.038 1.0	Coll Losses as of O/S	4-30-2004 Total Losses 5,144,115 4,685,434 4,617,085 3,732,216 3,761,263 3,188,781 2,836,912 2,646,248 3,609,439 2,579,313 As of 4-30-95 0,7933 0,7846 0,7979 0,7484	4-30-96 0.8137 0.7903 0.8283 0.7461	Year 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004  As of 4-30-97 0.8039 0.8600 0.8160 0.8229	Paid <u>Losses</u> 4,354,014 4,239,562 3,648,054 3,494,885 3,075,426 2,617,138 2,326,207 3,007,596 2,121,377 2,435,389 As of <u>4-30-98</u> 0.8905 0.8563 0.8733 0.8675	O/S Losses 314,520 386,153 303,421 265,838 102,660 268,392 303,703 755,241 691,104 753,720 As of 4-30-99 0.8150 0.8841 0.9047 0.8890	Total Losses 4,668,534 4,625,715 3,951,475 3,760,723 3,178,086 2,885,530 2,629,910 3,762,837 2,812,481 3,189,109 As of 4-30-00 0,8795 0,9013 0,9059 0,8945	4-30-01 0.8891 0.9302 0.9182 0.8827	4-30-02 0.9261 0.9144 0.8925 0.8829	4-30-03 0.9080 0.9144 0.8978 0.9123	4-30-04 0.9266 0.9132 0.9135 0.9147	4-30-05 0.9326 0.9165 0.9232 0.9293				
Medical Losses as of 4-30-2003           Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161           1997         3,474,497         503,808         3,978,305           1998         3,333,995         375,158         3,709,153           1999         2,844,763         212,900         3,057,663           2000         2,352,615         465,772         2,818,387           2001         2,027,699         561,554         2,589,253	Acc. Pear Losse 1994 4,766,7 1995 4,278,8 1996 4,217,4 1997 3,596,6 1998 3,456,7 1999 3,021,4 2000 2,491,7 2001 2,236,5 2002 2,673,5 2003 1,481,5 10th 0,77 19th 0,65 8th 0,77 16th 0,77 1994 1,055 1998 1,055 1,0	Coll Losses as of   Coll Cosses	4-30-2004 Total Losses 5,144,115 4,685,434 4,617,085 3,732,216 3,761,263 3,188,781 2,836,912 2,646,248 3,609,439 2,579,313 As of 4-30-95 0,7933 0,7846 0,7979 0,7484 0,7210	4-30-96 0.8137 0.7903 0.8283 0.7461 0.8264	Year 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004  As of 4-30-97 0.8039 0.8460 0.8160 0.8229 0.8302	Paid Losses 4,354,014 4,239,562 3,648,054 3,494,885 3,075,426 2,617,138 2,326,207 3,007,596 2,121,377 2,435,389 As of 4-30-98 0.8905 0.8563 0.8733 0.8675 0.8828	O/S Losses 314,520 386,153 303,421 265,838 102,669 268,392 303,703 755,241 691,104 753,720 As of 4-30-99 0.8841 0.9047 0.8890 0.8678	Total Losses 4,668,534 4,668,534 4,625,715 3,951,475 3,760,723 3,178,086 2,885,530 2,629,910 3,762,837 2,812,481 3,189,109 As of 4-30-00 0,8795 0,9013 0,9059 0,8945 0,8689	4-30-01 0.8891 0.9302 0.9182 0.8827 0.9142	4-30-02 0.9261 0.9144 0.8925 0.8829 0.8673	4-30-03 0.9080 0.9144 0.8978 0.9123 0.8734	4-30-04 0.9266 0.9132 0.9135 0.9147 0.9190	4-30-05 0.9326 0.9165 0.9232 0.9293 0.9677				
Medical Losses as of 4-30-2003           Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161           1997         3,474,497         503,808         3,978,305           1998         3,333,995         375,158         3,709,153           1999         2,844,763         212,900         3,057,663           2000         2,352,615         465,772         2,818,387           2001         2,027,699         561,554         2,589,253	Acc. Point	Columbia   Columbia	4-30-2004 Total Losses 5,144,115 4,685,434 4,617,085 3,782,216 3,761,263 3,188,781 2,836,912 2,646,248 3,609,439 2,579,313 As of 4-30-95 0,7933 0,7846 0,7979 0,7484 0,7210 0,8179	4-30-96 0.8137 0.7903 0.8283 0.7461 0.8264 0.8173	Year   1995   1996   1997   1998   1999   2000   2001   2002   2003   2004     As of   4-30-97   0.8039   0.8600   0.8160   0.8229   0.8751	Paid Losses 4,354,014 4,239,562 3,648,054 3,494,885 3,075,426 2,617,138 2,326,207 3,007,596 2,121,377 2,435,389 As of 4-30-98 0,8905 0,8563 0,8733 0,8675 0,8828 0,8077	O/S Losses 314,520 386,153 303,421 265,838 102,660 268,392 303,703 755,241 691,104 753,720 As of 4-30-99 0.8150 0.8841 0.9047 0.8890 0.8678 0.8197	Total Losses 4,668,534 4,625,715 3,951,475 3,760,723 3,178,086 2,885,530 2,629,910 3,762,837 2,812,481 3,189,109  As of 4-30-00 0,8795 0,9013 0,9059 0,8945 0,8689 0,9069	4-30-01 0.8891 0.9302 0.9182 0.8827 0.9142 0.8371	4-30-02 0.9261 0.9144 0.8925 0.8829 0.8673 0.8553	4-30-03 0.9080 0.9144 0.8978 0.9123 0.8734 0.8989	4-30-04 0.9266 0.9132 0.9135 0.9147 0.9190 0.9475	4-30-05 0.9326 0.9165 0.9232 0.9293 0.9677 0.9070				
Medical Losses as of 4-30-2003           Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161           1997         3,474,497         503,808         3,978,305           1998         3,333,995         375,158         3,709,153           1999         2,844,763         212,900         3,057,663           2000         2,352,615         465,772         2,818,387           2001         2,027,699         561,554         2,589,253	Acc. Post	Coll Losses as of   Coll Cosses   Coll Cos	4-30-2004 Total Losses 5,144,115 4,685,434 4,617,085 3,761,263 3,188,781 2,836,912 2,646,248 3,609,439 2,579,313 As of 4-30-95 0,7933 0,7846 0,7979 0,7484 0,7210 0,8179 0,7941	4-30-96 0.8137 0.7903 0.8283 0.7461 0.8264 0.8173 0.8343	As of 4-30-97 0.8302 0.8751 0.7573	Paid Losses 4,354,014 4,239,562 3,648,054 3,494,885 2,326,207 3,007,596 2,121,377 2,435,389 As of 4-30-98 0.8905 0.8733 0.8675 0.8828 0.8077 0.7623	O/S Losses 314,520 386,153 303,421 265,838 102,660 268,392 303,703 755,241 691,104 753,720 As of 4-30-99 0.8841 0.9047 0.8890 0.8892	Total Losses 4,668,534 4,625,715 3,951,475 3,760,723 3,178,086 2,885,530 2,629,910 3,762,837 2,812,481 3,189,109 As of 4-30-00 0,8795 0,9013 0,9059 0,8945 0,8689 0,9069 0,8071	4-30-01 0.8891 0.9302 0.9182 0.8827 0.9142 0.8371 0.8477	4-30-02 0.9261 0.9144 0.8925 0.8829 0.8673 0.8553 0.8567	4-30-03 0.9080 0.9144 0.8978 0.9123 0.8734 0.8989 0.9304	4-30-04 0.9266 0.9132 0.9135 0.9147 0.9190 0.9475 0.8783	4-30-05 0.9326 0.9165 0.9232 0.9293 0.9677 0.9070 0.8845				
Medical Losses as of 4-30-2003           Acc.         Paid         O/S         Total           Year         Losses         Losses           1993         5,421,732         549,551         5,971,283           1994         4,686,069         438,657         5,124,726           1995         4,225,458         480,945         4,706,403           1996         4,176,850         401,311         4,578,161           1997         3,474,497         503,808         3,978,305           1998         3,333,995         375,158         3,709,153           1999         2,844,763         212,900         3,057,663           2000         2,352,615         465,772         2,818,387           2001         2,027,699         561,554         2,589,253	Acc. Point	Coll Losses as of   Coll Cosses	4-30-2004 Total Losses 5,144,115 4,685,434 4,617,085 3,732,216 3,761,263 3,188,781 2,836,912 2,646,248 3,609,439 2,579,313  As of 4-30-95 0,7933 0,7846 0,7979 0,7484 0,7210 0,8179 0,7941 0,8094	4-30-96 0.8137 0.7903 0.8283 0.7461 0.8264 0.8173	Year   1995   1996   1997   1998   1999   2000   2001   2002   2003   2004     As of   4-30-97   0.8039   0.8600   0.8160   0.8229   0.8751	Paid Losses 4,354,014 4,239,562 3,648,054 3,494,885 3,075,426 2,617,138 2,326,207 3,007,596 2,121,377 2,435,389 As of 4-30-98 0,8905 0,8563 0,8733 0,8675 0,8828 0,8077	O/S Losses 314,520 386,153 303,421 265,838 102,660 268,392 303,703 755,241 691,104 753,720 As of 4-30-99 0.8150 0.8841 0.9047 0.8890 0.8678 0.8197	Total Losses 4,668,534 4,625,715 3,951,475 3,760,723 3,178,086 2,885,530 2,629,910 3,762,837 2,812,481 3,189,109  As of 4-30-00 0,8795 0,9013 0,9059 0,8945 0,8689 0,9069	4-30-01 0.8891 0.9302 0.9182 0.8827 0.9142 0.8371 0.8477 0.8461	4-30-02 0.9261 0.9144 0.8925 0.8829 0.8673 0.8553	4-30-03 0.9080 0.9144 0.8978 0.9123 0.8734 0.8989	4-30-04 0.9266 0.9132 0.9135 0.9147 0.9190 0.9475	4-30-05 0.9326 0.9165 0.9232 0.9293 0.9677 0.9070				

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0.6335

0.6640 0.6789

0.6348

0.6392

0.5744

0.7637

#### Coal Mine Compensation Rating Bureau Traumatic Loss Development Paid Losses for All Classes Combined

Indemnity and Funeral Reported Paid Losses as of 04/30/17

	,																					
Report	1995	1996	1997	1998	1999 1,519,950	2000 1,745,062	2001 1,453,835	2002 2,265,522	2003 1,499,127	2004 1,585,758	2005 2,123,723	2006 1,424,937	2007 1,477,485	2008 1,883,649	2009 1,490,981	2010 1,524,765	2011 1,786,240	2012 2,050,254	2013 1,899,710	2014 4,015,185	2015 2,666,351	<u>2016</u> 2,518,076
1				2 41 / 410																		2,310,076
2			4 050 000	3,416,410	3,017,821	3,311,393	3,447,824	4,498,717	2,589,720	3,607,906	4,763,116	3,031,492	2,973,005	3,608,322	2,864,778	3,435,863	3,977,654	5,436,521	4,482,404		6,061,309	
3			4,858,303	5,057,380	4,474,822	5,285,169	5,249,852	6,269,556	4,097,105	5,068,968	6,595,737	3,990,338	4,078,233	5,798,309	4,380,163	4,339,688	6,103,091	7,383,427		10,801,053		
4		7,305,441	5,469,765	5,832,214	6,135,793	5,944,494	6,234,883	7,427,776	5,182,592	5,951,422	7,770,869	4,714,994	5,032,592	6,658,499	4,536,641	6,078,298	7,555,055	8,102,574	6,502,458			
	9,159,725	8,410,558	6,279,802	6,733,975	6,807,415	6,698,701	6,774,208	8,517,965	5,654,435	6,488,204	8,470,539	4,894,518	5,362,003	6,986,131	4,912,891	6,374,543	7,923,836	8,850,340				
	9,866,552	9,250,841	7,170,191	7,213,884	7,415,056	7,237,063	6,969,310	9,582,098	6,009,319	6,696,634	8,926,585	4,966,788	5,648,220	7,214,898	5,041,132	6,690,310	8,262,491					
	10,439,947	9,721,858	7,497,940	7,570,855	7,496,955	7,283,059	7,402,247	9,706,503	6,156,138	6,907,738	9,168,385	4,991,574	5,900,930	7,644,898	5,082,350	7,001,167						
8	10,834,486	9,953,502	7,533,377	7,822,684	7,575,369	7,329,084	7,611,242	10,138,868	6,524,987	6,965,528	9,422,725	5,014,153	5,986,526	7,907,461	5,123,568							
9	10,935,715	10,286,479	7,615,032	8,111,694	7,654,237	7,462,119	7,653,900	10,368,436	6,705,837	7,020,184	9,810,124	5,059,383	6,164,246	8,052,763								
10	11,340,153	10,522,275	7,701,086	8,184,230	7,731,940	7,468,382	7,721,764	10,619,368	6,755,866	7,139,264	9,993,283	5,160,329	6,244,573									
11	11,386,217	10,880,769	7,791,027	8,357,349	7,805,017	7,474,646	7,789,732	10,873,650	6,839,005	7,190,739	10,178,581	5,422,689										
12	11,744,206	11,001,168	8,001,766	8,408,704	7,879,189	7,480,909	7,855,086	11,009,570	6,873,904	7,236,947	10,392,475											
13	11,774,571	11,110,031	8,057,267	8,460,058	8,038,850	7,481,735	7,919,766	11,120,644	6,908,899	7,276,930												
14	11.804.826	11,331,615	8.118.370	8,717,825	8,050,069	7,481,735	8.081.870	11,269,601	6.946.798													
15	11,995,979	11,414,237	8,170,070	8,731,745	8,050,069	7,481,735	8,115,379	11,305,361														
		11,494,656		8,742,665	8,050,069	7,481,735	8.142.053															
	12,156,503		8,297,379	8,753,585	8,050,069	7,481,735	-,- :=,															
	12,175,951		8,329,900	8,764,505	8,050,069	,,,,,,,,,																
		11,737,670		8,772,505	0,000,007																	
		11,799,577		0,7 7 2,000																		
20	12,200,000	11,777,077	0,407,000																			
	Madiaal Ban	oorted Paid I	f C	4/20/17																		

Medical Reported Paid Losses as of 04/30/17

19 4,727,156 4,443,912 4,343,956 3,772,745 20 4,797,565 4,448,856 4,370,845

Report	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1					1,804,774	1,676,127	1,421,461	2,013,689	1,481,566	2,435,389	2,520,705	1,948,500	3,239,013	2,201,565	1,934,714	2,751,976	3,211,934	3,607,221	2,405,205	3,932,999	2,543,986	2,330,259
2				2,809,039	2,438,735	2,184,303	2,027,699	2,673,510	2,121,377	3,067,832	3,289,523	2,697,293	4,228,737	3,040,747	2,474,907	3,388,757	4,428,864	4,556,072	3,576,391	5,142,203	3,291,985	
3			2,949,746	3,069,291	2,657,295	2,352,615	2,236,309	3,007,596	2,326,077	3,293,472	3,433,690	2,989,067	4,505,191	3,288,243	2,729,947	3,681,854	4,791,312	4,910,148	3,732,065	5,725,513		
4		3,931,096	3,057,875	3,187,684	2,844,763	2,491,759	2,326,207	3,216,844	2,429,794	3,868,121	3,535,900	3,075,764	4,755,842	3,434,618	2,838,307	4,050,370	4,980,927	5,036,044	3,783,913			
5	4,040,169	4,041,918	3,213,618	3,334,465	3,021,424	2,617,138	2,425,392	3,378,060	2,544,069	3,923,267	3,673,096	3,157,818	4,895,811	3,482,499	2,888,987	4,182,550	5,232,645	5,071,629				
6	4,115,840	4,132,108	3,474,497	3,457,200	3,075,426	2,673,929	2,495,415	3,495,984	2,582,303	3,963,617	3,920,165	3,202,045	5,005,959	3,502,704	2,911,117	4,258,152	5,334,986					
7	4,182,507	4,176,850	3,596,616	3,495,355	3,097,474	2,698,511	2,581,983	3,544,378	2,683,561	4,005,779	4,000,731	3,238,455	5,123,649	3,511,257	2,933,165	4,295,252						
8	4,225,458	4,217,481	3,648,054	3,506,028	3,138,912	2,715,033	2,622,094	3,699,439	2,709,624	4,053,658	4,067,412	3,238,035	5,214,054	3,521,293	2,960,275							
9	4,278,816	4,239,562	3,735,279	3,530,921	3,214,245	2,725,884	2,671,237	3,711,954	2,751,055	4,069,440	4,101,236	3,301,685	5,294,667	3,531,557								
10	4,354,014	4,267,844	3,787,156	3,552,363	3,235,670	2,764,209	2,715,237	3,727,842	2,775,526	4,099,493	4,121,749	3,378,839	5,339,901									
11	4,400,110	4,307,614	3,998,545	3,612,059	3,271,628	2,785,789	2,768,418	3,738,687	2,801,700	4,156,729	4,152,472	3,500,778										
12	4,444,736	4,322,947	4,026,401	3,625,447	3,339,216	2,791,316	2,821,879	3,760,085	2,830,668	4,186,218	4,188,666											
	4,482,464	4,338,162	4,068,692	3,640,675	3,530,763	2,794,972	2,865,653	3,783,035	2,860,666	4,197,884												
14	4,506,980	4,355,042	4,106,625	3,686,245	3,531,885	2,799,305	2,899,480	3,795,599	2,889,252													
15	4,530,249	4,371,918	4,152,798	3,716,598	3,532,238	2,823,807	2,925,169	3,944,740														
16	4,596,503	4,434,578	4,235,368	3,733,612	3,532,944	2,831,581	2,939,820															
17	4,642,586	4,437,180	4,268,527	3,750,418	3,533,634	2,872,279																
18	4,676,936	4,439,837	4,309,577	3,764,284	3,533,807																	

Source: CMCRB Database as of 04/30/17 - Validated 08/15/17

March   Marc		<u>St</u>	ate O.D.		<u> </u>	ederal Excess	
Col After AMA Guidelines   H 9   H		D co c	All DD		D.co.o.	All DD	
(1) Number of Claims	(a) After AMA Guidelines	<u>base</u>	All PP	100%-0%			100%-0%
2  Average Amounts   \$716.371   \$407.092   \$716.371   \$114.467   \$256.311   \$114.467   \$100.0000%   \$100.0000%   \$100.0000%   \$100.0000%   \$100.0000%   \$100.0000%   \$100.0000%   \$100.0000%   \$100.0000%   \$100.0000%   \$100.0000%   \$100.0000%   \$100.0000%   \$122.898   \$256.311   \$122.898   \$122.898   \$122.898   \$122.898   \$122.898   \$122.898   \$100.0000%   \$100.00000%   \$100.00000%   \$100.000000000%   \$1000.000000000000000000000000000000000	111111111111111111111111111111111111111				1-7		
(a) Index (Base) 100,000% 100	\ <i>\</i>						*
(c) Pension Offset (after Social Security Offset)  (d) Complement (above) \$122,898 \$256,311 \$122,898 \$10,000 \$1,00			\$407,092		•	\$256,311	
(1) Total (including above)	(5) maex (base)	100.0000/6		100.0000/6	100.0000/6		100.0000/6
	(b) Social Security Offset				(b) Social Sec	urity Onset	
	(1) Total (including above)	_	_	_	\$122.898	\$256.311	\$122.898
(3) Index (fo a(2)) 8,7893% 0,0000% 8,7893% 7,3656% 0,0000% 7,3656% (4) Complement 91,2107% 100,0000% 91,2107% 92,6344% 100,0000% 92,6344% 200,000% 200,00000% 200,00000% 200,00000% 200,00000% 200,00000% 200,00000% 200,00000% 200,00000% 200,00000% 200,000000% 200,0000000000		\$62,964	\$0	\$62,964			
(4) Complement         91.2107%         100.0000%         91.2107%         92.6344%         100.0000%         92.6344%           (c) Pension Offset (after Social Security Offset)         (c) Pension Onset           (1) Total (including above)         -         -         \$161.019         \$263.209         \$161.019           (2) Difference         \$94,934         \$36.299         \$94,934         38.121         6.698         38,121           (Federalc = c-1 minus b-1)         (3) % Pension (VII-G, P. 2)         12.50%         12.50%         12.50%         12.50%         38,121         6.698         38,121           (3) Mension (VII-G, P. 2)         12.50%         12.50%         12.50%         12.50%         12.50%         12.50%         12.50%         12.50%         12.50%         38,121         6.698         38,121         6.678         38,121         6.678         38,121         6.678         38,121         6.678         38,121         6.678         7.658         6.62         4.765         8.62         4.765         8.62         4.765         8.62         4.765         8.62         4.765         8.62         4.765         8.62         4.765         8.62         4.765         8.62         4.765         8.62         4.765         8.62	(Federal= b-1 minus a-2)						
(c) Pension Offset (after Social Security Offset)  (1) Total (including above) (2) Difference (3) 94,934 (3) 6,899 (3) 8,74,831 (3) 8,74,831 (4) Net Pension (1) 1,867 (5) Index (to α-2) (6) Complement (1) Average Amounts (1) Average Amounts (1) Average Amounts (2) Index (to α-2) (3) Complement (4) Net Quality Complement (5) 10,44578 (4) Net Quality Complement (5) 10,44578 (4) Notal Average (5) Index (to α-2) (1) Average Amounts (1) Average Amounts (1) Average Amounts (1) Average Amounts (2) Index (to α-2) (3) Complement (4) Total Average (4) Total Average (5) Index (to α-2) (6) Complement (7) Index (to α-2) (8) Complement (8) 5,541% (9) 8,88548 (9) 8,334358 (1) Factor (1) Percentage from Exhibit VII-G, Page 1 (2) Complement (3) Dollar Decrease (4) Factor (1) Percentage level Excl. AMA Guidelines (d-3 times e-2) (2) AMA Guidelines (α-3) (3) Full Effect of Act 57 (1 x 2) (4) Percentage Decrease (5) Combined Dollar Effect (1) (d-1) plus (e-3) Decrease (5) Combined Dollar Effect (1) (d-1) plus (e-3) Decrease (1) Percentage Effect (1) (d-1) plus (e-3) Decrease (1) Percentage Space Spac							
(1) Total (including above) \$161,019 \$263,209 \$161,019 (2) Difference \$94,934 \$36,299 \$94,934 38,121 6,898 38,121 (Federal= c-1 minus b-1) (3) % Pension (VIII-G, P. 2) 12.50% 12.50% 12.50% 12.50% 12.50% (4) Net Pension on 11,867 4,537 11,867 4,765 862 4,765 (5) Index (to α-2) 1.6565% 1.1146% 1.6565% 4.1629% 0.3364% 4.1629% (6) Complement 98.3435% 98.8854% 98.3435% (6) Complement \$98.3435% 98.8854% 98.3435% (6) Complement \$74.831 \$4.537 \$74.831 \$13,196 \$362 \$13,196 \$12.50% (6) Complement \$74.831 \$4.537 \$74.831 \$13,196 \$362 \$11.5285% (3) Complement \$89.5541% 98.8854% 89.5541% Factor 111.5285% (4) Total Average 641,539 \$402,555 641,539 \$12.50% \$111.5285% (2) Complement 100.0000% (3) Dollar Decrease 0 Dollar Increase \$9.00000% (4) Factor 100.0000% (2) Complement 100.0000% (3) Dollar Decrease 0 Dollar Increase \$9.00000% (4) Factor 100.0000% (4) Factor 100.0000% (3) Full Effect of Act 57 (1 X Z) 89.5541% 100.0000% (3) Full Effect of Act 57 (1 X Z) 89.5541% Increase 111.5285% (4) Percentage Decrease 10.4559% Increase 111.5285% (4) Percentage Decrease 10.4459% Increase 111.5285% (4) Percentage Decrease 10.4459% Increase 111.5285% (5) Increase 111.5285% (6) Combined Dollar Effect (1) (1) (1) plus (e-3) Decrease \$74,831   Increase \$131,968 \$13,196 \$13	(4) Complement	91.2107%	100.0000%	91.2107%	92.6344%	100.0000%	92.6344%
(2) Difference (Federal= c-I minus b-1) (Federal= c-I minus b-1) (S) % Pension (VII-G, P. 2)       12.50%       4.765       862       4.765       60       4.765       60       4.765       862       4.765       4.765       862       4.765       4.765       60       4.765       60       4.765       4.1629%       0.3364%       4.1629%       0.3364%       4.1629%       0.3364%       4.1629%       0.3364%       4.1629%       0.3364%       4.1629%       0.3364%       4.1629%       0.3364%       4.1629%       0.3364%       4.1629%       0.33196       0.0000       0.0000       11.5285%       11.5285%       1.11.5285%       1.11.5285%       1.11.5285%       1.11.5285%	(c) Pension Offset (after Social Security	Offset)			(c) Pension Or	<u>nset</u>	
(Federal= c-1 minus b-1)         (3) % Pension (VII-G, P. 2)       12.50%       4.765       862       4.1629%       862	(1) Total (including above)	-	-	-	\$161,019	\$263,209	\$161,019
(3) % Pension (VII-G, P. 2) 12.50% 12.50% 12.50% 12.50% 12.50% 12.50% 12.50% (4) Net Pension 11.867 4.537 11.867 4.765 862 4.765 (5) Index (to a-2) 1.6565% 1.1146% 1.6565% 4.1629% 0.3364% 4.1629% (6) Complement 98.3435% 98.8854% 98.3435% (d) Complement 98.3435% 98.8854% 98.3435% (d) Combined Social Security and Pension Offsets (d) Combined Social Security Pension and Wage Level 10.0000% (e) Wage Level Decrease (e) Wage Level Increase (e) Wage Level Increase (e) Pension Offsets (e) Wage Level Increase (e) Pension Offsets (e) Pensio	(2) Difference	\$94,934	\$36,299	\$94,934	38,121	6,898	38,121
(4) Net Pension       11,867       4,537       11,867       4,765       862       4,765         (5) Index (to a-2)       1.6565%       1.1146%       1.6565%       4.1629%       0.3364%       4.1629%         (6) Complement       98.3435%       98.8854%       98.3435%       (d) Combined Social Sec, Pension Onset         (1) Average Amounts (b-2 plus c-4)       \$74,831       \$4,537       \$74,831       \$13,196       \$862       \$13,196         (2) Index (to a-2)       10.4459%       1.1146%       10.4459%       Factor       111.5285%         (3) Complement       89.5541%       98.8854%       89.5541%       Factor       111.5285%         (4) Total Average       641,539       402.555       641.539       Factor       111.5285%         (e) Wage Level Decrease       (e) Wage Level Increase       (e) Wage Level Increase         (1) Percentage from Exhibit VII-G, Page 1       0.0000%       0.0000%       0.0000%       0.0000%       0.0000%       0.0000%       0.0000%       0.0000%       0.0000%       0.00000%       0.00000%       0.00000%       0.00000%       0.00000%       0.00000%       0.00000%       0.00000%       0.00000%       0.00000%       0.00000%       0.00000%       0.000000%       0.000000%       0.000000%	(Federal= c-1 minus b-1)						
Signature   1.6565%   1.1146%   1.6565%   98.3435%	. ,						
(6) Complement       98.3435%       98.8854%       98.3435%         (d) Combined Social Security and Pension Offsets       (d) Combined Social Sec, Pension Onset         (1) Average Amounts (b-2 plus c-4)       \$74,831       \$4,537       \$74,831       \$13,196       \$862       \$13,196         (2) Index (to a-2)       10.4459%       1.1146%       10.4459%       Factor       111.5285%         (3) Complement       89.5541%       98.8854%       89.5541%       Factor       111.5285%         (4) Total Average       641,539       402.555       641,539       Teactor       111.5285%         (2) Complement       100.0000%       100.0000%       100.0000%       100.0000%       100.0000%         (3) Dollar Decrease       0       Dollar Increase       \$0         (4) Factor       100.0000%       100.0000%       100.0000%         (5) Combined Social Security, Pension and Wage Level       (f) Combined Percentage       \$0         (1) Percentage level Excl. AMA Guidelines (d-3 times e-2)       89.5541%       (d-3) times (e-4)       111.5285%         (2) AMA Guidelines (a-3)       89.5541%       (d-3) times (e-4)       111.5285%         (4) Percentage Decrease       10.4459%       Increase       11.5285%         (4) Percentage Decrease       10.4	. ,		· ·		·		•
(d) Combined Social Security and Pension Offsets         (1) Average Amounts (b-2 plus c-4) (b-2 plus c-4)       \$74.831       \$4.537       \$74.831       \$13.196       \$862       \$13.196 (b-2 plus c-4)         (2) Index (fo a-2)       10.4459%       1.1146%       10.4459%       Factor       11.5285%         (3) Complement       89.5541%       98.8854%       89.5541%       Factor       111.5285%         (4) Total Average       641,539       402.555       641,539       Factor       111.5285%         (e) Wage Level Decrease       (e) Wage Level Increase       (g) Wage Level Increase         (1) Percentage from Exhibit VII-G, Page 1       0.0000%       (2) Complement       100.0000%         (3) Dollar Decrease       0       Dollar Increase       \$0         (4) Factor       100.0000%       100.0000%         (f) Combined Social Security, Pension and Wage Level       (f) Combined Percentage         (1) Percentage level Excl. AMA Guidelines (d-3 times e-2)       89.5541%       (d-3) times (e-4)       111.5285%         (2) AMA Guidelines (a-3)       89.5541%       (d-3) times (e-4)       111.5285%         (4) Percentage Decrease       10.4459%       Increase       11.5285%					4.1629%	0.3364%	4.1629%
(1) Average Amounts \$74.831 \$4.537 \$74.831 \$13.196 \$862 \$13.196 (b-2 plus c-4) (2) Index (to a-2) 10.4459% 1.1146% 10.4459% Factor 111.5285% (3) Complement 89.5541% 98.8854% 89.5541% Factor 1111.5285% (4) Total Average 641.539 402.555 641.539 127.663  (e) Wage Level Decrease (e) Wage Level Increase  (1) Percentage from Exhibit VII-G, Page 1 0.0000% (2) Complement 100.0000% (3) Dollar Decrease 0 Dollar Increase \$0 (4) Factor 100.0000% (4) Factor 100.0000% (5) Combined Social Security, Pension and Wage Level (6) Security, Pen	(6) Complement	98.3435%	98.8854%	98.3435%			
(b-2 plus c-4) (2) Index (to a-2) 10.4459% 1.1146% 10.4459% (3) Complement 89.5541% 98.8854% 89.5541% Factor 111.5285% (4) Total Average 641,539 402,555 641,539 Factor 127,663  (e) Wage Level Decrease (e) Wage Level Increase  (1) Percentage from Exhibit VII-G, Page 1 0.0000% (2) Complement 100.0000% (3) Dollar Decrease 0 Dollar Increase \$0 (4) Factor 100.0000% (4) Factor (f) Combined Social Security, Pension and Wage Level (c) 89.5541% (d-3) times (e-4) 111.5285% (2) AMA Guidelines (a-3) 100.0000% (3) Full Effect of Act 57 (1 X 2) 89.5541% (d-3) times (e-4) 111.5285% (4) Percentage Decrease 10.4459% Increase \$1.5285%  (g) Combined Dollar Effect  (1) (d-1) plus (e-3) Decrease \$74,831 Increase \$13,196	(d) Combined Social Security and Pens	ion Offsets			(d) Combined	d Social Sec, P	ension Onset
(2) Index (to a-2)		\$74,831	\$4,537	\$74,831	\$13,196	\$862	\$13,196
(3) Complement 89,5541% 98.8854% 89,5541% Factor 111,5285% (4) Total Average 641,539 402,555 641,539 Factor 127,663  (e) Wage Level Decrease (e) Wage Level Increase  (1) Percentage from Exhibit VII-G, Page 1 0.0000% (2) Complement 100.0000% (3) Dollar Decrease 0 Dollar Increase \$0 (4) Factor 100.0000%  (f) Combined Social Security, Pension and Wage Level (f) Combined Percentage (1) Percentage level Excl. AMA Guidelines (d-3 times e-2) 89,5541% (d-3) times (e-4) 111,5285% (2) AMA Guidelines (a-3) 100.0000% (3) Full Effect of Act 57 (1 X 2) 89,5541% (10.4459% Increase 11.5285% (4) Percentage Decrease 10.4459% Increase \$13,196	· · · · · ·	10.4459%	1.1146%	10.4459%			11.5285%
(4) Total Average       641,539       402,555       641,539       127,663         (e) Wage Level Decrease       (e) Wage Level Increase       (e) Wage Level Increase         (1) Percentage from Exhibit VII-G, Page 1       0.0000%       0.0000%         (2) Complement       100.0000%       0.0000%         (3) Dollar Decrease       0.001       0.0000%         (4) Factor       0.0000%       0.0000%         (5) Combined Social Security, Pension and Wage Level       (ff) Combined Percentage         (1) Percentage level Excl. AMA Guidelines (d-3 times e-2)       89.5541%       (d-3) times (e-4)       111.5285%         (2) AMA Guidelines (a-3)       100.0000%       100.0000%       111.5285%         (4) Percentage Decrease       10.4459%       Increase       11.5285%         (g) Combined Dollar Effect       \$74,831       Increase       \$13,196					Factor		
(1) Percentage from Exhibit VII-G, Page 1 0.0000% (2) Complement 100.0000% (3) Dollar Decrease 0 Dollar Increase \$0 (4) Factor (f) Combined Social Security, Pension and Wage Level (f) Combined Percentage  (1) Percentage level Excl. AMA Guidelines (d-3 times e-2) 89.5541% (d-3) times (e-4) 111.5285% (2) AMA Guidelines (a-3) 100.0000% (3) Full Effect of Act 57 (1 X 2) 89.5541% 100.0000% (4) Percentage Decrease 10.4459% Increase 11.5285% (g) Combined Dollar Effect  (1) (d-1) plus (e-3) Decrease \$74,831 Increase \$13,196					1 46.61		
100,0000%   100,0000%   3   Dollar Decrease   50   100,0000%   100,0000%   100,0000%   100,0000%   100,0000%   100,0000%   100,0000%   111,5285%   100,0000%   100,0000%   111,5285%   111,5285%   10,4459%   1	(e) Wage Level Decrease				(e) Wage Leve	el Increase	
100,0000%   100,0000%   3   Dollar Decrease   50   100,0000%   1	(1) Daga anterna fue de Euleileit VIII	C Davas 1		0.00000			
(3) Dollar Decrease		G, Page 1					
(4) Factor       100.0000%         (f) Combined Social Security, Pension and Wage Level       (f) Combined Percentage         (1) Percentage level Excl. AMA Guidelines (d-3 times e-2)       89.5541%       (d-3) times (e-4)       111.5285%         (2) AMA Guidelines (a-3)       100.0000%       100.0000%       100.0000%         (3) Full Effect of Act 57 (1 X 2)       89.5541%       Increase       111.5285%         (4) Percentage Decrease       10.4459%       Increase       11.5285%         (g) Combined Dollar Effect       \$74,831       Increase       \$13,196	. ,				Dollar Increas	Δ	0.2
(1) Percentage level Excl. AMA Guidelines (d-3 times e-2) 89.5541% (d-3) times (e-4) 111.5285% (2) AMA Guidelines (a-3) 100.0000% 100.0000% (3) Full Effect of Act 57 (1 X 2) 89.5541% 111.5285% (4) Percentage Decrease 10.4459% Increase 11.5285% (g) Combined Dollar Effect (1) (d-1) plus (e-3) Decrease \$74,831 Increase \$13,196				O	Dollar Increas	C	
(1) Percentage level Excl. AMA Guidelines (d-3 times e-2) 89.5541% (d-3) times (e-4) 111.5285% (2) AMA Guidelines (a-3) 100.0000% 100.0000% (3) Full Effect of Act 57 (1 X 2) 89.5541% 111.5285% (4) Percentage Decrease 10.4459% Increase 11.5285% (g) Combined Dollar Effect (1) (d-1) plus (e-3) Decrease \$74,831 Increase \$13,196	(f) Combined Social Security, Pension of	ınd Wage Level			(f) Combined	Percentage	
(2) AMA Guidelines (a-3)       100.0000%       100.0000%         (3) Full Effect of Act 57 (1 X 2)       89.5541%       111.5285%         (4) Percentage Decrease       10.4459%       Increase       11.5285%         (g) Combined Dollar Effect       \$74,831       Increase       \$13,196					1		
(3) Full Effect of Act 57 (1 X 2)       89.5541%       111.5285%         (4) Percentage Decrease       10.4459%       Increase       11.5285%         (g) Combined Dollar Effect       \$74,831       Increase       \$13,196		Guidelines (d-3	times e-2)		(d-3) times (e-	4)	
(4) Percentage Decrease       10.4459%       Increase       11.5285%         (g) Combined Dollar Effect       (1) (d-1) plus (e-3) Decrease       \$74,831       Increase       \$13,196							
(g) Combined Dollar Effect  (1) (d-1) plus (e-3) Decrease \$74,831 Increase \$13,196					In oro oro		
(1) (d-1) plus (e-3) Decrease \$74,831 Increase \$13,196	(4) Percentage Decrease			10.4439%	increase		11.5265%
	(g) Combined Dollar Effect						
(2) Average after Act 57 (a-2 plus or minus g-1) \$641,539 \$127,663	(1) (d-1) plus (e-3) Decrease			\$74,831	Increase		\$13,196
	(2) Average after Act 57 (a-2 pl	us or minus g-1)		\$641,539			\$127,663

	<u>St</u>	ate O.D.		<u>F</u> e	ederal Excess	
	Pasa	All PP	Weighted 100%-0%	Para	All DD	Weighted 100%-0%
(a) After AMA Guidelines	<u>Base</u>	All FF	100%-0%	<u>Base</u> (a) After AMA (	<u>All PP</u> Guidelines	100%-0%
14,7				10// 1101/11/11	<del>5 6 1 6 6 11 1 6 6</del>	
(1) Number of Claims	# 48			# 48		
(2) Average Amounts	\$297,970	\$236,234	\$297,970	\$232,603	\$252,777	\$232,603
(3) Index (Base)	100.0000%		100.0000%	100.0000%		100.0000%
(b) Social Security Offset				(b) Social Secu	rity Onset	
(1) Total (including above)	-	_	-	\$238,785	\$258,776	\$238,785
(2) Difference- Social Security	\$21,619	\$12,360	\$21,619	6,182	5,999	6,182
(Federal= b-1 minus a-2)						
(3) Index (to a(2))	7.2555%	5.2321%	7.2555%	2.6577%	2.3732%	2.6577%
(4) Complement	92.7445%	94.7679%	92.7445%	97.3423%	97.6268%	97.3423%
(c) Pension Offset (after Social Security (	Offset)			(c) Pension On	<u>set</u>	
(1) Total (including above)	_	_	-	\$266,622	\$282,964	\$266,622
(2) Difference	\$76,007	\$61,621	\$76,007	27,837	24,188	27,837
(Federal= c-1 minus b-1)						
(3) % Pension (VII-G, P. 2)	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%
(4) Net Pension	9,501	7,703	9,501	3,480	3,023	3,480
(5) Index (to a-2)	3.1885%	3.2606%	3.1885%	1.4959%	1.1961%	1.4959%
(6) Complement	96.8115%	96.7394%	96.8115%			
(d) Combined Social Security and Pensi	on Offsets			(d) Combined	Social Sec, Pe	ension Onset
(1) Average Amounts (b-2 plus c-4)	\$31,120	\$20,063	\$31,120	\$9,662	\$9,022	\$9,662
(2) Index (to a-2)	10.4440%	8.4926%	10.4440%			4.1537%
(3) Complement	89.5560%	91.5074%	89.5560%	Factor		104.1537%
(4) Total Average	266,850	216,172	266,850			242,265
(e) Wage Level Decrease				(e) Wage Leve	l Increase	
(1) Percentage from Exhibit VII-0	G. Paae 1		0.0000%			
(2) Complement	27. ago .		100.0000%			
(3) Dollar Decrease			0	Dollar Increase	<b>;</b>	\$0
(4) Factor						100.0000%
(f) Combined Social Security, Pension a	nd Wage Level			(f) Combined F	Percentage	
(1) Percentage level Excl. AMA	Guidelines (d-3	times e-21	89.5560%			104.1537%
(2) AMA Guidelines (a-3)		103 0-21	100.0000%			100.0000%
(3) Full Effect of Act 57 (1 X 2)			89.5560%			104.1537%
(4) Percentage Decrease			10.4440%	Increase		4.1537%
(g) Combined Dollar Effect						
100						
(1) (d-1) plus (e-3) Decrease			\$31,120	Increase		\$9,662
(2) Average after Act 57 (a-2 plu	us or minus g-1)		\$266,850			\$242,265

Source: Exhibit VII-E, Exhibit IX-A & Exhibit VII-G, Page 1 and Page 2.

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	<u>St</u>	ate O.D.		<u>F</u>	ederal Excess	
	Base	All PP	Weighted 100%-0%	Base	All PP	Weighted 100%-0%
(a) After AMA Guidelines	<u> </u>	7 11 1	100/0-0/0	(a) After AMA		100/0-0/0
(1) Number of Claims	# 38			# 38		
(2) Average Amounts	\$517,276	\$347,426	\$517,276	\$56,333	\$131,776	\$56,333
(3) Index (Base)	100.0000%		100.0000%	100.0000%		100.0000%
(b) Social Security Offset				(b) Social Secu	urity Onset	
(1) Total (including above)	-	-	-	\$59,294	\$131,811	\$59,294
(2) Difference-Social Security (Federal= b-1 minus a-2)	\$13,426	\$3,833	\$13,426	2,961	35	2,961
(3) Index (to a(2))	2.5956%	1.1032%	2.5956%	5.2561%	0.0265%	5.2561%
(4) Complement	97.4044%	98.8968%	97.4044%	94.7439%	99.9735%	94.7439%
(c) Pension Offset (after Social Security	Offset)			(c) Pension Or	<u>iset</u>	
(1) Total (including above)	-	-	-	\$72,707	\$140,802	\$72,707
(2) Difference	\$102,538	\$73,725	\$102,538	13,413	8,991	13,413
(Federal= c-1 minus b-1)						
(3) % Pension (VII-G, P. 2)	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%
(4) Net Pension	12,817	9,216	12,817	1,677	1,124	1,677
(5) Index (to a-2) (6) Complement	2.4778% 97.5222%	2.6525% 97.3475%	2.4778% 97.5222%	2.9763%	0.8529%	2.9763%
		77.547.576	77.022270			
(d) Combined Social Security and Pens	<u>ion Offsets</u>			(d) Combined	Social Sec, P	ension Onset
(1) Average Amounts (b-2 plus c-4)	\$26,244	\$13,048	\$26,244	\$4,638	\$1,159	\$4,638
(2) Index (to a-2)	5.0734%	3.7557%	5.0734%			8.2324%
(3) Complement	94.9266%	96.2443%	94.9266%	Factor		108.2324%
(4) Total Average	491,032	334,378	491,032			60,970
(e) Wage Level Decrease				(e) Wage Leve	el Increase	
(1) Percentage from Exhibit VII-	G. Paae 1		0.0000%			
(2) Complement			100.0000%			
(3) Dollar Decrease			0	Dollar Increase	Э	\$0
(4) Factor						100.0000%
(f) Combined Social Security, Pension a	nd Wage Level			(f) Combined	<u>Percentage</u>	
(1) Percentage level Excl. AMA	Guidelines (d-3	times e-2)	94.9266%			108.2324%
(2) AMA Guidelines (a-3)			100.0000%			100.0000%
(3) Full Effect of Act 57 (1 X 2)			94.9266%			108.2324%
(4) Percentage Decrease			5.0734%	Increase		8.2324%
(g) Combined Dollar Effect						
(1) (d-1) plus (e-3) Decrease			\$26,244	Increase		\$4,638
(2) Average after Act 57 (a-2 pl	us or minus g-1)		\$491,032			\$60,970

	<u>St</u>	ate O.D.		<u>F-</u>	ederal Excess	
	Base	All PP	Weighted 100%-0%	Base	All PP	Weighted 100%-0%
(a) After AMA Guidelines	<u>Базс</u>	<u> 7 (11 1 1 </u>	100/6-0/6	(a) After AMA		100/6-0/6
(1) Number of Claims	# 19			# 19		
(2) Average Amounts	# 17 \$398,476	\$272,152	\$398,476	# 17 \$198,987	\$245,203	\$198,987
(3) Index (Base)	100.0000%	Ψ272,102	100.0000%	100.0000%	φ2 10,200	100.0000%
(b) Social Security Offset				(b) Social Secu	urity Onset	
(1) Total (including above)	-	-	-	\$205,279	\$247,498	\$205,279
(2) Difference- Social Security	\$32,746	\$6,179	\$32,746	6,292	2,295	6,292
(Federal= b-1 minus a-2) (3) Index (to a(2))	8.2179%	2.2705%	8.2179%	3.1620%	0.9360%	3.1620%
(4) Complement	91.7821%	97.7295%	91.7821%	96.8380%	99.0640%	96.8380%
(c) Pension Offset (after Social Security	Offset)			(c) Pension On	<u>set</u>	
(1) Total (including above)	_	_	_	\$239,932	\$270,131	\$239,932
(2) Difference	\$77,315	\$49,211	\$77,315	34,653	22,632	34,653
(Federal= c-1 minus b-1)	ψ , σ . σ	Ψ . , ,	φ,,,σ.σ	0.7000	22,002	0.,000
(3) % Pension (VII-G, P. 2)	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%
(4) Net Pension	9,664	6,151	9,664	4,332	2,829	4,332
(5) Index (to a-2)	2.4253%	2.2603%	2.4253%	2.1768%	1.1537%	2.1768%
(6) Complement	97.5747%	97.7397%	97.5747%			
(d) Combined Social Security and Pens	ion Offsets			(d) Combined	Social Sec, Pe	ension Onset
(1) Average Amounts	\$42,411	\$12,331	\$42,411	\$10,624	\$5,124	\$10,624
(b-2 plus c-4)	10 / 42207	4 520007	10 / 42207			E 220007
(2) Index (to a-2)	10.6433%	4.5308% 95.4692%	10.6433% 89.3567%	Factor		5.3389% 105.3389%
(3) Complement (4) Total Average	89.3567% 356,065	259,822	356,065	FUCIOI		209,610
(e) Wage Level Decrease				(e) Wage Leve	el Increase	
(1) Percentage from Exhibit VII-	G, Page 1		0.0000%			
(2) Complement			100.0000%	<b>-</b>		4.0
(3) Dollar Decrease			0	Dollar Increase	9	\$0
(4) Factor						100.0000%
(f) Combined Social Security, Pension of	nd Wage Level			(f) Combined	<u>Percentage</u>	
(1) Percentage level Excl. AMA	Guidelines (d-3	times e-2)	89.3567%			105.3389%
(2) AMA Guidelines (a-3)			100.0000%			100.0000%
(3) Full Effect of Act 57 (1 X 2)			89.3567%			105.3389%
(4) Percentage Decrease			10.6433%	Increase		5.3389%
(g) Combined Dollar Effect						
(1) (d-1) plus (e-3) Decrease			\$42,411	Increase		\$10,624
(2) Average after Act 57 (a-2 pl	us or minus g-1)		\$356,065			\$209,610

# Coal Mine Compensation Rating Bureau Average Severity from Before Act 57 through Stages to After Act 57

Exhibit VII-A Page 5 Other Classes

For Information - NOT USED

	<u>St</u>	ate O.D.		<u>Fe</u>	ederal Excess	
			Weighted	5	A II DD	Weighted
(a) After AMA Guidelines	<u>Base</u>	<u>All PP</u>	100%-0%	<u>Base</u> (a) After AMA (	<u>All PP</u> Guidelines	100%-0%
11				<u>, - / </u>		
(1) Number of Claims	# 10			# 10		
(2) Average Amounts	\$312,052	\$199,724	\$312,052	\$202,575	\$245,913	\$202,575
(3) Index (Base)	100.0000%		100.0000%	100.0000%		100.0000%
(b) Social Security Offset				(b) Social Secu	rity Onset	
(1) Total (including above)	-	-	_	\$214,041	\$252,032	\$214,041
(2) Difference- Social Security	\$25,613	\$10,789	\$25,613	11,466	6,119	11,466
(Federal= b-1 minus a-2)						
(3) Index (to a(2))	8.2080%	5.4021%	8.2080%	5.6602%	2.4881%	5.6602%
(4) Complement	91.7920%	94.5979%	91.7920%	94.3398%	97.5119%	94.3398%
(c) Pension Offset (after Social Security	Offset)			(c) Pension On	<u>set</u>	
(1) Total (including above)	-	_	-	\$223,051	\$253,908	\$223,051
(2) Difference	\$58,256	\$33,888	\$58,256	9,010	1,876	9,010
(Federal= c-1 minus b-1)	, .		•	·	•	
(3) % Pension (VII-G, P. 2)	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%
(4) Net Pension	7,282	4,236	7,282	1,126	235	1,126
(5) Index (to a-2)	2.3336%	2.1209%	2.3336%	0.5560%	0.0954%	0.5560%
(6) Complement	97.6664%	97.8791%	97.6664%			
(d) Combined Social Security and Pens	sion Offsets			(d) Combined	Social Sec, P	ension Onset
(1) Average Amounts	\$32,895	\$15,025	\$32,895	\$12,592	\$6,353	\$12,592
(b-2 plus c-4)						
(2) Index (to a-2)	10.5416%	7.5230%	10.5416%			6.2161%
(3) Complement	89.4584%	92.4770%	89.4584%	Factor		106.2161%
(4) Total Average	279,156	184,699	279,156			215,167
(e) Wage Level Decrease				(e) Wage Leve	l Increase	
(1) Percentage from Exhibit VII-	G, Page 1		0.0000%			
(2) Complement	· ·		100.0000%			
(3) Dollar Decrease			0	Dollar Increase	;	\$0
(4) Factor						100.0000%
(f) Combined Social Security, Pension of	and Wage Level			(f) Combined F	Percentage	
(1) Percentage level Excl. AMA	Guidelines (d-3	times e-21	89.4584%			106.2161%
(2) AMA Guidelines (a-3)	_ 3.65103 (4 0		100.0000%			100.0000%
(3) Full Effect of Act 57 (1 X 2)			89.4584%			106.2161%
(4) Percentage Decrease			10.5416%	Increase		6.2161%
(g) Combined Dollar Effect						
(1) (d 1) plus (a 2) Dagrassa			¢37 00E	Increase		¢10 E00
(1) (d-1) plus (e-3) Decrease	us or minus a 11		\$32,895 \$279,156	Increase		\$12,592 \$215.147
(2) Average after Act 57 (a-2 pl	03 OF THIFIUS G-1)		\$279,156			\$215,167

Weighted Level = 100% Base Scenario plus 0% 'All Permanent Partial' Scenario.

# COAL MINE COMPENSATION RATING BUREAU State Occupational Disease Classification Credibility

			(1)	(2)	(3)	(4)	(5) Credib	(6) bility	(7) Claim	(8)	(9)	(10) Claim
			Estimated Miner Years	Claim Freq Indicated	quency per 100 <i>h</i> Trended to	Miner Years Indicated	Expected Awarded	-	Frequency Indicated w/	Change in Indication	10 Year 2007-2016	Frequency Per \$100 of
<u>Classification</u>		<u>Code</u>	2007-2016	(Eff 4/1/2017)	4/1/2018	(Eff 4/1/2018)	<u>Claims</u>	<u>Factor</u>	Credibility	After Cred.	<u>Payroll</u>	<u>Payroll</u>
Underground:	: Anthracite Bituminous	1011 1002	212.6 21,441.6	0.510505 0.106031	0.510505 0.106031	1.844230 0.116782	1.085 22.735	0.166 0.758	0.731903 0.114180	43.4% 7.7%	9,780,689 1,496,431,050	0.159092 0.016360
Surface:	Anthracite Bituminous	1016 1013	4,072.0 13,034.4	0.174723 <u>0.015724</u>	0.174723 0.015724	0.185379 0.038431	7.115 <u>2.050</u>	0.424 0.228	0.179241 0.020901	2.6% <u>32.9%</u>	197,526,677 <u>618,706,649</u>	0.036950 0.004403
Four Standard	d Classificatio	ns	38,760.6	0.085098	0.085098	0.107116	32.984		0.093035	15.8%	2,322,445,065	0.015527
	Coke Auger	1017 1019	1,272.4 215.9	0.012475 0.026040	0.012475 0.026040	0.009733 0.009800	0.159 0.056	0.063 0.038	0.012302 0.025423	-1.4% -2.4%	59,287,880 10,114,526	0.002640 0.005427
Co-Gen:	Anthracite Bituminous	1022 1024	1,955.6 2,053.3	0.030905 0.046822	0.030905 0.046822	0.009729 0.009724	0.604 0.961	0.124 0.156	0.028279 0.041035	-8.5% -12.4%	94,317,743 99,219,155	0.005863 0.008492
Prep Plants:	Anthracite Bituminous	1026 1028	1,482.0 <u>4,177.5</u>	0.227273 0.034649	0.227273 0.034649	0.179142 0.013866	3.368 1.447	0.292 0.191	0.213219 0.030679	-6.2% <u>-11.5%</u>	71,644,743 289,122,723	0.044105 0.004433
Other Classes	i		11,156.7	0.059125		0.033783	6.596		0.054214	-9.1%	623,706,770	0.009698
Total			49,917.3	0.079293		0.090726	39.581		0.084358	10.2%	2,946,151,835	0.014293

Source: (1) Estimated Miner Years from Exhibit VII-B-2

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<sup>(2)</sup> Exhibit VII-B-1-B Col. 10

<sup>(3)</sup> Approved claim frequency trended to 4/1/2018 @ 0.0%

<sup>(4)</sup> Indicated Frequency - Exhibit VII-B-2; totals and subtotals are based on class frequencies weighted with 10 year estimated miner years.

<sup>(5)</sup> Expected Awarded Claims = (1)  $\times$  (2) / 100

<sup>(6)</sup> Factor  $Z = ((5) / 39.581) \land 0.5$ 

<sup>(7)=(4)\*(6)+((3)\*(1-(6))</sup> 

<sup>(8)=(7)/(2)-1</sup> Totals and subtotals are weighted with 10 year estimated miner years.

<sup>(9)</sup> From Exhibit X-A

 $<sup>(10)=(7) \</sup>times (1) / ((9) \times 100) / 1,000,000$ 

# COAL MINE COMPENSATION RATING BUREAU State Occupational Disease Classification Credibility

			(1)	(2)	(3) Expected	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			Approved	- "	Awarded Claims		Estimated		Average Weekly	- "	Estimated	Frequency
			Claim Freq.	Payroll	2006-2015	Miner Years	Miner Years	Adjustment	Wage	Payroll	Miner Years	Per 100
<u>Classification</u>	<u>n</u>	<u>Code</u>	4/1/2017	<u>2006-2015</u>	(1) x (2)	2007-2016	<u>2016</u>	<u>Factor</u>	<u>2006</u>	<u>2006</u>	<u>2006-2015</u>	Miner Years
Undergroun	d: Anthracite	1011	0.113046	11,059,453	1.250227	212.6	3.0	1.056	745	1,442,524	244.9	0.510505
o o	Bituminous	1002	0.015482	1,418,002,772	21.953519	21,441.6	1,945.4	1.505	745	70,465,937	20,704.8	0.106031
Surface:	Anthracite	1016	0.036827	188,662,209	6.947863	4,072.0	387.5	1.056	745	11,946,382	3,976.5	0.174723
	Bituminous	1013	0.003381	<u>652,716,582</u>	2.206835	13,034.4	540.0	1.056	745	63,008,975	14,034.6	0.015724
Four Standa	rd Classificatio	ns		2,270,441,016	32.358444	38,760.6	2,875.9			146,863,818	38,960.8	
	Coke	1017	0.002757	69,711,550	0.192195	1,272.4	43.1	1.056	745	12,737,394	1,540.7	0.012475
	Auger	1019	0.005664	10,808,861	0.061221	215.9	6.9	1.056	745	1,066,831	235.1	0.026040
Co-Gen:	Anthracite	1022	0.006590	91,875,712		1,955.6	202.0	1.056	745	8,405,393	1,959.1	0.030905
	Bituminous	1024	0.009973	97,229,898	0.969674	2,053.3	212.0	1.056	745	9,397,580	2,071.0	0.046822
D DI I		1007	0.0.40000	<b>40.550.055</b>	0.044550	1 400 0	100.0	1.057	7.15	4 005 000	1 (71 (	0.007070
Prep Plants:	Anthracite	1026	0.048082	69,559,355		1,482.0	129.8	1.056	745	4,885,882	1,471.6	0.227273
	Bituminous	1028	0.005100	284,042,267	<u>1.448616</u>	4,177.5	289.2	1.505	745	17,050,967	4,180.8	0.034649
Other Classe	es			623,227,643		11,156.7	883.0			53,544,047	11,458.3	
Total				2,893,668,659		49,917.3	3,758.9			200,407,865	50,419.1	

Source: (1) Approved Claim Frequency (4/1/17): See Exhibit III from filing effective 4/1/2017 (See Exhibit X-F)

- (2) 10 years Payroll(2006-2015): See Exhibit X-A-1
- (3) Expected Awarded Claims = (1)x(2) / 1,000,000
- (4) Estimated Miner Years 2007-2016: See Exhibit VII-B-2
- (5) Estimated Miner Years 2016: See Exhibit VII-B-2
- (6) Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G
- (7) Average Weekly Wage 2006: See Exhibit XII-D
- (8) Payroll 2006: See Exhibit X-A-1
- (9) Estimated Miner Years 2006-2015 = (4)-(5)+(8)/((6)x(7)x52)
- (10) Frequency Per 100 Miner Years = (3)/((9)/100))

# STATE OCCUPATIONAL DISEASE FREQUENCY WITH FEDERAL EXCESS FREQUENCY

ANTHRACITE	UNDERGRO	JND (1011)												10-Year
7	0.122.10.10	(,				IBNR +	0.962 AWARD		EXPECTED ULTIMATE	Statewide Average	Adjustment	Estimated Miner	Frequency Claims per 100	Payroll Weighted
YEAR	REPORTED		PENDING	DENIED	IBNR	PENDING	RATIO	Payroll	AWARDED	Weekly Wage	Factor	<u>Years</u>	Miner Years	Frequency
2007 2008	0	0	0	0	0.0000	0.0000	0.000000	1,662,537 2,136,713	0.000000	779 807	1.056 1.056	38.9 48.2	0.000000	
2009	0	0	0	0	0.0000	0.0000	0.000000	1,335,866	0.000000	836	1.056	29.1	0.000000	
2010	0	0	0	0	0.0000	0.0000	0.000000	1,299,588	0.000000	845	1.056	28.0	0.000000	
2011 2012	1	1 0	0	0	0.0000	0.0000	0.000000	1,257,944 1,029,260	1.000000	858 888	1.056 1.056	26.7 21.1	3.745318 0.000000	
2012	1	1	0	0	0.0000	0.0000	0.000000	381,876	1.000000	917	1.056	7.6	13.157895	
2014	0	0	0	0	0.0000	0.0000	0.000000	258,809	0.000000	932	1.056	5.1	0.000000	
2015 2016	0	0	0	0	0.0120 0.0407	0.0120 0.0407	0.011496 0.039134	254,336 163,760	0.011496	951 978	1.056 1.056	4.9 3.0	0.234610 1.304472	
TOTAL	2	2	0	0	0.0526	0.0526	0.050630	9,780,689	2.050630	,,,	1.000	212.6	18.442295	
Average	e: State Frequ		10.0001										1.844230	
	Excess Frequ		40.0%)										0.737692	
BITUMINOUS	UNDERGROU	ND (1002)					0.962		EXPECTED	Statewide		Estimated	Frequency	
V5.15	05000550		25.12.110	05,450	10.10	IBNR +	AWARD		ULTIMATE	Average	Adjustment	Miner	Claims per 100	
<u>YEAR</u> 2007	REPORTED 0	AWARDED 0	PENDING 0	DENIED 0	<u>IBNR</u> 0.0000	0.0000	RATIO 0.000000	<u>Payroll</u> 79,904,266	0.000000	Weekly Wage 779	<u>Factor</u> 1.505	<u>Years</u> 1,310.7	Miner Years 0.000000	
2008	2	2	0	0	0.0000	0.0000	0.000000	101,353,977	2.000000	807	1.505	1,604.8	0.124626	
2009	0	0	0	0	0.0000	0.0000	0.000000	101,348,140	0.000000	836	1.505	1,549.1	0.000000	
2010 2011	0 2	0 2	0	0	0.1367	0.1367 0.3979	0.131486 0.382818	125,393,576 148,485,709	0.131486 2.382818	845 858	1.505 1.505	1,896.2 2,211.4	0.006934 0.107752	
2012	4	3	1	0	0.6959	1.6959	1.631446	153,618,908	4.631446	888	1.505	2,210.5	0.209520	
2013	3	3	0	0	1.0452	1.0452	1.005511	149,747,092	4.005511	917	1.505	2,086.6	0.191964	
2014 2015	2	2	0	0	3.0893 3.9287	3.0893 3.9287	2.971926 3.779361	271,230,707 216,454,460	4.971926 4.779361	932 951	1.505 1.505	3,718.6 2,908.3	0.133704 0.164335	
2016	0	0	0	0	4.6306	4.6306	4.454647	148,894,215	4.454647	978	1.505	1,945.4	0.164333	
TOTAL	14	13	1	0	13.9243	14.9243	14.357196	1,496,431,050	27.357196			21,441.6	1.167819	
	: State Frequ	,	40.0971										0.116782	
	Excess Frequ		40.0%)										0.046713	
ANTHRACITE	SURFACE (1	016)					0.962		EXPECTED	Statewide		Estimated	Frequency	
						IBNR +	AWARD		ULTIMATE	Average	Adjustment	Miner	Claims per 100	
<u>YEAR</u> 2007	REPORTED 3	AWARDED 3	PENDING 0	DENIED 0	<u>IBNR</u> 0.0000	0.0000	0.000000	<u>Payroll</u> 14,555,579	3.000000	Weekly Wage 779	<u>Factor</u> 1.056	<u>Years</u> 340.3	Miner Years 0.881575	
2008	1	1	0	0	0.0000	0.0000	0.000000	16,954,313	1.000000	807	1.056	382.6	0.261370	
2009	0	0	0	0	0.0000	0.0000	0.000000	16,445,462	0.000000	836	1.056	358.2	0.000000	
2010 2011	0	0	0	0	0.0000	0.0000	0.000000	14,295,288 21,034,600	0.000000	845 858	1.056 1.056	308.1 446.5	0.000000 0.223964	
2012	0	0	0	0	0.0000	0.0000	0.000000	26,295,907	0.000000	888	1.056	539.3	0.000000	
2013	1	0	0	1	0.0000	0.0000	0.000000	22,449,824	0.000000	917	1.056	445.8	0.000000	
2014 2015	0	0	0	0	0.1081 0.3628	0.1081 0.3628	0.103954 0.349014	20,466,075 24,218,779	0.103954 0.349014	932 951	1.056 1.056	399.9 463.8	0.025995 0.075251	
2016	1	0	1	0	0.5534	1.5534	1.494332	20,810,850	1.494332	978	1.056	387.5	0.385634	
TOTAL	7	5	1	1	1.0242	2.0242	1.947300	197,526,677	6.947300			4,072.0	1.853789	
	e: State Frequ Excess Frequ		40.0%)										0.185379 0.074152	
BITUMINOUS	SURFACE (1)	113)												
2		,				IDAID :	0.962		EXPECTED	Statewide	A all codes a sed	Estimated	Frequency	
YEAR	REPORTED	AWARDED	PENDING	DENIED	IBNR	IBNR + PENDING	AWARD RATIO	Payroll	ULTIMATE AWARDED	Average Weekly Wage	Adjustment Factor	Miner Years	Claims per 100 Miner Years	
2007	0	0	0	0	0.0000	0.0000	0.000000	63,295,774	0.000000	779	1.056	1,479.7	0.000000	
2008	0	0	0	0	0.0000	0.0000	0.000000	73,054,482	0.000000	807	1.056	1,648.6	0.000000	
2009 2010	0	0	0	0	0.0000	0.0000	0.000000	61,784,394 72,711,558	0.000000	836 845	1.056 1.056	1,345.9 1,567.0	0.000000	
2011	1	1	0	0	0.0000	0.0000	0.000000	86,074,064	1.000000	858	1.056	1,826.9	0.054738	
2012	2	2	0	0	0.0680	0.0680	0.065454	76,452,811	2.065454	888	1.056	1,567.9	0.131734	
2013 2014	0	0	0	0	0.1166 0.1573	0.1166 0.1573	0.112131 0.151313	61,349,745 54,050,731	0.112131 0.151313	917 932	1.056 1.056	1,218.4 1,056.1	0.009203 0.014328	
2015	1	Ō	1	0	0.1682	1.1682	1.123847	40,934,048	1.123847	951	1.056	783.9	0.143366	
<u>2016</u>	0	0	0	0	0.1737	0.1737	0.167099	28,999,042	0.167099	978	1.056	540.0	0.030944	
TOTAL	4 e: State Frequ	3	1	0	0.6838	1.6838	1.619844	618,706,649	4.619844			13,034.4	0.384313 0.038431	
	Excess Frequ		40.0%)										0.035431	
FOUR STAND	ARD CLASSE	s					0.962		EXPECTED	Statewide		Estimated	Frequency	
YEAR	REPORTED	AWARDED	PENDING	DENIED	IBNR	IBNR + PENDING	AWARD RATIO	Payroll	ULTIMATE AWARDED	Average Weekly Wage	Adjustment <u>Factor</u>	Miner Years	Claims per 100 Miner Years	
2007	3	3	0	0	0.0000	0.0000	0.000000	159,418,156	3.000000	779		3,169.6	0.094649	
2008	3	3	0	0	0.0000	0.0000	0.000000	193,499,485	3.000000	807		3,684.2	0.081429	
2009 2010	0	0	0	0	0.0000 0.1367	0.0000 0.1367	0.000000 0.131486	180,913,862 213,700,010	0.000000 0.131486	836 845		3,282.3 3,799.3	0.000000 0.003461	
2011	5	5	0	0	0.3979	0.3979	0.382818	256,852,317	5.382818	858		4,511.5	0.119313	
2012	6	5	1	0	0.7639	1.7639	1.696901	257,396,886	6.696901	888		4,338.8	0.154349	
2013 2014	5 2	4 2	0	1	1.1618 3.3547	1.1618 3.3547	1.117642 3.227193	233,928,537 346,006,322	5.117642 5.227193	917 932		3,758.4 5,179.7	0.136165 0.100917	
2015	2	1	1	0	4.4716	5.4716	5.263718	281,861,623	6.263718	951		4,160.9	0.150538	
2016	1	0	1	0	5.3984	6.3984	6.155213	198,867,867	6.155213	978		2,875.9	0.214027	
TOTAL	27 State Freque	23	3	1	15.6850	18.6850	17.974970	2,322,445,065	40.974970			38,760.6	1.054848	0.107114
	e: State Frequ Excess Frequ		40.0%)										0.105485 0.042194	0.107116 0.042846
		., (												

Source: Claim counts - CMCRB OD Database as of 08/15/2017

IBNR: Exhibit VII-C Payroll- Exhibit X-A

Payroll- Exhibit X-A

The Award Ratios for all classes were set equal to the Grand Total Award Ratio calculated on Exhibit VII-B-2 Page 3.

The Grand Total Award Ratio is equal to Awarded ÷ (Awarded plus Denied) = 25 / [25 + 01] = 0.962

The Wage Adjustment Factor was derived from CMCR8 data. See Exhibit X-G

Estimated Miner Years = Payroll / (SAWW x Adj. Factor x 52)

Frequency per 100 Miner Years = (Expected Ult. Awarded / Est. Miner Years) x 100

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Run Date: October 10, 2017 - 11:03:56 AM

# STATE OCCUPATIONAL DISEASE FREQUENCY WITH FEDERAL EXCESS FREQUENCY

COKE (1017)	١													10-Year
CORE (1017)	,	IBNR F	actor adjust	ted by 0.400	00		0.962		EXPECTED	Statewide		Estimated	Frequency	Payroll
V5+5	2500255		DE. 101110	05,050	101.10	IBNR +	AWARD		ULTIMATE	Average	Adjustment	Miner	Claims per 100	Weighted
<u>YEAR</u> 2007	REPORTED 0	AWARDED 0	PENDING 0	DENIED 0	<u>IBNR</u> 0.0000	0.0000	0.000000	Payroll 13,669,925	0.000000	Weekly Wage 779	Factor 1.056	<u>Years</u> 319.6	Miner Years 0.000000	Frequency
2008	0	0	0	0	0.0000	0.0000	0.000000	9,761,146	0.000000	807	1.056	220.3	0.000000	
2009	0	0	0	0	0.0010	0.0010	0.000962	5,173,552	0.000962	836	1.056	112.7	0.000854	
2010 2011	0	0	0	0	0.0022 0.0027	0.0022 0.0027	0.002116 0.002597	5,435,658 3,599,086	0.002116 0.002597	845 858	1.056 1.056	117.1 76.4	0.001807 0.003400	
2011	0	0	0	0	0.0027	0.0027	0.002377	5,738,105	0.002377	888	1.056	117.7	0.003400	
2013	0	0	0	0	0.0107	0.0107	0.010293	4,791,910	0.010293	917	1.056	95.2	0.010812	
2014	0	0	0	0	0.0136	0.0136	0.013083	4,464,398	0.013083	932	1.056	87.2	0.015004	
2015	0	0	0	0	0.0206	0.0206	0.019817	4,340,376	0.019817	951	1.056	83.1	0.023847	
<u>2016</u> TOTAL	0	0	0	0	0.0156	0.0156	0.015007	2,313,724 59,287,880	0.015007	978	1.056	1,272.4	0.034819	
	e: State Frequ		U	U	0.0747	0.0747	0.07 1001	37,267,660	0.071001			1,2/2.4	0.009733	
	Excess Frequ	,	40.0%)										0.003893	
AUGER (1019	יו													
	,	IBNR F	actor adjust	ted by 0.400	00		0.962		EXPECTED	Statewide		Estimated	Frequency	
						IBNR +	AWARD		ULTIMATE	Average	Adjustment	Miner	Claims per 100	
<u>YEAR</u> 2007	REPORTED 0	AWARDED 0	PENDING 0	DENIED 0	<u>IBNR</u> 0.0000	0.0000	RATIO 0.000000	Payroll 1,121,156	0.000000	Weekly Wage 779	Factor 1.056	<u>Years</u> 26.2	Miner Years 0.000000	
2007	0	0	0	0	0.0000	0.0000	0.000000	2,488,558	0.000000	807	1.056	56.2	0.000000	
2009	0	0	0	0	0.0002	0.0002	0.000192	926,163	0.000192	836	1.056	20.2	0.000952	
2010	0	0	0	0	0.0003	0.0003	0.000289	806,696	0.000289	845	1.056	17.4	0.001659	
2011 2012	0	0	0	0	0.0009	0.0009 0.0012	0.000866 0.001154	1,176,255 808,208	0.000866 0.001154	858 888	1.056 1.056	25.0 16.6	0.003463 0.006954	
2012	0	0	0	0	0.0012	0.0012	0.001134	1,025,399	0.001134	917	1.056	20.4	0.010846	
2014	0	0	0	0	0.0025	0.0025	0.002405	806,976	0.002405	932	1.056	15.8	0.015222	
2015	0	0	0	0	0.0028	0.0028	0.002694	582,619	0.002694	951	1.056	11.2	0.024050	
2016	0	0	0	0	0.0025	0.0025	0.002405	372,496	0.002405	978	1.056	6.9	0.034855	
TOTAL	0 e: State Frequ	0	0	0	0.0127	0.0127	0.012217	10,114,526	0.012217			215.9	0.098001	
-	Excess Frequ		40.0%)										0.003920	
	2,0000011040	01.07 (03	10.070										0.000720	
ANTHRACITE	CO-GEN (10		actor adjust	ted by 0.400	nn		0.962		EXPECTED	Statewide		Estimated	Frequency	
ANTHRACITE	CO-GEN (10		actor adjust	ted by 0.400	00	IBNR +	0.962 AWARD		EXPECTED ULTIMATE	Statewide Average	Adjustment	Estimated Miner	Frequency Claims per 100	
YEAR	CO-GEN (10		PENDING	DENIED	IBNR	PENDING		<u>Payroll</u>	ULTIMATE AWARDED	Average Weekly Wage	Adjustment <u>Factor</u>		Claims per 100 Miner Years	
<u>YEAR</u> 2007	REPORTED 0	AWARDED 0	PENDING 0	DENIED 0	<u>IBNR</u> 0.0000	<u>PENDING</u> 0.0000	AWARD RATIO 0.000000	9,160,450	ULTIMATE AWARDED 0.000000	Average Weekly Wage 779	<u>Factor</u> 1.056	Miner <u>Years</u> 214.1	Claims per 100 Miner Years 0.000000	
<u>YEAR</u> 2007 2008	REPORTED 0 0	AWARDED 0 0	PENDING 0 0	DENIED 0 0	IBNR 0.0000 0.0000	PENDING 0.0000 0.0000	AWARD <u>RATIO</u> 0.000000 0.000000	9,160,450 7,958,335	ULTIMATE <u>AWARDED</u> 0.000000 0.000000	Average <u>Weekly Wage</u> 779 807	Factor 1.056 1.056	Miner <u>Years</u> 214.1 179.6	Claims per 100 <u>Miner Years</u> 0.000000 0.000000	
<u>YEAR</u> 2007 2008 2009	REPORTED 0 0 0 0	AWARDED 0 0 0	PENDING 0 0 0	DENIED 0 0	IBNR 0.0000 0.0000 0.0016	PENDING 0.0000 0.0000 0.0016	AWARD <u>RATIO</u> 0.000000 0.000000 0.001539	9,160,450 7,958,335 8,004,644	ULTIMATE <u>AWARDED</u> 0.000000 0.000000 0.001539	Average Weekly Wage 779 807 836	<u>Factor</u> 1.056 1.056 1.056	Miner <u>Years</u> 214.1 179.6 174.4	Claims per 100 <u>Miner Years</u> 0.000000 0.000000 0.000883	
<u>YEAR</u> 2007 2008	REPORTED 0 0	AWARDED 0 0	PENDING 0 0	DENIED 0 0	IBNR 0.0000 0.0000	PENDING 0.0000 0.0000	AWARD <u>RATIO</u> 0.000000 0.000000	9,160,450 7,958,335	ULTIMATE <u>AWARDED</u> 0.000000 0.000000	Average <u>Weekly Wage</u> 779 807	Factor 1.056 1.056	Miner <u>Years</u> 214.1 179.6 174.4 182.8 248.8	Claims per 100 <u>Miner Years</u> 0.000000 0.000000	
YEAR 2007 2008 2009 2010 2011 2012	REPORTED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	AWARDED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PENDING  0  0  0  0  0  0  0  0	DENIED 0 0 0 0 0 0 0 0 0	IBNR 0.0000 0.0000 0.0016 0.0034 0.0087 0.0149	PENDING 0.0000 0.0000 0.0016 0.0034 0.0087 0.0149	AWARD <u>RATIO</u> 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334	9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004	ULTIMATE <u>AWARDED</u> 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334	Average <u>Weekly Wage</u> 779 807 836 845 858 888	Factor 1.056 1.056 1.056 1.056 1.056 1.056	Miner <u>Years</u> 214.1 179.6 174.4 182.8 248.8 210.7	Claims per 100 <u>Miner Years</u> 0.000000 0.000000 0.000883 0.001789 0.003364 0.006803	
YEAR 2007 2008 2009 2010 2011 2012 2013	REPORTED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	AWARDED 0 0 0 0 0 0	PENDING 0 0 0 0 0 0 0 0 0 0	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	IBNR 0.0000 0.0000 0.0016 0.0034 0.0087 0.0149 0.0186	PENDING 0.0000 0.0000 0.0016 0.0034 0.0087 0.0149 0.0186	AWARD <u>RATIO</u> 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893	9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651	ULTIMATE <u>AWARDED</u> 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner <u>Years</u> 214.1 179.6 174.4 182.8 248.8 210.7 165.7	Claims per 100  Miner Years  0.000000  0.000000  0.000000  0.0001789  0.003364  0.006803  0.010799	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014	REPORTED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	AWARDED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PENDING 0 0 0 0 0 0 0 0 0 0 0	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	IBNR 0.0000 0.0000 0.0016 0.0034 0.0087 0.0149 0.0186 0.0275	PENDING 0.0000 0.0000 0.0016 0.0034 0.0087 0.0149 0.0186 0.0275	AWARD <u>RATIO</u> 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455	9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883	ULTIMATE <u>AWARDED</u> 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner <u>Years</u> 214.1 179.6 174.4 182.8 248.8 210.7 165.7 177.0	Claims per 100  Miner Years 0.000000 0.000000 0.000883 0.001789 0.003364 0.006803 0.010799 0.014946	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015	REPORTED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	AWARDED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PENDING 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	IBNR 0.0000 0.0000 0.0016 0.0034 0.0087 0.0149 0.0186 0.0275 0.0496	PENDING 0.0000 0.0000 0.0016 0.0034 0.0087 0.0149 0.0186 0.0275 0.0496	AWARD <u>RATIO</u> 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715	9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089	ULTIMATE <u>AWARDED</u> 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner <u>Years</u> 214.1 179.6 174.4 182.8 248.8 210.7 165.7 177.0 200.5	Claims per 100  Miner Years  0.000000  0.000000  0.000000  0.0001789  0.003364  0.006803  0.010799	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014	REPORTED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	AWARDED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PENDING 0 0 0 0 0 0 0 0 0 0 0	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	IBNR 0.0000 0.0000 0.0016 0.0034 0.0087 0.0149 0.0186 0.0275	PENDING 0.0000 0.0000 0.0016 0.0034 0.0087 0.0149 0.0186 0.0275	AWARD <u>RATIO</u> 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455	9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883	ULTIMATE <u>AWARDED</u> 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932 951	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner <u>Years</u> 214.1 179.6 174.4 182.8 248.8 210.7 165.7 177.0	Claims per 100  Miner Years 0.000000 0.000000 0.000883 0.001789 0.003364 0.006803 0.010799 0.014946 0.023798	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL	REPORTED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	AWARDED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PENDING 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	IBNR 0.0000 0.0000 0.0016 0.0034 0.0087 0.0149 0.0186 0.0275 0.0496 0.0733	PENDING 0.0000 0.0000 0.0016 0.0034 0.0087 0.0149 0.0186 0.0275 0.0496 0.0733	AWARD RATIO 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515	9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424	ULTIMATE <u>AWARDED</u> 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932 951	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner <u>Years</u> 214.1 179.6 174.4 182.8 248.8 210.7 165.7 177.0 200.5 202.0	Claims per 100 Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL	REPORTED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	AWARDED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PENDING 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	IBNR 0.0000 0.0000 0.0016 0.0034 0.0087 0.0149 0.0186 0.0275 0.0496 0.0733	PENDING 0.0000 0.0000 0.0016 0.0034 0.0087 0.0149 0.0186 0.0275 0.0496 0.0733	AWARD RATIO 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515	9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424	ULTIMATE <u>AWARDED</u> 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932 951	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner <u>Years</u> 214.1 179.6 174.4 182.8 248.8 210.7 165.7 177.0 200.5 202.0	Claims per 100 <u>Miner Years</u> 0.000000 0.000000 0.000008 0.000883 0.001789 0.003364 0.006803 0.010799 0.014946 0.023798 0.034908 0.097290	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal	REPORTED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BNR F A AWARDED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PENDING 0 0 0 0 0 0 0 0 0 0 0 0 40.0%)	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	IBNR 0.0000 0.0001 0.0016 0.0034 0.0087 0.0149 0.0275 0.0496 0.0733 0.1976	PENDING 0.0000 0.0000 0.0016 0.0034 0.0087 0.0149 0.0186 0.0275 0.0496 0.0733	AWARD RATIO 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515 0.190091	9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424	ULTIMATE <u>AWARDED</u> 0.000000 0.000000 0.001539 0.00327 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932 951 978	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner Years 214.1 179.6 174.4 182.8 248.8 210.7 165.7 177.0 200.5 202.0 1,955.6	Claims per 100 Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal	REPORTED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 E: State Frequ	BNR F A AWARDED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PENDING 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	IBNR 0.0000 0.0001 0.0016 0.0034 0.0087 0.0149 0.0275 0.0496 0.0733 0.1976	PENDING 0.0000 0.0000 0.0016 0.0014 0.0087 0.0186 0.0275 0.0496 0.0733 0.1976	AWARD RATIO 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515 0.190091	9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424	ULTIMATE <u>AWARDED</u> 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515 0.190091	Average Weekly Wage 779 807 836 845 858 888 917 932 951 978  Statewide	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner Years 214.1 179.6 174.4 182.8 248.8 210.7 165.7 177.0 200.5 202.0 1,955.6	Claims per 100  Miner Years	
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YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal	REPORTED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 E: State Frequ	BNR F A AWARDED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PENDING 0 0 0 0 0 0 0 0 0 0 0 0 0 40.0%)	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	IBNR 0.0000 0.0001 0.0016 0.0034 0.0087 0.0149 0.0275 0.0496 0.0733 0.1976	PENDING 0.0000 0.0000 0.0016 0.0014 0.0087 0.0186 0.0275 0.0496 0.0733 0.1976	AWARD RATIO 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515 0.190091	9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424	ULTIMATE <u>AWARDED</u> 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515 0.190091	Average Weekly Wage 779 807 836 845 858 888 917 932 951 978  Statewide	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner Years 214.1 179.6 174.4 182.8 248.8 210.7 165.7 177.0 200.5 202.0 1,955.6	Claims per 100  Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal BITUMINOUS	REPORTED	BNR F   AWARDED	PENDING 0 0 0 0 0 0 0 0 0 0 0 0 0 0 40.0%)	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BNR 0.0000 0.0000 0.0016 0.0034 0.0087 0.0149 0.0186 0.0275 0.0496 0.0733 0.1976	PENDING 0.0000 0.0000 0.0000 0.0016 0.0034 0.0049 0.0149 0.0149 0.0733 0.1976	AWARD RATIO 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515 0.190091  0.962 AWARD RATIO 0.000000	9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424 94,317,743	ULTIMATE AWARDED (0.000000) 0.000000 0.001539 0.0032271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515 0.1790091 0.1790091 0.1790091 0.1790091 0.1790091 0.0000000 0.0000000 0.0000000 0.0000000	Average Weekly Wage  807 807 836 845 858 898 917 932 951 978  Statewide Average Weekly Wage 779 807	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner Years 214.1 179.6 174.4 182.8 248.8 210.7 165.7 177.0 200.5 202.0 1,955.6  Estimated Miner Years 252.2 191.1	Claims per 100 Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal BITUMINOUS  YEAR 2007 2008 2009	REPORTED  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BNR F	PENDING 0 0 0 0 0 0 0 0 0 0 0 0 0 0 40.0%)	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0000 0.0016 0.0034 0.0034 0.0149 0.0149 0.0275 0.0496 0.0733 0.1976	PENDING 0.0000 0.0000 0.0001 0.0001 0.0016 0.0034 0.0149 0.0186 0.0275 0.0496 0.0733 0.1976  BBNR + PENDING 0.0000 0.0000 0.0001 0.00016	AWARD RATIO 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515 0.190091  0.962 AWARD RATIO 0.000000 0.0000000 0.0000000	9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424 94,317,743  Poyroll 10,789,214 8,468,561 7,866,413	ULTIMATE AWARDED 0.000000 0.0001539 0.003271 0.008269 0.014334 0.017893 0.026455 0.047715 0.070515 0.190091 0.008069 0.01808 0.000000 0.000000 0.000000 0.000000 0.000000	Average Weekly Wage 779 807 836 845 858 888 917 932 951 978  Statewide Average Weekly Wage 779 807 836	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner Years 214.1 779.6 1774.4 182.8 248.8 210.7 165.7 177.0 200.5 202.0 1,955.6  Estimated Miner Years 252.2 191.1 171.4	Claims per 100  Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal BITUMINOUS  YEAR 2007 2008 2009 2010	REPORTED	BNR F   AWARDED	PENDING 0 0 0 0 0 0 0 0 0 0 0 0 40.0%)  PENDING 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0014 0.0034 0.0034 0.0034 0.0034 0.0186 0.0275 0.0496 0.0733 0.1976	PENDING 0.0000 0.0001 0.0000 0.0016 0.0034 0.0087 0.0149 0.0186 0.0275 0.0496 0.0733 0.1976  BBNR + PENDING 0.0000 0.0000 0.0000 0.0000	AWARD RATIO 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.190091  0.962 AWARD RATIO 0.000000 0.000000 0.001539 0.000000 0.001539 0.003367	9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424 94,317,743  Payroll 10,789,214 8,468,561 7,866,413 8,732,701	ULTIMATE AWARDED (0.000000 0.00153) 0.0003271 0.0003271 0.008349 0.014334 0.017893 0.024455 0.047715 0.0700515 0.190091 0.190091 0.190091 0.000000 0.000000 0.00003347 0.0003347	Average Weekly Wage  807 807 806 845 858 808 917 932 951 978  Statewide Average Weekly Wage 779 807 836 845	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner Years 214.1 179.6 174.4 182.8 248.8 210.7 165.7 177.0 200.5 202.0 1,955.6 Estimated Miner Years 252.2 191.1 171.4 188.2	Claims per 100  Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal BITUMINOUS  YEAR 2007 2008 2009 2010 2011	REPORTED  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BNR F   AWARDED	PENDING 0 0 0 0 0 0 0 0 0 0 0 0 0 0 40.0%)  Cactor adjust  PENDING 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0000 0.0003 0.0034 0.0034 0.0037 0.0149 0.0275 0.0496 0.0753 0.1976	PENDING 0.0000 0.0000 0.0000 0.0016 0.0038 0.0149 0.0149 0.0186 0.02275 0.0496 0.0733 0.1976  IBNR + PENDING 0.0000 0.0000 0.0016 0.0000	AWARD RATIO 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.190091  0.962 AWARD RATIO 0.000000 0.001539 0.003367 0.003367	9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424 94,317,743	ULTIMATE AWARDED (0.000000 0.001539 0.003207 0.01539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515 0.1790091 0.01645 0.000000 0.001639 0.000000 0.001639 0.003367 0.006445	Average Weekly Wage 779 807 836 845 858 888 917 932 951 978  Statewide Average Weekly Wage 779 807 836	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner Years 214.1 179.6 174.4 182.8 248.8 210.7 165.7 177.0 200.5 202.0 1,955.6  Estimated Miner Years 252.2 191.1 171.4 188.2 193.2	Claims per 100 Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal BITUMINOUS  YEAR 2007 2008 2009 2010	REPORTED	BNR F   AWARDED	PENDING 0 0 0 0 0 0 0 0 0 0 0 0 40.0%)  PENDING 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0014 0.0034 0.0034 0.0034 0.0034 0.0186 0.0275 0.0496 0.0733 0.1976	PENDING 0.0000 0.0001 0.0000 0.0016 0.0034 0.0087 0.0149 0.0186 0.0275 0.0496 0.0733 0.1976  BBNR + PENDING 0.0000 0.0000 0.0000 0.0000	AWARD RATIO 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.190091  0.962 AWARD RATIO 0.000000 0.000000 0.001539 0.000000 0.001539 0.003367	Poyroll 10,789,214 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424 94,317,743	ULTIMATE AWARDED (0.000000 0.00153) 0.0003271 0.0003271 0.008349 0.014334 0.017893 0.024455 0.047715 0.0700515 0.190091 0.190091 0.190091 0.000000 0.000000 0.00003347 0.0003347	Average Weekly Wage 779 807 836 846 858 888 917 932 951 978  Statewide Average Weekly Wage 779 807 836 845 845	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner Years 214.1 179.6 174.4 182.8 248.8 210.7 165.7 177.0 200.5 202.0 1,955.6 Estimated Miner Years 252.2 191.1 171.4 188.2	Claims per 100  Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal BITUMINOUS  YEAR 2007 2008 2009 2010 2011 2012 2013 2014	REPORTED	BNR F   AWARDED	PENDING 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BNR 0.0000 0.0016 0.0034 0.0034 0.0034 0.0149 0.0186 0.0275 0.0496 0.0753 0.1976	PENDING 0.0000 0.0000 0.0000 0.0016 0.0034 0.0149 0.0149 0.0186 0.02275 0.0496 0.0733 0.1976  IBNR + PENDING 0.0000 0.0000 0.0016 0.0000 0.0016 0.0007 0.0131 0.0236	AWARD RATIO 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.190091  0.962 AWARD RATIO 0.000000 0.001539 0.003367 0.006445 0.012602 0.022126 0.034247	P.160.450 7.958.335 8.004.644 8.481.228 11.720.035 10.273.004 8.342.651 9.060.883 10.469.089 10.847.424 94.317.743  Poyroll 10.789.214 8.468.561 7.866.413 8.732.701 9.102.411 9.047.745 11.721.184	ULTIMATE AWARDED 0.000000 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515 0.190091 0.000000 0.000000 0.000000 0.000000 0.000000	Average Weekly Wage 779 807 836 845 858 888 917 973 951 978  Statewide Average Weekly Wage 779 807 836 845 858	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner Years 214.1 179.6 174.4 182.8 248.8 210.7 165.7 177.0 200.5 202.0 1,955.6  Estimated Miner Years 252.2 191.1 171.4 188.2 185.5 205.7 229.0	Claims per 100 Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal BITUMINOUS  YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015	REPORTED  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BNR F   AWARDED   0	PENDING 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	IBNR 0.0000 0.00016 0.0034 0.0034 0.0149 0.0186 0.0275 0.0496 0.0733 0.1976	PENDING 0.0000 0.0000 0.0001 0.0003 0.0014 0.0018 0.0149 0.0186 0.0275 0.0496 0.0733 0.1976  BBNR + PENDING 0.0000 0.0000 0.0000 0.0001 0.0001 0.0001 0.0001 0.0001 0.0001 0.0001 0.0001 0.0001 0.0001 0.0005 0.0016 0.0035 0.00556	AWARD RATIO 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515 0.190091  0.962 AWARD RATIO 0.000000 0.001539 0.003367 0.006445 0.012602 0.022126 0.034247 0.053487	Poyroll 10,789,214 8,468,561 7,896,413 8,732,701 9,102,411 9,047,745 10,355,884 11,741,205	ULTIMATE AWARDED 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515 0.190091  EXPECTED ULTIMATE AWARDED 0.000000 0.001539 0.000000 0.001539 0.003347 0.006445 0.012602 0.022126 0.034247	Average Weekly Wage 779 807 836 845 858 858 917 978 Statewide Average Weekly Wage 779 807 836 845 858 888 917 732 951	Factor 1.056	Miner Years 214.1 779.6 174.4 182.8 248.8 210.7 165.7 177.0 200.5 202.0 1,955.6  Estimated Miner Years 252.2 191.1 171.4 188.2 193.2 185.5 205.7 229.0 225.0	Claims per 100 Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal BITUMINOUS  YEAR 2007 2008 2009 2010 2011 2011 2012 2013 2014 2015 2016	REPORTED	BNR F   AWARDED   0	PENDING 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000 IBNR 0.0000 0.0016 0.0035 0.0055	PENDING 0.0000 0.0000 0.0016 0.0034 0.0087 0.0149 0.0186 0.0275 0.0496 0.0733 0.1976  BBNR + PENDING 0.0000 0.0000 0.0000 0.0000 0.0016 0.0016 0.0035 0.0067 0.0131 0.0230 0.0356 0.0556 0.0770	AWARD RATIC 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515 0.190091  0.962 AWARD RATIC 0.000000 0.000000 0.0000367 0.006445 0.01539 0.003367 0.006445 0.012602 0.022126 0.034247 0.053487 0.074074	Payroll 10,789,214 8,485,51 10,273,214 8,485,51 10,727,315 10,789,214 8,48,51 10,789,214 8,48,561 10,789,214 8,48,561 10,789,214 8,48,561 10,789,214 8,48,561 11,741,84 11,741,8	ULTIMATE AWARDED (0.000000 0.00153) 0.005349 (0.01434 0.017893 0.02455 0.047715 0.070515 0.070515 0.000000 0.001539 0.000000 0.001539 0.000000 0.001539 0.000000 0.001539 0.003447 0.0034424 0.0034247 0.0034247 0.0034247 0.005445 0.001540	Average Weekly Wage 779 807 836 846 858 888 917 932 951 978  Statewide Average Weekly Wage 779 807 836 845 858 888 917 932	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner Years 214.1 179.6 174.4 182.8 248.8 210.7 165.7 177.0 200.5 202.0 1,955.6  Estimated Miner Years 171.1 171.4 188.2 193.2 195.5 205.7 229.0 225.0 225.0 212.0	Claims per 100  Miner Years	
YEAR 2007 2008 2010 2011 2012 2013 2014 2015 2016 TOTAL AVerage Federal BITUMINOUS  YEAR 2007 2008 2009 2011 2012 2013 2014 2015 2016 TOTAL TOTA	REPORTED	BNR F   AWARDED	PENDING 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	IBNR 0.0000 0.00016 0.0034 0.0034 0.0149 0.0186 0.0275 0.0496 0.0733 0.1976	PENDING 0.0000 0.0000 0.0001 0.0003 0.0014 0.0018 0.0149 0.0186 0.0275 0.0496 0.0733 0.1976  BBNR + PENDING 0.0000 0.0000 0.0000 0.0001 0.0001 0.0001 0.0001 0.0001 0.0001 0.0001 0.0001 0.0001 0.0001 0.0005 0.0016 0.0035 0.00556	AWARD RATIO 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515 0.190091  0.962 AWARD RATIO 0.000000 0.001539 0.003367 0.006445 0.012602 0.022126 0.034247 0.053487	Poyroll 10,789,214 8,468,561 7,896,413 8,732,701 9,102,411 9,047,745 10,355,884 11,741,205	ULTIMATE AWARDED 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515 0.190091  EXPECTED ULTIMATE AWARDED 0.000000 0.001539 0.000000 0.001539 0.003347 0.006445 0.012602 0.022126 0.034247	Average Weekly Wage 779 807 836 845 858 858 917 978 Statewide Average Weekly Wage 779 807 836 845 858 888 917 732 951	Factor 1.056	Miner Years 214.1 779.6 174.4 182.8 248.8 210.7 165.7 177.0 200.5 202.0 1,955.6  Estimated Miner Years 252.2 191.1 171.4 188.2 193.2 185.5 205.7 229.0 225.0	Claims per 100 Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal BITUMINOUS  YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal	REPORTED	BNR F   AWARDED   0	PENDING 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000 IBNR 0.0000 0.0016 0.0035 0.0055	PENDING 0.0000 0.0000 0.0016 0.0034 0.0087 0.0149 0.0186 0.0275 0.0496 0.0733 0.1976  BBNR + PENDING 0.0000 0.0000 0.0000 0.0000 0.0016 0.0016 0.0035 0.0067 0.0131 0.0230 0.0356 0.0556 0.0770	AWARD RATIC 0.000000 0.001539 0.003271 0.008369 0.014334 0.017893 0.026455 0.047715 0.070515 0.190091  0.962 AWARD RATIC 0.000000 0.000000 0.0000367 0.006445 0.01539 0.003367 0.006445 0.012602 0.022126 0.034247 0.053487 0.074074	Payroll 10,789,214 8,485,51 10,273,214 8,485,51 10,727,315 10,789,214 8,48,51 10,789,214 8,48,561 10,789,214 8,48,561 10,789,214 8,48,561 10,789,214 8,48,561 11,741,84 11,741,8	ULTIMATE AWARDED (0.000000 0.00153) 0.005349 (0.01434 0.017893 0.02455 0.047715 0.070515 0.070515 0.000000 0.001539 0.000000 0.001539 0.000000 0.001539 0.000000 0.001539 0.003447 0.0034424 0.0034247 0.0034247 0.0034247 0.005445 0.001540	Average Weekly Wage 779 807 836 845 858 858 917 978 Statewide Average Weekly Wage 779 807 836 845 858 888 917 732 951	Factor 1.056	Miner Years 214.1 179.6 174.4 182.8 248.8 210.7 165.7 177.0 200.5 202.0 1,955.6  Estimated Miner Years 171.1 171.4 188.2 193.2 195.5 205.7 229.0 225.0 225.0 212.0	Claims per 100  Miner Years	

Source: Claim counts - CMCRB OD Database as of 08/15/2017

IBNR: Exhibit VII-C-6, p.4 Payroll- Exhibit X-A

Payroll- Exhibit X-A

The Award Ratios for all classes were set equal to the Grand Total Award Ratio calculated on Exhibit VII-B-2 Page 3.

The Grand Total Award Ratio is equal to Awarded ÷ (Awarded plus Denied) = 25 / [25 + 01] = 0.962

The Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G

Estimated Miner Years = Payroll / [SAWW x Adj. Factor x 52]

Frequency per 100 Miner Years = (Expected Ult. Awarded / Est. Miner Years) x 100

File: C:\Clients\Coal Mine\2017 Rate Filing\XL\{2017-07-B-2.xlsm}\VII-B-2

Run Date: October 10, 2017 - 11:03:56 AM

# STATE OCCUPATIONAL DISEASE FREQUENCY WITH FEDERAL EXCESS FREQUENCY

ANTHRACITE	THRACITE PREP PLANT (1026)  IBNR Factor adjusted by 1.0000  IBNR + AWARD  ULTIMATE Average Adjustment Miner Claims per 100 Weighted													
		IBNR Fo	actor adjus	sted by 1.00	00	IDVID :								
<u>YEAR</u> 2007	REPORTED 1	AWARDED	PENDING 0	DENIED 0	IBNR 0.0000	PENDING 0.0000	AWARD <u>RATIO</u> 0.000000	Payroll 5,756,439	AWARDED 1.000000	Average Weekly Wage 779	Adjustment Factor 1.056	Miner Years 134.6	Miner Years 0.742942	Frequency
2008	0	0	0	0	0.0000	0.0000	0.000000	6,390,767	0.000000	807	1.056	144.2	0.000000	
2009	0	0	0	0	0.0034	0.0034	0.003271	6,749,748	0.003271	836	1.056	147.0	0.002225	
2010	1	1	0	0	0.0058	0.0058	0.005580	5,762,086	1.005580	845	1.056	124.2	0.809645	
2011 2012	0	0	0	0	0.0134	0.0134 0.0315	0.012891 0.030303	7,236,583 8,671,140	0.012891 0.030303	858 888	1.056 1.056	153.6 177.8	0.008392 0.017043	
2013	0	0	0	0	0.0460	0.0460	0.044252	8,265,665	0.044252	917	1.056	164.2	0.026950	
2014	0	0	0	0	0.0626	0.0626	0.060221	8,234,771	0.060221	932	1.056	160.9	0.037428	
2015	0	0	0	0	0.0901	0.0901	0.086676	7,606,274	0.086676	951	1.056	145.7	0.059489	
<u>2016</u>	0	0	0	0	0.1178	0.1178	0.113324	6,971,270	0.113324	978	1.056	129.8	0.087306	
TOTAL	2	2	0	0	0.3706	0.3706	0.356517	71,644,743	2.356517			1,482.0	1.791420 0.179142	
	e: State Frequ Excess Frequ		40.0%)										0.071657	
BITUMINOUS	PREP PLANT (		actor adjus	sted by 0.40	00		0.962		EXPECTED	Statewide		Estimated	Frequency	
		IDINK FO	actor dajus	sied by 0.40	00	IBNR +	AWARD		ULTIMATE	Average	Adjustment	Miner	Claims per 100	
YEAR	REPORTED	AWARDED	<u>PENDIN</u> G	DENIED	IBNR	PENDING	RATIO	Payroll	AWARDED	Weekly Wage	<u>Factor</u>	<u>Years</u>	Miner Years	
2007	0	0	0	0	0.0000	0.0000	0.000000	18,895,192	0.000000	779	1.505	309.9	0.000000	
2008	0	0	0	0	0.0000	0.0000	0.000000	21,250,256	0.000000	807	1.505	336.5	0.000000	
2009 2010	0	0	0	0	0.0040 0.0105	0.0040 0.0105	0.003848	19,828,012 26,313,130	0.003848	836 845	1.505 1.505	303.1 397.9	0.001270 0.002539	
2010	0	0	0	0	0.0103	0.0103	0.025012	35,155,068	0.025012	858	1.505	523.6	0.002337	
2012	Ō	0	0	0	0.0497	0.0497	0.047811	34,211,729	0.047811	888	1.505	492.3	0.009712	
2013	0	0	0	0	0.0762	0.0762	0.073304	34,253,697	0.073304	917	1.505	477.3	0.015358	
2014	0	0	0	0	0.1323	0.1323	0.127273	43,520,040	0.127273	932	1.505	596.7	0.021329	
2015 2016	0	0	0	0	0.1590 0.1496	0.1590 0.1496	0.152958 0.143915	33,564,176 22,131,423	0.152958 0.143915	951 978	1.505 1.505	451.0 289.2	0.033915 0.049763	
TOTAL	0				0.6073	0.6073	0.584223	289,122,723	0.584223	770	1.505	4,177.5	0.138663	
	: State Frequ		Ü		0.0070	0.0070	0.00 1220	20771227720	0.00 1220			1,177.0	0.013866	
Federal	Excess Frequ	ency (times	40.0%)										0.005546	
TOTAL OTHER	CLASSES													
TOTAL OTHER	CLASSES						0.962		EXPECTED	Statewide		Estimated	Frequency	
						IBNR +	AWARD		ULTIMATE	Average	Adjustment	Miner	Claims per 100	
YEAR	CLASSES  REPORTED	AWARDED	PENDING	DENIED	IBNR 0.0000	PENDING	AWARD RATIO	Payroll	ULTIMATE AWARDED	Average Weekly Wage	Adjustment <u>Factor</u>	Miner Years	Claims per 100 Miner Years	
<u>YEAR</u> 2007	REPORTED 1	1	0	0	0.0000	9ENDING 0.0000	AWARD <u>RATIO</u> 0.000000	59,392,376	ULTIMATE AWARDED 1.000000	Average Weekly Wage 779		Miner <u>Years</u> 1,256.6	Claims per 100 Miner Years 0.079580	
YEAR		AWARDED 1 0 0				PENDING	AWARD RATIO		ULTIMATE AWARDED	Average Weekly Wage		Miner Years	Claims per 100 Miner Years	
YEAR 2007 2008 2009 2010	REPORTED 1 0 0 1	1 0 0	0 0 0 0	0 0 0	0.0000 0.0000 0.0118 0.0257	PENDING 0.0000 0.0000 0.0118 0.0257	AWARD <u>RATIO</u> 0.000000 0.000000	59,392,376 56,317,623 48,548,532 55,531,499	ULTIMATE <u>AWARDED</u> 1.000000 0.000000 0.011352 1.024723	Average Weekly Wage 779 807 836 845		Miner <u>Years</u> 1,256.6 1,127.9 928.8 1,027.6	Claims per 100 <u>Miner Years</u> 0.079580 0.000000 0.001222 0.099720	
YEAR 2007 2008 2009 2010 2011	REPORTED 1 0 0 1 0 0	1 0 0 1	0 0 0 0	0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584	PENDING 0.0000 0.0000 0.0118 0.0257 0.0584	AWARD <u>RATIO</u> 0.000000 0.000000 0.011352 0.024723 0.056181	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438	ULTIMATE <u>AWARDED</u> 1.000000 0.000000 0.011352 1.024723 0.056181	Average Weekly Wage 779 807 836 845 858		Miner <u>Years</u> 1,256.6 1,127.9 928.8 1,027.6 1,220.6	Claims per 100 <u>Miner Years</u> 0.079580 0.000000 0.001222 0.099720 0.004603	
YEAR 2007 2008 2009 2010 2011 2012	REPORTED 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 1 0	0 0 0 0 0	0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187	PENDING 0.0000 0.0000 0.0118 0.0257 0.0584 0.1187	AWARD <u>RATIO</u> 0.000000 0.000000 0.011352 0.024723 0.056181 0.114189	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931	ULTIMATE <u>AWARDED</u> 1.000000 0.000000 0.011352 1.024723 0.056181 0.114189	Average <u>Weekly Wage</u> 779 807 836 845 858 888		Miner <u>Years</u> 1,256.6 1,127.9 928.8 1,027.6 1,220.6 1,200.6	Claims per 100 <u>Miner Years</u> 0.079580 0.000000 0.001222 0.099720 0.004603 0.009511	
YEAR 2007 2008 2009 2010 2011 2012 2013	REPORTED 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 1 0 0	0 0 0 0 0	0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768	PENDING 0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768	AWARD <u>RATIO</u> 0.000000 0.000000 0.011352 0.024723 0.056181 0.114189 0.170082	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931 67,035,206	ULTIMATE <u>AWARDED</u> 1.000000 0.000000 0.011352 1.024723 0.056181 0.114189 0.170082	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917		Miner <u>Years</u> 1,256.6 1,127.9 928.8 1,027.6 1,220.6 1,200.6 1,128.5	Claims per 100  Miner Years 0.079580 0.000000 0.001222 0.099720 0.004603 0.009511 0.015071	
YEAR 2007 2008 2009 2010 2011 2012	REPORTED 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 1 0	0 0 0 0 0	0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187	PENDING 0.0000 0.0000 0.0118 0.0257 0.0584 0.1187	AWARD <u>RATIO</u> 0.000000 0.000000 0.011352 0.024723 0.056181 0.114189	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931	ULTIMATE <u>AWARDED</u> 1.000000 0.000000 0.011352 1.024723 0.056181 0.114189	Average <u>Weekly Wage</u> 779 807 836 845 858 888		Miner <u>Years</u> 1,256.6 1,127.9 928.8 1,027.6 1,220.6 1,200.6	Claims per 100 <u>Miner Years</u> 0.079580 0.000000 0.001222 0.099720 0.004603 0.009511	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016	REPORTED 1 0 0 1 0 0 0 0 0 0 0 0 0 0	1 0 0 1 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358	PENDING 0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358	AWARD <u>RATIO</u> 0.000000 0.000000 0.011352 0.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931 67,035,206 77,808,252 68,310,739 54,023,174	ULTIMATE <u>AWARDED</u> 1.000000 0.000000 0.011352 1.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932		Miner <u>Years</u> 1,256.6 1,127.9 928.8 1,027.6 1,200.6 1,200.6 1,128.5 1,266.6 1,116.5 883.0	Claims per 100  Miner Years 0.079580 0.000000 0.001222 0.099720 0.004603 0.009511 0.015071 0.020818 0.032543 0.047479	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL	REPORTED 1 0 0 1 0 0 0 0 0 0 0 0 0 0 2	1 0 0 1 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777	PENDING 0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777	AWARD <u>RATIO</u> 0.000000 0.000000 0.011352 0.024723 0.056181 0.114189 0.170082 0.263684 0.363347	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931 67,035,206 77,808,252 68,310,739	ULTIMATE <u>AWARDED</u> 1.000000 0.000000 0.011352 1.024723 0.056181 0.114189 0.170082 0.263684 0.363347	Average Weekly Wage 779 807 836 845 858 858 888 917 932 951		Miner <u>Years</u> 1,256.6 1,127.9 928.8 1,027.6 1,220.6 1,128.5 1,266.6 1,116.5	Claims per 100 Miner Years 0.079580 0.000000 0.001222 0.099720 0.004603 0.009511 0.015071 0.020818 0.032543 0.047479 0.310547	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL	REPORTED 1 0 0 1 0 0 0 0 0 0 0 0 0 0	1 0 0 1 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358	PENDING 0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358	AWARD <u>RATIO</u> 0.000000 0.000000 0.011352 0.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931 67,035,206 77,808,252 68,310,739 54,023,174	ULTIMATE <u>AWARDED</u> 1.000000 0.000000 0.011352 1.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240	Average Weekly Wage 779 807 836 845 858 858 888 917 932 951		Miner <u>Years</u> 1,256.6 1,127.9 928.8 1,027.6 1,200.6 1,200.6 1,128.5 1,266.6 1,116.5 883.0	Claims per 100  Miner Years 0.079580 0.000000 0.001222 0.099720 0.004603 0.009511 0.015071 0.020818 0.032543 0.047479	0.028988 0.011595
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL	REPORTED  1 0 0 1 0 0 0 0 0 0 0 2 State Frequences	1 0 0 1 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358	PENDING 0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358	AWARD RATIO 0.000000 0.000000 0.011352 0.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240 1.422798	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931 67,035,206 77,808,252 68,310,739 54,023,174	ULTIMATE <u>AWARDED</u> 1.000000 0.000000 0.011352 1.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240 3.422798	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932 951 978		Miner Years 1,256.6 1,127.9 928.8 1,027.6 1,220.6 1,200.6 1,128.5 1,266.6 1,116.5 883.0 11,156.7	Claims per 100 Miner Years 0.079580 0.000000 0.001222 0.099720 0.004603 0.009511 0.015071 0.020818 0.032543 0.047479 0.310547 0.310547 0.0310555 0.012422	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal	REPORTED  1 0 0 1 0 0 0 0 0 0 0 2 State Frequences	1 0 0 1 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358	PENDING 0.0000 0.0000 0.00118 0.0257 0.0584 0.1185 0.1768 0.2741 0.3777 0.4358 1.4790	AWARD <u>RATIO</u> 0.000000 0.000000 0.011352 0.024723 0.056181 0.114189 0.170082 0.253684 0.363347 0.419240 1.422798	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931 67,035,206 77,808,252 68,310,739 54,023,174	ULTIMATE <u>AWARDED</u> 1,000000 0,000000 0,011352 1,024723 0,056181 0,114189 0,170082 0,243684 0,363347 0,419240 3,422798	Average Weekly Wage 779 807 836 845 858 888 917 932 951 978 Statewide	Factor	Miner Years 1,256.6 1,127.9 928.8 1,027.6 1,220.6 1,200.6 1,128.5 1,266.6 1,116.5 883.0 11,156.7	Claims per 100  Miner Years 0.079580 0.000000 0.001222 0.0997720 0.004603 0.009511 0.015071 0.020818 0.032543 0.047479 0.310547 0.031055 0.012422	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal I	REPORTED	1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358 1.4790	PENDING 0,0000 0,0000 0,0118 0,0257 0,0584 0,1187 0,1768 0,2741 0,3777 0,4358 1,4790	AWARD <u>RATIO</u> 0.000000 0.000000 0.011352 0.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240 1.422798	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931 67,035,206 77,808,252 68,310,739 54,023,174 623,706,770	ULTIMATE AWARDED 1.000000 0.000000 0.011352 1.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240 3.422798 EXPECTED ULTIMATE	Average  Weekly Wage  779  807  836  845  858  888  917  932  951  978  Statewide  Average	<u>Factor</u>	Miner Years 1,256.6 1,127.9 928.8 1,027.6 1,220.6 1,128.5 1,266.6 1,116.5 883.0 11,156.7  Estimated Miner	Claims per 100  Miner Years 0.079580 0.079580 0.000000 0.001222 0.099720 0.004603 0.009511 0.015071 0.020818 0.032543 0.0047479 0.310547 0.031055 0.012422  Frequency Claims per 100	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal	REPORTED  1 0 0 1 0 0 0 0 0 0 0 2 State Frequences	1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358	PENDING 0.0000 0.0000 0.00118 0.0257 0.0584 0.1185 0.1768 0.2741 0.3777 0.4358 1.4790	AWARD <u>RATIO</u> 0.000000 0.000000 0.011352 0.024723 0.056181 0.114189 0.170082 0.253684 0.363347 0.419240 1.422798	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931 67,035,206 77,808,252 68,310,739 54,023,174	ULTIMATE <u>AWARDED</u> 1,000000 0,000000 0,011352 1,024723 0,056181 0,114189 0,170082 0,243684 0,363347 0,419240 3,422798	Average Weekly Wage 779 807 836 845 858 888 917 932 951 978 Statewide	Factor	Miner Years 1,256.6 1,127.9 928.8 1,027.6 1,220.6 1,200.6 1,128.5 1,266.6 1,116.5 883.0 11,156.7	Claims per 100  Miner Years 0.079580 0.000000 0.001222 0.0997720 0.004603 0.009511 0.015071 0.020818 0.032543 0.047479 0.310547 0.031055 0.012422	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL AVERAGE GRAND TOTAL	REPORTED   1	1 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358 1.4790	PENDING 0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358 1.4790	AWARD RATIO 0.000000 0.000000 0.011352 0.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240 1.422798	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931 67,035,206 77,808,252 68,310,739 54,023,174 623,706,770	ULTIMATE AWARDED 1.000000 0.000000 0.011352 1.024723 0.056181 0.114189 0.17082 0.263684 0.363347 0.419240 3.422798	Average Weekly Wage 9779 807 836 845 858 888 917 932 951 978  Statewide Average Weekly Wage	<u>Factor</u>	Miner Years 1,256.6 1,127.9 928.8 1,027.6 1,220.6 1,200.6 1,120.5 1,126.6 1,116.5 883.0 11,156.7  Estimated Miner Years	Claims per 100  Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal GRAND TOTA  YEAR 2007 2008 2009	REPORTED   1	1 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1186 0.2741 0.377 0.4358 1.4790	PENDING 0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358 1.4790  BBNR + PENDING 0.0000 0.0000 0.0000 0.00118	AWARD RATIO 0.000000 0.000000 0.011352 0.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240 1.422798  0.962 AWARD RATIO 0.000000 0.000000 0.01352	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931 67,035,206 77,808,252 68,310,739 54,023,174 623,706,770  Poyroll 218,810,532 249,817,108 229,462,394	ULTIMATE AWARDED 1.000000 0.000000 0.011352 1.024723 0.056181 0.114189 0.17082 0.263684 0.363347 0.419240 3.422798 EXPECTED ULTIMATE AWARDED 4.000000 3.000000 0.011352	Average  Weekly Wage  779 807 836 845 858 888 917 932 951 978  Statewide Average  Weekly Wage 779 807 836	<u>Factor</u>	Miner Years 1,256.6 1,127.9 928.8 1,027.6 1,220.6 1,200.6 1,128.5 1,266.6 1,116.5 883.0 11,156.7  Estimated Miner Years 4,426.2 4,812.1 4,211.1	Claims per 100  Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal  GRAND TOTA  YEAR 2007 2008 2009 2010	REPORTED   1	1 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358 1.4790 IBNR 0.0000 0.0000 0.0000	PENDING 0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358 1.4790  BBNR + PENDING 0.0000 0.0000 0.0018 0.0118	AWARD RATIO 0.000000 0.000000 0.011352 0.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240 1.422798  0.962 AWARD RATIO 0.000000 0.000000 0.001352	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931 67,035,206 77,808,252 68,310,739 54,023,174 623,706,770  Payroll 218,810,532 249,817,108 229,462,394 269,231,509	ULTIMATE AWARDED 1.000000 0.010352 1.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419249 8 EXPECTED ULTIMATE AWARDED 4.000000 3.000000 0.011352 1.156210	Average Weekly Wage 807 807 808 808 845 858 898 917 932 951 978  Statewide Average Weekly Wage 779 807 836 845	<u>Factor</u>	Miner Years 1,256.6 1,127.9 928.8 1,027.6 1,220.6 1,128.5 1,266.6 1,116.5 883.0 11,156.7  Estimated Miner Years 4,426.2 4,812.1 4,211.1 4,826.9	Claims per 100  Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal I  GRAND TOTA  YEAR 2007 2008 2009 2010 2011	REPORTED   1	1 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358 1.4790 IBNR 0.0000 0.0000 0.0000 0.1624 0.1624	PENDING 0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358 1.4790  IBNR + PENDING 0.0000 0.0000 0.0118 0.16263	AWARD RATIO 0.000000 0.000000 0.011352 0.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240 0.419240 0.4922798  0.962 AWARD RATIO 0.000000 0.011352 0.0156210 0.156210 0.156210 0.156210 0.1562979	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931 67,035,206 77,808,252 68,310,739 54,023,174 623,706,770  Payroll 218,810,532 249,817,108 229,462,394 269,231,509 324,841,755	ULTIMATE AWARDED 1.000000 0.000000 0.011352 1.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240 3.422798 EXPECTED ULTIMATE AWARDED 4.000000 0.011352 1.156210 5.438999	Average Weekly Wage 779 807 836 845 858 888 917 932 951 978  Statewide Average Weekly Wage 779 807 836 845 845	<u>Factor</u>	Miner Years 1,256.6 1,127.9 928.8 1,027.6 1,220.6 1,128.5 1,266.6 1,116.5 883.0 11,156.7  Estimated Miner Years 4,426.2 4,812.1 4,211.1 4,826.9 5,732.1	Claims per 100  Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal  GRAND TOTA  YEAR 2007 2008 2009 2010	REPORTED   1	1 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358 1.4790 IBNR 0.0000 0.0000 0.0000	PENDING 0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358 1.4790  BBNR + PENDING 0.0000 0.0000 0.0018 0.0118	AWARD RATIO 0.000000 0.000000 0.011352 0.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240 1.422798  0.962 AWARD RATIO 0.000000 0.000000 0.001352	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931 67,035,206 77,808,252 68,310,739 54,023,174 623,706,770  Payroll 218,810,532 248,4817,538 249,462,394 269,231,509 324,841,755 326,146,817	ULTIMATE AWARDED 1.000000 0.010352 1.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419249 8 EXPECTED ULTIMATE AWARDED 4.000000 3.000000 0.011352 1.156210	Average Weekly Wage 807 807 808 808 845 858 898 917 932 951 978  Statewide Average Weekly Wage 779 807 836 845	<u>Factor</u>	Miner Years 1,256.6 1,127.9 928.8 1,027.6 1,220.6 1,200.6 1,128.5 1,266.6 1,116.5 883.0 11,156.7  Estimated Miner Years 4,426.2 4,812.1 4,211.1 4,826.9 5,732.1 5,539.4	Claims per 100  Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal I  GRAND TOTA  YEAR 2007 2008 2009 2010 2011 2012 2013 2014	REPORTED   1	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358 1.4790 BBNR 0.0000 0.0000 0.0000 0.0118 0.1624 0.4563 0.8826 1.3382 1.3288	PENDING 0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358 1.4790  IBNR + PENDING 0.0000 0.0118 0.1624 0.4563 1.8826 1.3826 1.3826	AWARD RATIO 0.000000 0.000000 0.011352 0.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240 0.419240 0.0962 AWARD RATIO 0.000000 0.011352 0.0562899 1.811090 1.287724 3.49087724	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931 67,035,206 77,808,252 68,310,739 54,023,174 623,706,770  Payroll 218,810,532 249,817,108 229,462,394 269,231,509 324,841,755	ULTIMATE AWARDED 1.000000 0.000000 0.011352 1.024723 0.056181 0.114189 0.17082 0.263684 0.363347 0.419240 3.422798 EXPECTED ULTIMATE AWARDED 4.000000 3.000000 0.011352 1.156210 5.438999 5.438990 6.811090	Average Weekly Wage 779 807 836 845 858 888 917 932 951 978  Statewide Average Weekly Wage 779 807 836 845 858	<u>Factor</u>	Miner Years 1,256.6 1,127.9 928.8 1,027.6 1,220.6 1,128.5 1,266.6 1,116.5 883.0 11,156.7  Estimated Miner Years 4,426.2 4,812.1 4,211.1 4,826.9 5,732.1 5,539.4 4,886.9 6,444.3	Claims per 100  Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL AVERAGE FEDERAL  YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2008 2009 2010 2011 2012 2013 2014 2015	REPORTED   1	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358 1.4790 1.4790 1.4790 0.0000 0.0000 0.0118 0.1624 0.4563 0.8826 1.3386 3.6288 4.8493	PENDING 0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358 1.4790  BBNR + PENDING 0.0000 0.0000 0.0000 0.00118 0.1624 0.4563 1.8826 1.3386 3.6288 3.6288 5.8493	AWARD RATIO 0.000000 0.000000 0.011352 0.026723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240 1.422798  0.962 AWARD RATIO 0.000000 0.011352 0.156210 0.438999 1.281724 3.4987724 3.4987724 3.4987724	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931 67,035,206 77,808,252 68,310,739 54,023,174 623,706,770  Payroll 218,810,532 249,817,108 229,462,394 269,231,509 324,841,755 326,146,817 300,963,743 423,814,574 423,814,575 423,814,574 423,814,574	ULTIMATE AWARDED 1.000000 0.000000 0.011352 1.024723 0.263684 0.363347 0.419240 3.422798 EXPECTED ULTIMATE AWARDED 4.000000 3.000000 0.011352 1.156210 5.438999 6.811090 5.287724 5.49087 7.4000000 5.43990 5.287724 5.49087	Average Weekly Wage 779 807 836 845 858 888 917 932 951 978  Statewide Average Weekly Wage 779 807 836 845 858 888 917 932 951	<u>Factor</u>	Miner Years 1,256.6 1,127.9 928.8 1,027.6 1,220.6 1,128.5 1,128.5 1,116.5 883.0 11,156.7  Estimated Miner Years 4,426.2 4,812.1 4,211.1 4,826.9 5,732.1 5,539.4 4,886.9 6,446.3 5,277.4	Claims per 100  Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL AVerage Federal  GRAND TOTA  YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2010 2011 2012 2013 2014 2015 2016	REPORTED   1	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358 1.4790 IBNR 0.0000 0.0000 0.0118 0.1624 0.4563 0.8826 1.3386 3.6288 4.8493 5.8342	PENDING 0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1788 0.2741 0.3777 0.4358 1.4790  BBNR + PENDING 0.0000 0.0000 0.0000 0.0118 0.1624 0.4563 1.8826 1.3386 3.6288 5.8493 6.8342	AWARD RATIO 0.000000 0.000000 0.011352 0.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.4192240 1.422798  0.962 AWARD RATIO 0.000000 0.000000 0.000000 0.0000000 0.0113522 0.156210 0.438999 1.811090 1.287724 3.490877 5.627065 6.574452	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931 67,035,206 77,808,252 68,310,739 54,023,174 623,706,770  Payroll 218,810,532 249,817,108 229,462,394 269,231,509 324,841,752 326,146,817 300,963,743 423,814,574 423,814,574 423,814,574 423,814,574 423,814,574 423,814,574 423,814,574 423,814,574 423,814,574 423,814,574 423,814,574 423,814,574 423,814,574	ULTIMATE AWARDED 1.000000 0.011352 1.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240 3.422798 EXPECTED ULTIMATE AWARDED ULTIMATE AWARDED 1.156210 5.438999 6.811090 5.287724 5.490877 6.627065 6.574452	Average  Weekly Wage 779 807 836 845 858 858 917 932 951 978  Statewide Average Weekly Wage 779 807 836 845 858 888 917 932	<u>Factor</u>	Miner Years 1,256.6 1,127.9 928.8 1,027.6 1,220.6 1,128.5 1,266.6 1,116.5 883.0 11,156.7  Estimated Miner Years 4,426.2 4,812.1 4,211.1 4,211.1 4,282.9 5,732.1 5,539.4 4,886.9 6,446.3 5,277.4 3,758.9	Claims per 100  Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average Federal  GRAND TOTA  YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL	REPORTED   1	1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358 1.4790 1.4790 1.4790 0.0000 0.0000 0.0118 0.1624 0.4563 0.8826 1.3386 3.6288 4.8493	PENDING 0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358 1.4790  BBNR + PENDING 0.0000 0.0000 0.0000 0.00118 0.1624 0.4563 1.8826 1.3386 3.6288 3.6288 5.8493	AWARD RATIO 0.000000 0.000000 0.011352 0.026723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240 1.422798  0.962 AWARD RATIO 0.000000 0.011352 0.156210 0.438999 1.281724 3.4987724 3.4987724 3.4987724	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931 67,035,206 77,808,252 68,310,739 54,023,174 623,706,770  Payroll 218,810,532 249,817,108 229,462,394 269,231,509 324,841,755 326,146,817 300,963,743 423,814,574 423,814,575 423,814,574 423,814,574	ULTIMATE AWARDED 1.000000 0.000000 0.011352 1.024723 0.263684 0.363347 0.419240 3.422798 EXPECTED ULTIMATE AWARDED 4.000000 3.000000 0.011352 1.156210 5.438999 6.811090 5.287724 5.49087 7.4000000 5.43990 5.287724 5.49087	Average Weekly Wage 779 807 836 845 858 888 917 932 951 978  Statewide Average Weekly Wage 779 807 836 845 858 888 917 932 951	<u>Factor</u>	Miner Years 1,256.6 1,127.9 928.8 1,027.6 1,220.6 1,128.5 1,128.5 1,116.5 883.0 11,156.7  Estimated Miner Years 4,426.2 4,812.1 4,211.1 4,826.9 5,732.1 5,539.4 4,886.9 6,446.3 5,277.4	Claims per 100  Miner Years	0.011595
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL  YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL  YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL	REPORTED   1	1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DENIED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1768 0.2741 0.3777 0.4358 1.4790 IBNR 0.0000 0.0000 0.0118 0.1624 0.4563 0.8826 1.3386 3.6288 4.8493 5.8342	PENDING 0.0000 0.0000 0.0118 0.0257 0.0584 0.1187 0.1788 0.2741 0.3777 0.4358 1.4790  BBNR + PENDING 0.0000 0.0000 0.0000 0.0118 0.1624 0.4563 1.8826 1.3386 3.6288 5.8493 6.8342	AWARD RATIO 0.000000 0.000000 0.011352 0.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.4192240 1.422798  0.962 AWARD RATIO 0.000000 0.000000 0.000000 0.0000000 0.0113522 0.156210 0.438999 1.811090 1.287724 3.490877 5.627065 6.574452	59,392,376 56,317,623 48,548,532 55,531,499 67,989,438 68,749,931 67,035,206 77,808,252 68,310,739 54,023,174 623,706,770  Payroll 218,810,532 249,817,108 229,462,394 269,231,509 324,841,752 326,146,817 300,963,743 423,814,574 423,814,574 423,814,574 423,814,574 423,814,574 423,814,574 423,814,574 423,814,574 423,814,574 423,814,574 423,814,574 423,814,574 423,814,574	ULTIMATE AWARDED 1.000000 0.011352 1.024723 0.056181 0.114189 0.170082 0.263684 0.363347 0.419240 3.422798 EXPECTED ULTIMATE AWARDED ULTIMATE AWARDED 1.156210 5.438999 6.811090 5.287724 5.490877 6.627065 6.574452	Average Weekly Wage 779 807 836 845 858 888 917 932 951 978  Statewide Average Weekly Wage 779 807 836 845 858 888 917 932 951	<u>Factor</u>	Miner Years 1,256.6 1,127.9 928.8 1,027.6 1,220.6 1,128.5 1,266.6 1,116.5 883.0 11,156.7  Estimated Miner Years 4,426.2 4,812.1 4,211.1 4,211.1 4,282.9 5,732.1 5,539.4 4,886.9 6,446.3 5,277.4 3,758.9	Claims per 100  Miner Years	

Source: Claim counts - CMCRB OD Database as of 08/15/2017

IBNR: Exhibit VII-C-6, p.4 Payroll- Exhibit X-A

Payroll- Exhibit X-A

The Award Ratios for all classes were set equal to the Grand Total Award Ratio calculated on Exhibit VII-B-2 Page 3.

The Grand Total Award Ratio is equal to Awarded ÷ (Awarded plus Denied) = 25 / [25 + 01] = 0.962

The Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G

Estimated Miner Years = Payroll / [SAWW x Adj. Factor x 52)

Frequency per 100 Miner Years = (Expected Ult. Awarded / Est. Miner Years) x 100

File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-07-B-2.xlsm]VII-B-3

Run Date: October 10, 2017 - 11:03:56 AM

COAL MINE COMPENSATION RATING BUREAU STATE OCCUPATIONAL DISEASE ANTHRACITE UNDERGROUND (1011)

Claims with File Dates on or before 12-31-2016, Valued as of 4-30-2017

													Incre	mental Fre		d IBNR								Cidiris wii	ITTIIC Dates	orror belor	C 12-31-20	6, Valued as	014-30-2017
Reported Cli Months  12 24 36 48 60 72 84 96 108 120 132 144 156 168 180 192 204 216 228 240	1990 1 2 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	1991 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1992 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1993 0 1 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4	1994 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1995 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1996 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1997 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1998 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1999	2000	2001 0 0 0 1 1 1 1 1 1 1 1	2002 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Yec 2003 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2004 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2005 0 0 0 0 0 0 0 0 0 0 0	2006 0 0 0 0 0 0 0 0 0 0	2007 0 0 0 0 0 0 0 0 0	0 0 0	2009	2010 0 0 0 0 0 0	2011	2012 0 0 0 0	2013 0 0 1 1	2014 0 0 0	2015 0 0	2016 0		
Incremental 12-24 24-36 36-48 48-60 60-72 72-84 84-96 96-108 108-120 120-132 132-144 144-156 156-168 168-180 180-192 192-204 204-216 216-228 228-240	Changes  0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0	0 1 0	0 0	0			
Payroll (\$Millions) 12-24 24-36 36-48 48-60 60-72 72-84 84-96 96-108 108-120 120-132 132-144 144-156 156-168 168-180 180-192 192-204 204-216 216-228 228-240	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	1998 1.76229 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	1999 1.81416 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2000 1.37016 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2001 1.63652 0.61105 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2002 1.38655 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2003 1.35427 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2004 1.34532 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2005 1.41757 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2006 1.44252 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2007 1.66254 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2008 2.13671 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2009 1.33587 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2010 1.29959 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2011 1.25794 0.00000 0.00000 0.00000 0.00000 0.00000	2012 1.02926 0.00000 0.00000 0.00000 0.00000	2013 0.38188 0.00000 2.61842 0.00000	2014 0.25881 0.00000 0.00000	2015 0.25434 0.00000	2016 0.16376	Average (0.0000) (0.0	Smoothed 0.20143 0.04700 0.00000
IBNR Claims Cumulative times Payroll									0.0000.0	0.00000	0.00000		0.00000	0.00000	0.00000	0.00000		0.00000		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.04700 0.01195	0.24843 0.04068		

COAL MINE COMPENSATION RATING BUREAU STATE OCCUPATIONAL DISEASE BITUMINOUS UNDERGROUND (1002)

Claims with File Dates on or before 12-31-2016, Valued as of 4-30-2017

																- IDNID								Claims w	ith File Date	s on or befo	re 12-31-20	16, Valued as	of 4-30-2017
Reported C Months 12 24 36 48 60 72 84 96 108 120 132 144 156 168 180 192 204 216 228 240	laims 1990 0 4 4 4 5 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1991 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1992 8 11 14 15 15 15 15 15 15 15 15 15 15	1993 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1994 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	1995 0 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1996 0 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1997 1 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1998 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1	1999 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2000 0 0 1 1 1 1 1 9 9 9 9 9 9 9 9	2001 2 2 2 2 2 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4	2002 1 1 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Premental Free Year 2003   1   2   2   2   2   2   2   2   2   2	2004 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2005 1 3 3 3 3 3 4 4 4 4 4 4	2006 0 0 0 0 0 0 0 0 0 0	2007 0 0 0 0 0 0 0 0 0 0	2008 0 0 0 1 1 2 2 2 2 2 2 2	2009 0 0 0 0 0 0 0	2010 0 0 0 0 0 0 0	2011 0 1 1 2 2 2 2	2012 0 3 3 3 4	2013 2 3 3 3 3	2014 0 1 2	0	2016 0		
Incrementa 12-24 24-36 36-48 48-60 60-72 72-84 84-96 96-108 108-120 120-132 132-144 144-156 156-168 168-180 180-192 192-204 204-216 216-228	0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 8 0 0 0 0 0 0 0 0	0 0 1 0 0 0 1 0 0 0 0 0 0	0 1 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 1 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 1 1 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	1 0 1 1 0 0	3 0 0 1	1 0 0	1 1	1			
Payroll (\$Millions) 12-24 24-36 36-48 48-60 60-72 72-84 84-96 108-120 120-132 132-144 144-156 156-148 188-180 180-192 192-204 204-216 216-228 228-240	0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	1999 58.68524  0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2000 47.52056 0.00000 0.16835 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2001 48.52263 0.00000 0.02061 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2002 49.25035 0.02030 0.00000 0.02030 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2003 54.21550 0.01844 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2004 65.49767 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2005 70.87262 0.02822 0.00000 0.00000 0.01411 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2006 70.46594 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2007 79.90427 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2008 101.35398 0.00000 0.00000 0.00987 0.00000 0.00000 0.00000 0.00000	2009 101.34814 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2010 125.39358 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2011 148.48571 0.00673 0.000673 0.00000 0.00673 0.00000	0.01953		0.00369	216.45446		Average 0.00676 0.00185 0.00245 0.00245 0.00109 0.01099 0.00159 0.00000	Smoothed 0.01295 0.00676 0.00411 0.00245 0.00189 0.00109 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.000000
IBNR Claims Cumulative times Payro	Factor								0.00000		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00109 0.13668		0.00453 0.69589	0.00698 1.04523			0.03110 4.63061		

COAL MINE COMPENSATION RATING BUREAU STATE OCCUPATIONAL DISEASE ANTHRACITE SURFACE (1016)

Claims with File Dates on or before 12-31-2016, Valued as of 4-30-2017

													Incre	mental Fre		d IBNR								Claims wit	n nie Dales	on or bero	re 12-31-20	l 6, Valued as	01 4-30-2017
Reported C Months  12 24 36 48 60 72 84 96 108 120 132 144 156 168 180 192 204 216 228 240	1990   4   9   10   11   11   11   11   12   12   12	1991 5 7 9 10 11 11 11 11 11 11 11 11 11	1992 2 2 5 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1993 1 2 4 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1994 1 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1995 1 4 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1996 0 1 1 1 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1997 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1998 1 1 1 1 1 1 1 1 1 1 1 1 1	1999	2000 0 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2001	2002 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2	Yec 2003 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2004 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2005	2006 0 0 0 0 0 0 0 0 0 0 0	2007 1 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		2009	2010 0 0 0 0 0 0	2011	2012 0 0 0 0	2013 0 0 1 1	2014 0 0 0	2015 0 0	2016		
Incrementa 12-24 24-33 36-48 48-60 60-72 72-84 108-120 120-132 132-144 144-156 156-168 168-180 180-192 192-204 204-216 216-228	0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	1 0 1 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0	0 1 0	0 0	0			
Payroll (\$Millions) 12-24 24-36 36-48 48-60 60-72 72-84 84-96 96-108 108-120 120-132 132-144 144-156 156-168 168-180 180-192 192-204 204-216 216-228 218-240	0.00000 0.0000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	1999 18.44114  0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2001 13.94080 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2002 12.25126 0.08142 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2003 12.16621 0.08219 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2004 12.35973 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2005 12.14091 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2006 11.94638 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2007 14.55558 0.06870 0.00000 0.06870 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000	2009 16.44546 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2010 14.29529 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2011 21.03460 0.00000 0.00000 0.00000 0.00000 0.00000	2012 26.29591 0.00000 0.00000 0.00000 0.00000	2013 22.44982 0.00000 0.04454 0.00000		2015 24.21878 0.00000		Average 0.01161 0.00970 0.00526 0.00000	Smoothed 0.01161 0.00970 0.00528 0.00000
IBNR Claims Cumulative times Payro	Factor								0.0000.0	0.00000	0.00000		0.00000		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00528 0.10806	0.01498 0.36280	0.02659 0.55336		

COAL MINE COMPENSATION RATING BUREAU STATE OCCUPATIONAL DISEASE BITUMINOUS SURFACE (1013)

INNOUS SURFACE (1013)

Claims with file Dates on or before 12-31-2016, Valued as of 4-30-2017

													Incre	emental Fre	quency ar	id IBNR								Claims wi	th File Date:	on or befo	re 12-31-20	16, Valued as	of 4-30-2017
Reported C Months  12 24 36 48 48 60 72 84 96 108 112 114 156 168 180 192 204 216 228 240	1990 0 0 1 2 2 2 2 2 2 2 2 2 2 2 2 2	1991 4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1992 1 3 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1993 1 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1994 1 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1995 1 1 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1996 0 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1997 0 2 2 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	1998 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1	1999 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2001	2002 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Yec 2003	2004 2004 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2005 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2006 0 0 0 0 0 0 0 0 0 0	2007 0 0 0 0 0 0 0 0	2008 0 0 0 0 0 0 0	2009	2010 0 0 0 0 0 0	2011 0 0 1 1 1	2012 0 0 0 1 2	2013 0 0 0	2014 0 0	2015 0 1	2016 0		
Incrementa 12-24 24-36 36-48 48-60 60-72 72-84 81-98-108-120 120-132 132-144 144-156 156-168 168-180 192-204 204-216 216-228 228-240	-	0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0	0 1 0 0 0	0 0 1 1 1	0 0 0	0 0	1			
Payroll (\$Millions) 12-24 24-35 36-48 48-60 60-72 72-84 108-120 120-132 132-144 144-156 156-168 168-180 180-192 192-204 204-216 216-228 228-240	0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0,00000 0,00000 0,00000 0,00000 0,00000 0,00000 0,00000 0,00000 0,00000 0,00000 0,00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	1998 63.65156 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	1999 54.16227  0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2000 49.93562 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2001 58.15133 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2002 53.50209 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2003 47.87374 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2004 56.21730 0.0000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2005 64.87156 0.0000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2006 63.00898 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2007 63.29577 0.0000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2008 73.05448 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2009 61.78439 0.0000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2010 72.71156 0.0000 0.00000 0.00000 0.00000 0.00000 0.00000	2011 86.07406 0.00000 0.01162 0.00000 0.00000 0.00000	2012 76.45281 0.00000 0.00000 0.01308 0.01308	2013 61.34975 0.0000 0.00000 0.00000	2014 54.05073 0.00000 0.00000	2015 40.93405 0.02443	2016 28.99904 Total=	Average 0.00188 0.00101 0.00101 0.00101 0.00101 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	Smoothed 0.00188 0.00120 0.00101 0.00101 0.00009 0.000000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.000000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.000000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.000000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.000000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.0000
IBNR Claim: Cumulative times Payro	Factor											0.00000						0.00000				0.00000			0.00291 0.15729		0.00599 0.17370		

COAL MINE COMPENSATION RATING BUREAU STATE OCCUPATIONAL DISEASE OTHER CLASSIFICATIONS - STATE

Claims with File Dates on or before 12-31-2016, Valued as of 4-30-2017

													Incre	mental Fre		d IBNR								Cidii iis wi	III TIIC Dale.	on or belo	10 12-01-201	re, valued as	014-30-2017
Reported CI Months 12 24 36 48 48 60 72 84 96 108 120 132 144 156 168 180 192 204 216 228 240	1990 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1991 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1992 1 1 1 1 1 1 1 1 1 1 1 1 1	1993 0 1 1 1 1 1 1 1 1 1 1 1 1 1	1994 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1995 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1996 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1997 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1998 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1999 0 0 0 0 1 1 1 1 1 1 1	2000	2001 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2002	Yec 2003 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2004 0 1 1 1 1 1 1 1 1 1 1 1 1	2005 0 0 0 0 0 0 0 0 0	2006 0 1 1 1 1 1 1 1 1 1 1	2007	2008 0 0 0 0 0 0 0 0	2009	2010	2011	2012 0 0 0 0	2013 0 0 0	2014 0 0 0	2015 0 0	2016 0		
Incremental 12-24 24-36 36-48 48-60 60-72 72-84 84-96 96-108 108-120 120-132 132-144 144-156 156-168 168-180 180-192 192-204 204-216 216-228 228-240	Changes  0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0	0 0 0	0 0	0			
Payroll (\$Millions) 12-24 24-36 36-48 48-60 60-72 72-84 84-96 96-108 108-120 120-132 132-144 144-156 156-168 168-180 180-192 192-204 204-216 216-228 228-240	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	1998 31.35678 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	1999 30.45185  0.03284 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2000 29.53686 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2001 32.92543 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2002 36.81203 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2003 41.30010 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2004 49.30786 0.02028 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2005 53.12798 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2006 53.54405 0.01868 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000		2008 56.31762 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2009 48.54853 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2010 55.53150 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2011 67.98944 0.00000 0.00000 0.00000 0.00000 0.00000	2012 68.74993 0.00000 0.00000 0.00000 0.00000	2013 67.03521 0.00000 0.00000 0.00000	2014 77.80825 0.00000 0.00000			Average 3 0.00429 0.00000	\$moothed 0.00429 0.00253 0.000000
IBNR Claims Cumulative times Payrol									0.00000		0.00000			0.00000						0.00000		0.00000					0.00682 0.36844		

COAL MINE COMPENSATION RATING BUREAU STATE OCCUPATIONAL DISEASE ALL CLASSIFICATIONS

														mental Fre		, IDNID								Claims wit	th File Dates	on or befor	e 12-31-201	6, Valued as	of 4-30-2017
Reported Cl Months  12 24 36 48 60 72 84 96 108 120 132 144 156 168 180 192 204 216 228 240	1990 5 15 15 17 22 23 24 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25	1991 100 12 14 16 18 18 18 18 18 18 18 18 18 18 18 18	1992 14 19 26 28 30 30 31 31 31 31 31 31 31 31 31 31 31 31 31	1993 2 8 12 14 16 17 17 17 17 17 17 17 17 17 17 17 17 17	1994 5 13 14 17 17 17 17 17 17 17 17 17 17 17 17 17	1995 2 6 12 13 13 13 13 13 13 13 13 13 13 13 13 13	1996 0 3 4 4 5 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1997 4 8 9 100 10 11 12 12 12 12 12 12 12 12 12 12 12 12	1998 1 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1999 3 4 6 6 6 7 7 7 7 7 7 7 7 7 7 7	2000 0 5 6 6 6 6 14 14 14 14 14 14 14 14	2001 3 3 3 4 4 5 5 6 6 6 6 6 6 6 6 6 6	2002 3 3 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	Yeo 2003 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		2005 3 5 5 5 5 6 6 6 6 6	2006 0 1 1 1 1 1 1 1 1 1 1	2007 1 3 3 4 4 4 4 4 4 4 4 4	2008 1 1 1 2 2 3 3 3 3 3 3 3 3 3	2009	2010	2011 2 3 4 5 5 5	2012 0 3 3 4 6	2013 2 3 5 5	2014 0 1 2	2015	2016		
Incrementa 12-24 24-36 36-48 48-60 60-72 72-84 88-96 96-108 108-120 120-132 132-144 144-156 156-168 168-180 180-192 204-216 216-228 218-240	0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 1 0 0 0 0 0 0 0 0	0 2 0 1 0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 1 1 0 0 0 0 0 0 0 0 0 0	2 0 0 0 1 0 0 0 0 0 0	1 0 0 0 0 0 0 0 0 0 0	2 0 1 1 0 0 0 0 0	0 0 1 1 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0	1	3 0 1 2	1 2 0	1 1	2			
Payroll (\$Millions) 12-24 24-36 36-48 48-60 60-72 77-84 48-96 96-108 108-120 120-132 132-144 144-156 156-168 168-180 180-192 192-204 204-216 216-228 228-240	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000		0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	1998 175.23425 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	1999 163.55466 1 0.00611 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2000 145.17101 0.00000 0.00000 0.05511 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2001 155.17671 0.00644 0.00644 0.0000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2002 153.20228 0.01305 0.00000 0.00050 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2003 156.90982 0.01275 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2004 184.72788 0.00541 0.00000 0.00541 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2005 202.43064 0.00908 0.00000 0.00000 0.00049 0.00000 0.00000 0.00000 0.00000 0.00000	200.6 200.40787 0.00499 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2007 218.81054 0.00914 0.00000 0.00457 0.00000 0.00000 0.00000 0.00000 0.00000			2010 269.23152 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000		2012 326.14682 0.00920 0.00000 0.00307 0.00613	2013 300.96375 0.00332 0.00665 0.00000	2014 423.81458 0.00236 0.00236	2015 350.17237 2 0.00571		Average : 0.00506	Smoothed 0.00506 0.00424 0.00193 0.00178 0.00085 0.00050 0.00000
IBNR Claims Cumulative times Payrol	Factor								0.00000			0.00000						0.00000		0.00050 0.11473		0.00185 0.60096		0.00556 1.67336		0.01184 4.14604	0.01690 4.27386		

# COAL MINE COMPENSATION RATING BUREAU STATE OCCUPATIONAL DISEASE ALL CLASSIFICATIONS

## **IBNR By Class**

#### CLASSIFICATION

			Anthracite	Bituminous	Anthracite	Bituminous
A. IBNR Factor	Coke	<u>Auger</u>	Co-Gen	Co-Gen	<u>Prep Plant</u>	Prep Plant
<u>Year</u>	<u>1017</u>	1019	1022	1024	<u>1026</u>	1028
2007	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2008	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2009	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050
2010	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100
2011	0.00185	0.00185	0.00185	0.00185	0.00185	0.00185
2012	0.00363	0.00363	0.00363	0.00363	0.00363	0.00363
2013	0.00556	0.00556	0.00556	0.00556	0.00556	0.00556
2014	0.00760	0.00760	0.00760	0.00760	0.00760	0.00760
2015	0.01184	0.01184	0.01184	0.01184	0.01184	0.01184
2016	0.01690	0.01690	0.01690	0.01690	0.01690	0.01690
B. Adjustment Factor	0.40000	0.40000	0.40000	0.40000	1.00000	0.40000
C. Payroll Per \$1M						
2007	13.66993	1.12116	9.16045	10.78921	5.75644	18.89519
2008	9.76115	2.48856	7.95834	8.46856	6.39077	21.25026
2009	5.17355	0.92616	8.00464	7.86641	6.74975	19.82801
2010	5.43566	0.80670	8.48123	8.73270	5.76209	26.31313
2011	3.59909	1.17626	11.72004	9.10241	7.23658	35.15507
2012	5.73811	0.80821	10.27300	9.04775	8.67114	34.21173
2013	4.79191	1.02540	8.34265	10.35588	8.26567	34.25370
2014	4.46440	0.80698	9.06088	11.72118	8.23477	43.52004
2015	4.34038	0.58262	10.46909	11.74821	7.60627	33.56418
2016	2.31372	0.37250	10.84742	11.38684	6.97127	22.13142
D. IBNR						
2007	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2008	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2009	0.0010	0.0002	0.0016	0.0016	0.0034	0.0040
2010	0.0022	0.0003	0.0034	0.0035	0.0058	0.0105
2011	0.0027	0.0009	0.0087	0.0067	0.0134	0.0260
2012	0.0083	0.0012	0.0149	0.0131	0.0315	0.0497
2013	0.0107	0.0023	0.0186	0.0230	0.0460	0.0762
2014	0.0136	0.0025	0.0275	0.0356	0.0626	0.1323
2015	0.0206	0.0028	0.0496	0.0556	0.0901	0.1590
2016	0.0156	0.0025	0.0733	0.0770	0.1178	0.1496

Source: IBNR Factor - Exhibit VII-C-6
Adjustment Factor - Judgement
Payrolls: Exhibit X-A pages 1 & 2
IBNR = A times B times C

File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-07-C.xlsm]VII-C-7

Run Date: October 06, 2017 - 03:01:29 PM

# COAL MINE COMPENSATION RATING BUREAU STATE OCCUPATIONAL DISEASE ALL CLASSIFICATIONS

## **IBNR By Class**

#### CLASSIFICATION

			Anthracite	Bituminous	Anthracite	Bituminous
A. IBNR Factor	<u>Coke</u>	<u>Auger</u>	Co-Gen	Co-Gen	<u>Prep Plant</u>	Prep Plant
<u>Year</u>	<u>1017</u>	<u>1019</u>	1022	1024	<u>1026</u>	1028
1997	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
1998	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
1999	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2002	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2003	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2004	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2005	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2006	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
B. Adjustment Factor	0.40000	0.40000	0.40000	0.40000	1.00000	0.40000
C. Payroll Per \$1M						
1997	53.11908	1.19349	3.52016	0.85605	1.14940	13.78365
1998	13.35390	1.23790	3.45878	1.16120	1.03290	11.11210
1999	12.29348	1.13689	3.60431	1.49428	1.23112	10.69178
2000	12.09257	1.20588	4.47346	1.87072	1.31947	8.57476
2001	10.37583	1.42913	5.23447	2.12133	3.60965	10.15503
2002	10.48501	1.15084	6.35854	2.38612	3.78169	12.64983
2003	11.53408	1.10222	7.13766	3.05252	3.72130	14.75232
2004	12.04913	1.05880	7.35151	6.37448	4.40665	18.06729
2005	12.86098	1.02654	7.85529	8.52475	5.17007	17.69036
2006	12.73739	1.06683	8.40539	9.39758	4.88588	17.05097
D. IBNR						
1997	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1998	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1999	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2006	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Source: IBNR Factor - Exhibit VII-C-6
Adjustment Factor - Judgement
Payrolls: Exhibit X-A pages 1 & 2
IBNR = A times B times C

File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-07-C.xlsm]VII-C-8

Run Date: October 06, 2017 - 03:01:29 PM

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

		rded- ent Basis	Commuted Comprom As Settle	ised-	Total Awarded- Permanent plus Commuted/Com		Pending, Permanent		<u>Total Claims</u>	
_	( Count	1) Amount	(2) Count	Amount	(3) = (1) + (2) Count Amo	ount	(4) Count	Amount	(5) Count Amount	
a. Numbers and Amou	ınts									
(i) List	1	607,575	-	-			-	-		
	1	619,198 1,677,023	-	-			-	-		
	i	466,902	-	-			-	-		
	1	571,120	-	-			-	-		
	- '	1,375,726	- 1	159,241			-	-		
	-	-	1	549,904			-	-		
	-	-	- 1	420,647			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
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	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total (ii) Average	# 6	\$5,317,544 \$886,257	# 3	\$1,129,791 \$376,597	# 9 \$6,447; \$716;		# 0	\$0 \$0	# 9 \$6,447,335 \$716,371	
b. Percentage of Awar (i) Number	aea ana (	Commuted/Comp	oromisea within 3	lotal Awaraea	9					
	66.6667%		33.3333%		100%					
c. Difference Between	Average	Awarded Perman	ent Claim and A	werage Comp	outed/Compromised	d Claim				
(i) Average	•	\$886,257	erii cidiiri dila z	\$376,597	потеа/ соттрготпвес	a Cidiiii				
(ii) Difference (Col. 2 m	ninus Col. 1	)			(\$509,	660)				
d. Pending claims Split	t into Awar	ded and Commu	ted/Comp using	a Awarded Mix	(					
	66.6667% # 0.0000		33.3333% # 0.0000		-		# 0			
e. Pending Average fr	om Above		d Compromised		<u>Difference</u>					
(i) Pending Ave. (ii) C/C Difference		\$0 \$0		\$0 (\$509,660)						
(iii) (e-i) + (e-ii)	-	\$0	_	\$0	Limited to zero: neg	ative offse	t is not app	ropriate.		
(iv) Total		\$0		\$0						
(d-ii) x (e-iii) (v) Total of (e-iv)								\$0		
f. Calculation of Impa	ct of Adjus	tment_								
		Awarded			Pending				Total	
(i) Permanent	Count # 6	Amount \$5,317,544	Average \$886,257		Count Amo # 0.0000	ount A \$0	Average \$0		Count Amount # 6.0000 \$5,317,544	Average \$886,257
(ii) Comm./Comp.	# 3	\$1,129,791	\$376,597		# 0.0000	\$0 \$0	\$0 \$0		# 3.0000 \$1,129,791	\$376,597
(iii) Total	# 9	\$6,447,335	\$716,371		# 0.0000	\$0	\$0		# 9.0000 \$6,447,335	\$716,371

Source: Exhibit IX-A

(iv) Average Severity before Adjustment (v) Impact

\$716,371 \$0

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awar Permane	rded- ent Basis	Commuted Comprom As Settle	ised-	Total Awarded- Permanent plus Commuted/Comp.	Pendin Permane		<u>Total Claims</u>
_	(1 Count	Amount	(2) Count	Amount	(3) = (1) + (2) Count Amount	(4) Count	Amount	(5) Count Amount
a. Numbers and Amou	unts							
(i) List	1	845,721	- ,	-		-	-	
	-	-	1	126,573 188,565		-	-	
	-	-	1	413,583		-	-	
	-	-	1	75,901 165,181		-	-	
	-	-	1	321,115		-	-	
	- 1	843,686	-	131,514		-	-	
	1	1,106,397	-	-		-	-	
	- -	1,538,668	- 1	466,123		-	-	
	- ,	-	1	118,192		-	-	
	- 1	1,162,436	- 1	- 171,711		-	-	
	- ,	-	1	34,502		-	-	
	- 1	1,454,452	- 1	- 77,673		-	-	
	-	-	1	151,106		-	-	
	-	-	1	30,339 149,638		-	-	
	-	-	1	611,434		-	-	
	-	-	1	222,349 116,009		-	-	
	-	-	1	176,396		-	-	
	-	-	1	105,644 111,502		-	-	
	-	-	1	112,520		-	-	
	-	-	1	107,709 111,141		-	-	
	-	-	1	114,889		-	-	
	-	-	1	139,051 113,536		-	-	
	-	-	1	237,511		-	-	
	-	-	1	134,623 209,678		-	-	
	-	-	1	533,483		-	-	
	-	-	1	248,003 114,242		-	-	
	-	-	1	125,958		-	-	
	-	-	1	100,297 91,558		-	-	
	-	-	1	231,007		-	-	
	-	-	1	32,647 82,096		-	-	
	-	-	i	144,901		-	-	
	-	-	- 1	285,046		-	910,687	
(i) Total	# 6	\$6,951,359	# 41	\$7,234,948	# 47 \$14,186,307	# 1	\$910,687	# 48 \$15,096,994
(ii) Average		\$1,158,560		\$176,462	\$301,836		\$910,687	\$314,521
b. Percentage of Awa	rded and C	Commuted/Cor	mpromised within	Total Awarded				
(i) Number (ii) Percentage	# 6 12.7660%		# 41 87.2340%		# 47 100%			
<ul> <li>c. Difference Between</li> <li>(i) Average</li> </ul>	Average A	Awarded Perma \$1,158,560	anent Claim and	Average Comm \$176,462	uted/Compromised Clain	<u>1</u>		
(ii) Difference (Col. 2 m	ninus Col. 1			ψ17 07 10Z	(\$982,098)			
d. Pending claims Spli	t into Awar	ded and Comn	nuted/Comp usin	a Awarded Mix				
(i) Awarded Mix	12.7660%		87.2340%					
(ii) Number	# 0.1277		# 0.8723			# 1		
e. Pending Average fr	om Above		nd Compromised		Difference			
(i) Pending Ave. (ii) C/C Difference		\$910,687 \$0		\$910,687 (\$982,098)				
(iii) (e-i) + (e-ii)	=	\$910,687	=		Limited to zero: negative o	offset is not ap	propriate.	
(iv) Total (d-ii) x (e-iii)		\$116,258		\$0				
(v) Total of (e-iv)							\$116,258	
f. Calculation of Impa	ct of Adjust	tment						
	A	Awarded			Pending			Total
(i) Damas	Count	Amount	Average		Count Amount	Average		Count Amount Average
(i) Permanent (ii) Comm./Comp.	# 6 # 41	\$6,951,359 \$7,234,948	\$1,158,560 \$176,462		# 0.1277 \$116,258 # 0.8723 \$0	\$910,687 \$0		# 6.1277 \$7,067,617 \$1,153,396 # 41.8723 \$7,234,948 \$172,786
(iii) Total		\$14,186,307	\$301,836		# 1.0000 \$116,258	\$116,258		# 48.0000 \$14,302,565 \$297,970
(iv) Average Severity b	efore Adiu	stment						\$314,521
(v) Impact								(\$16,551)

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

			Commute	d and	Total Awa	arded-				
	Award		Compron		Permane		Pending			
=	Permane	nt Basis	As Settl	ed	Commuted		Permanen	† Basis	Total C	
	(1) Count	Amount	(2) Count	Amount	(3) = (1) Count	Amount	(4) Count	Amount	Count (5)	Amount
a. Numbers and Amo	nunte									
(i) List	1	807,441	_	_			_	_		
(-) =	-	-	1	32,430			-	-		
	1	866,447	-	-			-	-		
	1	575,362	-	-			-	-		
	1	285,103	-	-			-	-		
	-	-	1	47,484			-	-		
	1	687,925	-	-			-	-		
	1	518,988					-	-		
	- ,	-	1	522,010			-	-		
	1	764,963	-	-			-	-		
	1	966,922	-	-			-	-		
	1	760,273 634,387	-	-			-	-		
	i	56,213	-	-			-	_		
	- '	-	1	349,357			_	_		
	1	716,153	- '	-			_	_		
	i	578,819	-	-			-	-		
	1	878,802	-	-			-	-		
	-	-	1	548,931			-	-		
	1	646,042	-	-			-	-		
	1	411,565	-	-			-	-		
	1	495,238	-	-			-	-		
	1	605,712	-	-			-	-		
	1	1,298,986	-	-			-	-		
	1	470,736	-	-			-	-		
	1	720,359					-	-		
			1	28,881			-	-		
	1	986,069	- ,	-			-	-		
	-	-	1	214,644			-	-		
	1	558,470	-	-			-	-		
	1	664,243	- ,				-	-		
	-	-	1	114,006			-	-		
	-	-	1	115,183 97,176			-	-		
	- 1	439,188	_ '	77,170			-	-		
		437,100	1	54,223			_	_		
	_	_	1	105,830			_	_		
	_	_		-			1	1,184,319		
	_	_	_	_				-		
	_	_	-	_			_	_		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total	# 25 \$	16,394,405	# 12	\$2,230,155	# 37 \$1	18,624,560		1,184,319	# 38 \$1	9,808,879
(ii) Average		\$655,776		\$185,846		\$503,366	\$	1,184,319		\$521,286
b. Percentage of Awa	arded and Ca	ommuted/Com	oromised within	Total Awarded						
(i) Number	# 25		# 12		# 37					
(ii) Percentage	67.5676%		32.4324%		100%					
.,										
c. Difference Between	n Average Av	warded Perman	ent Claim and	Average Comm	uted/Compre	omised Claim				
(i) Average		\$655,776		\$185,846						
(ii) Difference (Col. 2 r	minus Col. 1)					(\$469,930)				
d. Pending claims Spl		ed and Commu		g Awarded Mix						
(i) Awarded Mix	67.5676%		32.4324%							
(ii) Number	# 0.6757		# 0.3243				# 1			
o Pondina Assess	from About	Committed	1 Compressio	Hore Augusta - F	)ifforon = =					
<ul> <li>e. Pending Average f</li> <li>(i) Pending Ave.</li> </ul>		\$1,184,319	a Compromisec	\$1,184,319	viii ei ei i Ce					
(ii) C/C Difference		\$1,164,319 \$0		(\$469,930)						
(iii) (e-i) + (e-ii)		\$1,184,319	_	\$714,389						
(iv) Total		\$800,215		\$231,694						
(d-ii) x (e-iii)		φ000,210		Ψ201,074						
(v) Total of (e-iv)							\$	1,031,909		
, ,							Ψ			
f. Calculation of Impo	act of Adjustr	<u>nent</u>								
		_								
	A	warded			Pe	ending			То	tal
_	C	A	A	-	C	A A	ALLOROGO	-	C	A

	Awarded			Pending		Total	
·-	Count Amount	Average	Count	Amount	Average	Count Amount	Average
(i) Permanent	# 25 \$16,394,405	\$655,776	# 0.6757	\$800,215	\$1,184,319	# 25.6757 \$17,194,621	\$669,685
(ii) Comm./Comp.	# 12 \$2,230,155	\$185,846	# 0.3243	\$231,694	\$714,389	# 12.3243 \$2,461,849	\$199,755
(iii) Total	# 37 \$18,624,560	\$503,366	# 1.0000	\$1,031,909	\$1,031,909	# 38.0000 \$19,656,469	\$517,276
(iv) Average Severity (v) Impact	before Adjustment						\$521,286 (\$4,011)

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

_	Awar Permane	ent Basis	Commuted Comprom As Settle	ised-	Total Aw Permane Commute	ent plus d/Comp.	Pendin Permanei	nt Basis		<u>Claims</u>
	(1 Count	) Amount	(2) Count	Amount	(3) = (1) Count	(2) Amount	(4) Count	Amount	(Count	5) Amount
a. Numbers and Amo	ounts									
(i) List	1	1,299,888	=	-			-	-		
	- '	1,047,177 -	1	604,162			-	-		
	-	-	1	93,593			-	-		
	- 1	1,620,823	1 -	354,150			-	-		
	-	-	1	462,414			-	-		
	-	-	1	31,459 196,017			-	-		
	-	-	i	86,546			-	-		
	-	-	1	332,300			-	-		
	-	-	1	202,458 65,267			-	-		
	-	-	1	129,784			-	-		
	- 1	- 740,102	1	70,472			-	-		
	- '	-	1	123,382			-	-		
	-	=	-	-			1	306,479		
	-	-	-	42,938			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
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	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total	# 4	\$4,707,990	# 14	\$2,794,942	# 18	\$7,502,932	# 1	\$306,479	# 19	\$7,809,411
(ii) Average		\$1,176,998		\$199,639		\$416,830		\$306,479		\$411,022
b. Percentage of Awa	arded and C	anana ika di (Can	on a delicio de la cidebia.	Tokal Assardad						
(i) Number	# 4	.ommorea/com	# 14	IOIGI AWGIGEG	# 18					
(ii) Percentage	22.2222%		77.7778%		100%					
c. Difference Betwee	n Average A	warded Perma	nent Claim and A	verage Comm	uted/Compr	omised Clain	n			
(i) Average		\$1,176,998		\$199,639	,		=			
(ii) Difference (Col. 2	minus Col. 1)					(\$977,359)				
d. Pending claims Sp	lit into Award	ded and Comm	uted/Comp using	g Awarded Mix						
(i) Awarded Mix	22.2222%		77.7778%				H 3			
(ii) Number	# 0.2222		# 0.7778				# 1			
e. Pending Average	from Above;		d Compromised		Difference					
(i) Pending Ave. (ii) C/C Difference		\$306,479 \$0		\$306,479 (\$977,359)						
(iii) (e-i) + (e-ii)	_	\$306,479	_	\$0	Limited to ze	o: negative o	offset is not ap	propriate.		
(iv) Total		\$68,106		\$0						
(d-ii) x (e-iii) (v) Total of (e-iv)								\$68,106		
f. Calculation of Impe	act of Adiust	ment								
Salesianon or imp						andina			+	otal
-	Count	warded Amount	Average	-	Count	ending Amount	Average		Count	otal Amount Averd
(i) Permanent	# 4	\$4,707,990	\$1,176,998		# 0.2222	\$68,106	\$306,479		# 4.2222	\$4,776,097 \$1,131,1
(ii) Comm./Comp.		\$2,794,942	\$199,639		# 0.7778	\$0 \$49.104	\$0			\$2,794,942 \$189,1
(iii) Total	# 18	\$7,502,932	\$416,830		# 1.0000	\$68,106	\$68,106		# 19.0000	\$7,571,039 \$398,4
(iv) Average Severity (v) Impact	before Adjus	stment								\$411,0 (\$12,5

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

		rded- ent Basis	Commuted Comprom As Settle	ised-	Total Av Perman Commute	ent plus	Pending Permanen		<u>Total C</u>	<u>claims</u>	
	Count (	1) Amount	(2) Count	Amount	(3) = (1 Count	) + (2) Amount	(4) Count	Amount	(5 Count	) Amount	
		741100111	000111	741100111	000	711100111	000111	741100111	000111	741100111	
a. Numbers and Am (i) List	100nts	1,427,380	-	-			-	-			
	-	-	1	248,398			-	-			
	-	-	1 1	111,003 133,596			-	-			
	1	499,014	- '	-			-	-			
	-	-	1	64,651			-	-			
	-	-	1 1	71,331 68,013			-	-			
	1	431,504	-	-			-	-			
	-	-	1	65,627			-	-			
	-	-	=	-			-	-			
	-	-	-	-			-	-			
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	-	-	-	-			-	-			
(i) Total (ii) Average	# 3	\$2,357,898 \$785,966	# 7	\$762,618 \$108,945	# 10	\$3,120,517 \$312,052	# 0	\$0 \$0	# 10 5	\$3,120,517 \$312,052	
b. Percentage of Av (i) Number	varaea ana ( #3	Commuted/Con	npromised within # 7	lotal Awaraea	# 10						
(ii) Percentage	30.0000%		70.0000%		100%						
c. Difference Betwe	on Average	Awardad Barma	nont Claim and A	worddo Comn	utod/Comr	romicad Claim					
(i) Average (ii) Difference (Col. 2		\$785,966	nem ciaim ana A	\$108,945	тотеа/Соттр	(\$677,021)					
d. Pending claims S		ded and Comm		g Awarded Mix							
(i) Awarded Mix (ii) Number	30.0000% # 0.0000		70.0000% # 0.0000				# 0				
e. Pending Average	from Above		nd Compromised		Difference						
(i) Pending Ave. (ii) C/C Difference		\$0 \$0		\$0 (\$677,021)							
(iii) (e-i) + (e-ii)	-	\$0	_	\$0	Limited to ze	ero: negative o	ffset is not app	ropriate.			
(iv) Total		\$0		\$0							
(d-ii) x (e-iii) (v) Total of (e-iv)								\$0			
f. Calculation of Imp	pact of Adius	tment						ΨΟ			
						te se elle				4-1	
	Count	Awarded Amount	Average		Count	ending Amount	Average		Count	tal Amount	Averag
(i) Permanent	# 3	\$2,357,898	\$785,966		# 0.0000	\$0	\$0		# 3.0000	\$2,357,898	\$785,96
(ii) Comm./Comp.	# 7	\$762,618	\$108,945		# 0.0000	\$0 \$0	\$0 \$0		# 7.0000	\$762,618	\$108,94
(iii) Total	# 10	\$3,120,517	\$312,052		# 0.0000	\$0	\$0		# 10.0000	\$3,120,517	\$312,05

# 0.0000

Source: Exhibit IX-A

(iv) Average Severity before Adjustment

# 10 \$3,120,517

(iii) Total

(v) Impact

\$312,052

\$312,052

\$312,052

\$0

# 10.0000 \$3,120,517

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awara Permanei		Commuted of Compromise As Settled	ed-	Total Awarded- Permanent plus Commuted/Comp.	Pending Permanen		Total C	laims	
_	(1) Count		(2) Count	Amount	(3) = (1) + (2) Count Amount	(4) Count	Amount	(5) Count		
a. Numbers and Amou	nts									
(i) List		-	-	-		-	-			
	1 1	296,889	-	-		-	-			
	i	-	-	-		-	-			
	- -	269,790 -	1	-		-	-			
	-	-	1	-		-	-			
	-	=	=	-		-	-			
	-	-	=	-		-	-			
	-	-	-	-		-	-			
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	-	=	=	-		-	-			
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(i) Total (ii) Average	# 6	\$566,679 \$94,446	# 3	\$0 \$0	# 9 \$566,679 \$62,964	# 0	\$0 \$0	# 9	\$566,679 \$62,964	
b. Percentage of Award		ommuted/Comp		otal Awarded	# 0					
(i) Number (ii) Percentage	# 6 66.6667%		# 3 33.3333%		# 9 100%					
	Average Av		ent Claim and Av		uted/Compromised Claim					
(i) Average (ii) Difference (Col. 2 mi	inus Col. 1)	\$94,446		\$0	(\$94,446)					
	<u>into Award</u> 66.6667% # 0.0000	ed and Commu	33.3333% # 0.0000	Awarded Mix		# 0				
e. Pending Average fro	m Above;		I Compromised le		oifference					
(i) Pending Ave. (ii) C/C Difference		\$0 \$0		\$0 (\$94,446)						
(iii) (e-i) + (e-ii) (iv) Total	_	\$0 \$0			imited to zero: negative of	fset is not app	ropriate.			
(d-ii) x (e-iii) (v) Total of (e-iv)		**		40			\$0			
f. Calculation of Impac	et of Adjustn	nent					+-			
		warded			Pending			To	tal	
(i) Permanent	Count # 6	Amount \$566,679	Average \$94,446	_	Count Amount # 0.0000 \$0	Average \$0		Count # 6.0000	Amount \$566,679	Average \$94,446
(ii) Comm./Comp.	# 3	\$0	\$0		# 0.0000 \$0	\$0		# 3.0000	\$0	\$0
(iii) Total	# 9	\$566,679	\$62,964		# 0.0000 \$0	\$0		# 9.0000	\$566,679	\$62,964

Source: Exhibit IX-A

(iv) Average Severity before Adjustment (v) Impact

\$62,964 \$0

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Aware Permane		Commuted Compromis As Settles	ed-	Total Awarded- Permanent plus Commuted/Comp.	Pending Permanen		<u>Total Claims</u>
<del>-</del>	(1 Count	Amount	(2) Count	Amount	(3) = (1) + (2) Count Amount	(4) Count	Amount	(5) Count Amount
a. Numbers and Amo	ounts							
(i) List	1	-	-	-		-	-	
	-	-	1	-		-	-	
	-	-	i	-		-	-	
	-	-	1	-		-	-	
	-	-	1	57,005		-	-	
		-	1	-		-	-	
	1	-	-	-		-	-	
	1	310,154	-	-		-	-	
	-	-	1	-		-	-	
	1	-	- '	-		-	-	
	-	-	1	26,076		-	-	
	- 1	- 289,790	-	-		-	-	
	-	-	1	-		-	-	
	-	-	1	- 84		-	-	
	-	-	1	44,335		-	-	
	-	-	1	76,830		-	-	
	-	-	1	-		-	-	
	-	-	1	53,745		-	-	
	-	-	1	31,066		-	-	
	-	-	i	23,381		-	-	
	-	-	1	-		-	-	
	-	-	1	2,253		-	-	
	-	-	1	-		-	-	
	-	-	1	-		-	-	
	-	-	i	29,220		-	-	
	-	-	1	-		-	-	
	-	-	1	-		-	-	
	-	-	1	-		-	-	
	-	-	1	45,634 -		-	-	
	-	-	i	-		-	-	
	-	-	1	48,147		-	-	
	-	-	1	-		-	-	
	-	-	1	-		-	-	
	-	-	- 1	-		1	-	
(i) Total	# 6	\$599,944	# 41	¢ 427 775	# 47 \$1 027 710	# 1	\$0	# 40 \$1.027.710
(ii) Average	# 0	\$99,991	# 41	\$437,775 \$10,677	# 47 \$1,037,719 \$22,079	# 1	\$0	# 48 \$1,037,719 \$21,619
b. Percentage of Awa	arded and C	ommuted/Com	oromised within T	otal Awarder	4			
(i) Number	# 6	oinioiou/Colli	# 41	o.ai / wuidet	# 47			
(ii) Percentage	12.7660%		87.2340%		100%			
c. Difference Betwee	n Average A	warded Perman	ent Claim and A	verage Comr	nuted/Compromised Claim	1		
(i) Average		\$99,991		\$10,677		-		
(ii) Difference (Col. 2 i	minus Col. 1)				(\$89,313)			
d. Pending claims Sp		led and Commu		Awarded Mi	<u>×</u>			
(i) Awarded Mix (ii) Number	12.7660% # 0.1277		87.2340% # 0.8723			# 1		
						# 1		
e. Pending Average	from Above;		d Compromised I		Difference			
(i) Pending Ave. (ii) C/C Difference		\$0 \$0		\$0 (\$89,313)				
(iii) (e-i) + (e-ii)	_	\$0		\$0	Limited to zero: negative o	ffset is not app	ropriate.	
(iv) Total (d-ii) x (e-iii)		\$0		\$0				
(v) Total of (e-iv)							\$0	
f. Calculation of Impo	act of Adjusti	ment						
	A	warded			Pending			Total
-	Count	Amount	Average		Count Amount	Average		Count Amount Average
<ul><li>(i) Permanent</li><li>(ii) Comm./Comp.</li></ul>	# 6 # 41	\$599,944 \$437,775	\$99,991 \$10,677		# 0.1277 \$0 # 0.8723 \$0	\$0 \$0		# 6.1277 \$599,944 \$97,908 # 41.8723 \$437,775 \$10,455
(iii) Total		\$1,037,719	\$22,079		# 1.0000 \$0	\$0		# 48.0000 \$1,037,719 \$21,619

Source: Exhibit IX-A

(iv) Average Severity before Adjustment (v) Impact

# 47 \$1,037,719

(iii) Total

\$22,079

# 1.0000

\$21,619

\$21,619 \$0

# 48.0000 \$1,037,719

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Award Permaner		Commuted Compromis As Settled	ed-	Total Awa Permaner Commuted	nt plus	Pending, Permanen		Total C	Claims	
=	(1) Count	Amount	(2) Count	Amount	(3) = (1) Count		(4) Count	Amount	Count (5	Amount	
a. Numbers and Amo	ounts										
(i) List	1	-	- 1	-			-	-			
	1	-	- '	-			-	-			
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	1	-	- 1	- 52,565			-	-			
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	1	246,295	- 1	-			-	-			
	1	211,339	- '	-			-	-			
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(i) Total (ii) Average	# 25	\$457,634 \$18,305	# 12	\$52,565 \$4,380	# 37	\$510,199 \$13,789	# 1	\$0 \$0	# 38	\$510,199 \$13,426	
b. Percentage of Awa	arded and Co	mmuted/Com	promised within To	otal Awarde	d						
(i) Number (ii) Percentage	# 25 67.5676%		# 12 32.4324%		# 37 100%						
c. Difference Betwee	n Average Aw	varded Permar	nent Claim and Av	erage Com	muted/Compro	mised Claim					
(i) Average (ii) Difference (Col. 2	minus Col. 1)	\$18,305		\$4,380		(\$13,925)					
d. Pending claims Sp		ed and Commi		Awarded M	iix						
(i) Awarded Mix (ii) Number	67.5676% # 0.6757		32.4324% # 0.3243				# 1				
e. Pending Average	from Above;		d Compromised le		d Difference						
(i) Pending Ave. (ii) C/C Difference		\$0 \$0		\$0 (\$13,925)							
(iii) (e-i) + (e-ii)	_	\$0		\$0	Limited to zero	o: negative off	fset is not app	ropriate.			
(iv) Total (d-ii) x (e-iii) (v) Total of (e-iv)		\$0		\$0				\$0			
f. Calculation of Imp	act of Adjustm	<u>nent</u>						-			
	Av	varded			Pe	nding			To	otal	
(i) Pormanant	Count	Amount	Average		Count	Amount	Average		Count	Amount	Average
(i) Permanent (ii) Comm./Comp.	# 25 # 12	\$457,634 \$52,565	\$18,305 \$4,380		# 0.6757 # 0.3243	\$0 \$0	\$0 \$0		# 25.6757 # 12.3243	\$457,634 \$52,565	\$17,824 \$4,265
(iii) Total	# 37	\$510,199	\$13,789		# 1.0000	\$0	\$0		# 38.0000	\$510,199	\$13,426

Source: Exhibit IX-A

(iv) Average Severity before Adjustment

(v) Impact

\$13,426

\$0

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Award Permane		Commuted Compromis As Settles	ed-	Total Aw Perman Commute	ent plus	Pending Permaner		<u>Total C</u>	<u>Claims</u>	
-	(1 Count	Amount	(2) Count	Amount	(3) = (1 Count	) + (2) Amount	(4) Count	Amount	Count (5	) Amount	
		741100111	200	741100111	000	741100111	000	741100111	000	741100111	
a. Numbers and Amo (i) List	ounts 1	_	_	_			_	_			
()	1	236,740		-			-	-			
	-	-	1	-			-	-			
	-	-	i	38,417			-	-			
	1	287,523	- 1	-			-	-			
	-	-	i	-			-	-			
	-	-	1	22,304			-	-			
	-	-	i	22,367			-	-			
	-	-	1	-			-	-			
	-	-	1	14,832			-	-			
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(i) Total (ii) Average	# 4	\$524,262 \$131,066	# 14	\$97,920 \$6,994	# 18	\$622,182 \$34,566	# 1	\$0 \$0	# 19	\$622,182 \$32,746	
b. Percentage of Awa (i) Number	# 4	ommutea/Com	promisea within i # 14	otal Awaraea	# 18						
(ii) Percentage	22.2222%		77.7778%		100%						
c. Difference Betwee	n Average A	warded Permar	nent Claim and A	eraae Comn	nuted/Comp	romised Claim					
(i) Average		\$131,066		\$6,994	,		•				
(ii) Difference (Col. 2	minus Col. 1)					(\$124,071)					
d. Pending claims Sp (i) Awarded Mix (ii) Number	lit into Awara 22.2222% # 0.2222	led and Commi	uted/Comp using 77.7778% # 0.7778	Awarded Mix			# 1				
e. Pending Average	from Above	Commuted an	d Compromised I	ess Awarded	Difference						
(i) Pending Ave.		\$0		\$0							
(ii) C/C Difference (iii) (e-i) + (e-ii)	_	\$0 \$0	_	(\$124,071) \$0	Limited to 76	ero: negative o	ffset is not an	oropriate			
(iv) Total		\$0 \$0		\$0 \$0	Littinga 10 Ze	.o. negunve 0	man is not upp	лорните.			
(d-ii) x (e-iii)								¢0			
(v) Total of (e-iv)								\$0			
f. Calculation of Imp	act of Adjusti	ment									
	Α	warded			Р	ending			To	otal	
(i) Dame or	Count	Amount	Average		Count	Amount	Average		Count	Amount	Average
<ul><li>(i) Permanent</li><li>(ii) Comm./Comp.</li></ul>	# 4 # 14	\$524,262 \$97,920	\$131,066 \$6,994		# 0.2222 # 0.7778	\$0 \$0	\$0 \$0		# 4.2222 # 14.7778	\$524,262 \$97,920	\$124,167 \$6,626
(iii) Total	# 18	\$622,182	\$34,566		# 1.0000	\$0	\$0		# 19.0000	\$622,182	\$32,746

\$0

# 1.0000

\$0

Source: Exhibit IX-A

(iv) Average Severity before Adjustment

# 18

\$622,182

(iii) Total

(v) Impact

\$34,566

\$622,182

\$32,746 \$32,746 \$0

# 19.0000

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awai Perman		Commuted Compromis As Settles	ed-	Total Awarded- Permanent plus Commuted/Comp.	Pendinç Permaner		<u>Total Cl</u>	aims
<del>-</del>	Count (1	Amount	(2) Count	Amount	(3) = (1) + (2) Count Amou	(4) unt Count	Amount	(5) Count	Amount
a. Numbers and Amo	ounts								
(i) List	1	-	- 1	- 35,198		-	-		
	-	-	1	-		=	-		
	- ,	-	1	48,988		-	-		
	-	170,982	- 1	964		-	-		
	-	-	i	-		-	-		
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	-	-	-	-		-	-		
(i) Total (ii) Average	# 3	\$170,982 \$56,994	# 7	\$85,150 \$12,164	# 10 \$256,13 \$25,61		\$0 \$0	# 10	\$256,133 \$25,613
b. Percentage of Awa	arded and C	Commuted/Com	promised within T	otal Awardea	1				
(i) Number	# 3		# 7		# 10				
(ii) Percentage	30.0000%		70.0000%		100%				
c. Difference Betwee	n Average A	Awarded Permar	nent Claim and A	verage Comr	nuted/Compromised (	Claim			
(i) Average (ii) Difference (Col. 2	minus Col. 1	\$56,994 )		\$12,164	(\$44,83	30)			
d. Pending claims Sp (i) Awarded Mix (ii) Number	30.0000% # 0.0000	ded and Commi	uted/Comp using 70.0000% # 0.0000	Awarded Mi	<u>(</u>	# 0			
e. Pending Average	from Above	: Commuted an	d Compromised I	ess Awarded	Difference				
(i) Pending Ave.		\$0	, , , , , , , , , , , , , , , , , , , ,	\$0					
(ii) C/C Difference (iii) (e-i) + (e-ii)	-	\$0 \$0	_	(\$44,830) \$0	Limited to zero: negat	ive offset is not an	oropriate		
(iv) Total		\$0		\$0 \$0	2	o onsor is not ap	o.opiiaio.		
(d-ii) x (e-iii)							*^		
(v) Total of (e-iv)							\$0		
f. Calculation of Impe	act of Adjus	tment							
	,	Awarded			Pending			Tot	al
-	Count	Amount	Average		Count Amou			Count	Amount Averag
(i) Permanent (ii) Comm./Comp.	# 3 # 7	\$170,982 \$85,150	\$56,994 \$12,164			50 \$0 50 \$0		# 3.0000 # 7.0000	\$170,982 \$56,994 \$85,150 \$12,164
(ii) Total	# 10	\$256,133	\$25,613			50 \$0			\$256,133 \$25,613

# 0.0000

Source: Exhibit IX-A

(iv) Average Severity before Adjustment

# 10

(iii) Total

(v) Impact

\$256,133

\$25,613

\$256,133

\$25,613

\$25,613

\$0

# 10.0000

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Award Permaner		Commuted Compromis As Settled	ed-	Total Award Permanent p Commuted/C	olus	Pending, Permanent		<u>Total C</u>	laims	
_	(1) Count	Amount	(2) Count	Amount	(3) = (1) + (		(4) Count	Amount	Count		
a. Nicosala ana ana al Ana a		741100111	000111	741100111	,	41100111	000111	741100111	000	741100111	
<ul> <li>a. Numbers and Amo</li> <li>(i) List</li> </ul>	i <u>unts</u> 1	143,881	-	-			-	-			
	1	- 184,863	-	-			-	-			
	1	142,655	-	-			-	-			
	1	155,057 158,959	-	-			-	-			
	-	-	1	68,990			-	-			
	-	-	1 1	-			-	-			
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	-	-	-	-			-	-			
	-	-	=	-			-	-			
(i) Total (ii) Average	# 6	\$785,416 \$130,903	# 3	\$68,990 \$22,997		54,406 94,934	# 0	\$0 \$0	# 9	\$854,406 \$94,934	
h December of Access					.1						
<ul> <li>b. Percentage of Awa</li> <li>(i) Number</li> </ul>	# 6	minuea/com	# 3	JIUI AWAIDE	# 9						
(ii) Percentage	66.6667%		33.3333%		100%						
c. Difference Between	n Average Aw		ent Claim and Av		muted/Compromi	ised Claim					
(i) Average (ii) Difference (Col. 2 r	minus Col. 1)	\$130,903		\$22,997	(\$1	07,906)					
d. Pending claims Spl	it into Awarde	ed and Commi	ited/Comp using	Awarded Mi	×						
(i) Awarded Mix (ii) Total	66.6667% # 0.0000	a ana comme	33.3333% # 0.0000	, mai ao a m	=		# 0				
e. Pending Average f	rom Above;		d Compromised le		Difference						
(i) Pending Ave. (ii) C/C Difference		\$0 \$0		\$0 (\$107,906)							
(iii) (e-i) + (e-ii) (iv) Total		\$0 \$0	<del></del>	\$0 \$0	Limited to zero: r	egative of	ffset is not app	ropriate.			
(d-ii) x (e-iii) (v) Total of (e-iv)		ΨΟ		ΨΟ				\$0			
f. Calculation of Impo	act of Adjustm	ent									
		rarded			Pendi				То		
(i) Permanent	Count # 6	Amount \$785,416	Average \$130,903		Count // # 0.0000	Amount \$0	Average \$0		Count # 6.0000	Amount \$785,416	Average \$130,903
(ii) Comm./Comp.	# 3	\$68,990	\$22,997		# 0.0000	\$0	\$0		# 3.0000	\$68,990	\$22,997
(iii) Total	# 9	\$854,406	\$94,934		# 0.0000	\$0	\$0		# 9.0000	\$854,406	\$94,934

Source: Exhibit IX-A

(iv) Average Severity before Adjustment (v) Impact

\$94,934 \$0

## Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

		ırded- ıent Basis	Commute Compron As Settl	nised-	Total Aw Permane Commute	ent plus	Pendin Permane		<u>Total Claims</u>	
	( Count	1) Amount	(2) Count	Amount	(3) = (1 Count	) + (2) Amount	(4) Count	Amount	(5) Count Amount	
a. Numbers and Amo	nunts									
(i) List	1	347,008	-	=			-	-		
	-	-	1	92,549 137,071			-	-		
	-	-	1	121,749			-	-		
	-	-	1	46,447			-	-		
	-	-	1	45,053 21,478			-	-		
	-	-	1	91,076			-	-		
	1	224,224	-	=			-	-		
	1	340,863 309,166	-	-			-	-		
	-	-	1	142,204			-	-		
	- 1	281,232	1	69,708			-	-		
		-	1	77			-	-		
	- ,	-	1	13,520			-	-		
	- 1	244,045	- 1	-			-	-		
	-	-	1	76,413			-	-		
	-	-	1	-			-	-		
	-	-	1	120 93,156			-	-		
	-	-	1	-			-	-		
	-	-	1	106			-	-		
	-	-	i	68,163			-	-		
	-	-	1	-			-	-		
	-	-	1	- 52,087			-	-		
	-	-	1	-			-	-		
	-	-	1	- 40 742			-	-		
	-	-	1	68,743 -			-	-		
	-	-	1	129,962			-	-		
	-	-	1	- 131,999			-	-		
	-	-	i	-			-	-		
	-	-	1	-			-	-		
	-	-	1	58,243			-	-		
	-	-	i	65,840			-	-		
	-	-	1	51,424			-	-		
	-	-	1	6,533			-	-		
	-	-	1	42,868			-	-		
	-	-	1	83,764			- 1	- 298,738		
	-	-	1	107,961			- '	-		
(i) Total (ii) Average	# 6	\$1,746,539 \$291,090	# 41	\$1,818,314 \$44,349	# 47	\$3,564,853 \$75,848	# 1	\$298,738 \$298,738	# 48 \$3,863,591 \$80,491	
b. Percentage of Awa		Commuted/Com		Total Awarded						
(i) Number (ii) Percentage	# 6 12.7660%		# 41 87.2340%		# 47 100%					
c. Difference Betwee	n Average	Awarded Perma \$291,090	nent Claim and		nuted/Comp	romised Clain	<u>n</u>			
(i) Average (ii) Difference (Col. 2)	minus Col. 1			\$44,349		(\$246,741)				
						(, ,				
d. Pending claims Sp (i) Awarded Mix	lit into Awar 12.7660%	rded and Comm	uted/Comp usin 87.2340%	g Awarded Mix	<u> </u>					
(ii) Number	# 0.1277		# 0.8723				# 1			
- Develop	f *!			( )	D:##					
e. Pending Average (i) Pending Ave.	IIOM Above	; Commuted ar \$298,738	ia Compromised	\$298,738	Difference					
(ii) C/C Difference		\$0		(\$246,741)						
(iii) (e-i) + (e-ii)	-	\$298,738	_	\$51,997						
(iv) Total (d-ii) x (e-iii)		\$38,137		\$45,359						
(v) Total of (e-iv)								\$83,496		
f. Calculation of Imp	act of Adius	tment								
calcolation of imp										
-	Count	Awarded Amount	Average		Count	ending Amount	Average		Total Count Amount	Average
(i) Permanent	# 6	\$1,746,539	\$291,090		# 0.1277	\$38,137	\$298,738		# 6.1277 \$1,784,676	\$291,249
(ii) Comm./Comp.	# 41	\$1,818,314	\$44,349		# 0.8723	\$45,359	\$51,997		# 41.8723 \$1,863,673	\$44,508
(iii) Total	# 47	\$3,564,853	\$75,848		# 1.0000	\$83,496	\$83,496		# 48.0000 \$3,648,349	\$76,007

# 1.0000

\$83,496

\$83,496

Source: Exhibit IX-A

(iv) Average Severity before Adjustment

# 47 \$3,564,853

(iii) Total

(v) Impact

\$75,848

# 48.0000 \$3,648,349

\$76,007

\$80,491

(\$4,484)

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awai Perman	ent Basis	Commuted Compromi As Settle	sed-	Total Av Perman Commute	ent plus d/Comp.	Pendin Permane	nt Basis	<u>Total Claims</u>
	(i Count	Amount	(2) Count	Amount	(3) = (1 Count	) + (2) Amount	(4) Count	Amount	(5) Count Amount
a. Numbers and An	mounts								
(i) List	1	172,356	-	-			-	-	
	- 1	- 155,678	-	-			-	-	
	1	140,014	-	-			-	-	
	1	-	- 1	20,066			-	-	
	1	227,602	- '	-			-	-	
	1	-					-	-	
	- 1	213,161	1	127,483			-	-	
	1	214,590	=	-			-	_	
	1	164,206	-	-			-	-	
	1	-	-	-			-	-	
	- '	-	1	-			-	-	
	1	151,731	-	-			-	-	
	1	204,345	-	-			-	-	
	- '	-	1	51,645			-	-	
	1	140,244	-	-			-	-	
	1	85,955 -	-	-			-	-	
	1	187,370	=	-			-	-	
	1	322,912	-	-			-	-	
	1 1	99,938 196,547	-	-			-	-	
	-	=	1	12,674			-	-	
	1	95,179	- 1	- 77 / 10			-	-	
	- 1	152,640	- '	77,619 -			-	-	
	1	150,615	=	-			-	-	
	-	-	1	55,875			-	-	
	-	-	1	75,625 51,471			-	-	
	1	-	-	-			-	-	
	-	-	1	28,139 44,589			-	-	
	-	-	- '	-			1	301,337	
	-	-	-	-			-	-	
	-	-	-	-			-	-	
	-	-	-	-			-	-	
	-	=	=	-			-	-	
	-	-	-	-			-	-	
	-	-	-	-			-	-	
	-	-	-	-			-	-	
i) Total	# 25	\$3,075,084	# 12	\$545,185	# 37	\$3,620,269	# 1	\$301,337	# 38 \$3,921,607
(ii) Average		\$123,003		\$45,432		\$97,845		\$301,337	\$103,200
. Deresetes of A	ardad and C	`anana ita d\Can	una maia a al colibbio 3	atal Amardad					
o. Percentage of Av i) Number	# 25	.ommorea/con	# 12	olal Awaraea	# 37				
i) Percentage	67.5676%		32.4324%		100%				
. Difference Betwe	en Average A	warded Perma	nent Claim and A	verage Comm	uted/Comr	romised Claim	1		
) Average		\$123,003	iom oranii ana i	\$45,432	01007001110		_		
i) Difference (Col.	2 minus Col. 1	)				(\$77,571)			
d. Pending claims S	Split into Awar	ded and Comm	uted/Comp using	Awarded Mix					
i) Awarded Mix	67.5676%		32.4324%						
i) Number	# 0.6757		# 0.3243				# 1		
e. Pending Average	e from Above	: Commuted ar	d Compromised	less Awarded E	Difference				
		\$301,337		\$301,337					
		\$0	_	(\$77,571) \$223,766					
i) C/C Difference	-	\$301.337							
i) C/C Difference ii) (e-i) + (e-ii)	=	\$301,337 \$203,606		\$72,573					
i) C/C Difference ii) (e-i) + (e-ii) v) Total (d-ii) x (e-iii)	-			\$/2,5/3					
i) C/C Difference ii) (e-i) + (e-ii) v) Total (d-ii) x (e-iii)	_			\$/2,5/3				\$276,179	
i) C/C Difference ii) (e-i) + (e-ii) v) Total (d-ii) x (e-iii) v) Total of (e-iv)	npact of Adjus	\$203,606		φ/ <i>2,</i> 3/3				\$276,179	
i) C/C Difference ii) (e-i) + (e-ii) v) Total (d-ii) x (e-iii) v) Total of (e-iv)		\$203,606		\$72,373	P	ending		\$276,179	Total
i) C/C Difference ii) (e-i) + (e-ii) v) Total (d-ii) x (e-iii) v) Total of (e-iv)  Calculation of Im	Count	\$203,606 ment Awarded Amount	Average	\$/2,5/3 -	Count	ending Amount	Average	\$276,179	Count Amount Ave
ij Pending Ave. ij C/C Difference iii) (e-i) + (e-ii) iv) Total (d-ii) x (e-iii) v) Total of (e-iv) Calculation of Im i) Permanent ii) Comm./Comp.	,	\$203,606 <u>ment</u> warded	Average \$123,003 \$45,432	\$/2,3/3 -			Average \$301,337 \$223,766	\$276,179	

(iv) Average Severity before Adjustment (v) Impact

\$103,200 (\$662)

Source: Exhibit IX-A

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Award Permane		Commuted Comprom As Settle	ised-		ent plus ed/Comp.	Pending Permanen		<u>Total Cl</u>	aims_
_	(1) Count	Amount	(2) Count	Amount	(3) = (1 Count	1) + (2) Amount	(4) Count	Amount	(5) Count	Amount
a. Numbers and Amo (i) List	iunts 1	380,415	_	-			-	_		
.,	1	153,019		-			-	-		
	-	-	1	- 60,568			-	-		
	-	-	i	36,762			-	-		
	1	157,103	- 1	-			-	-		
	-	-	1	6,225			-	-		
	-	-	1	105,202			-	-		
	-	-	1	19,893			-	-		
	-	-	1	125,776			-	-		
	-	-	1	78,620			-	-		
	- 1	245,056	1	-			-	-		
	- '	-	1	84,564			-	-		
	-	-	- 1	- 15 777			1	-		
	-	-	-	15,777 -			-	-		
	-	-	-	-			-	-		
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(1) <del>-</del> 1 1		*****	"	****	" 10	*1 440 000		**	# 10 · •	
(i) Total (ii) Average	# 4	\$935,594 \$233,898	# 14	\$533,388 \$38,099	# 18	\$1,468,982 \$81,610	# 1	\$0 \$0	# 19 \$	1,468,982 \$77,315
b. Percentage of Awa	arded and Co	ommuted/Comp	promised within	Total Awarded	Į.					
(i) Number	# 4		# 14		# 18					
(ii) Percentage	22.2222%		77.7778%		100%					
c. Difference Between	n Average Av		ent Claim and A		nuted/Comp	oromised Claim				
(i) Average (ii) Difference (Col. 2 r	minus Col. 1)	\$233,898		\$38,099		(\$195,799)				
d. Pending claims Spl (i) Awarded Mix	22.2222%	ed and Commu	77.7778%	g Awarded Mix	2					
(ii) Number	# 0.2222		# 0.7778				# 1			
e. Pending Average f	rom Above;		d Compromised		Difference					
(i) Pending Ave. (ii) C/C Difference		\$0 \$0		\$0 (\$195,799)						
(iii) (e-i) + (e-ii)	_	\$0	_	\$0	Limited to ze	ero: negative of	fset is not app	ropriate.		
(iv) Total (d-ii) x (e-iii)		\$0		\$0						
(v) Total of (e-iv)								\$0		
f. Calculation of Impo	act of Adjustr	nent								
Calculation of impo										
	A۱	warded			P	endina			Tot	al

Awarded				P		Total			
-	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 4	\$935,594	\$233,898	# 0.2222	\$0	\$0	# 4.2222	\$935,594	\$221,588
(ii) Comm./Comp.	# 14	\$533,388	\$38,099	# 0.7778	\$0	\$0	# 14.7778	\$533,388	\$36,094
(iii) Total	# 18	\$1,468,982	\$81,610	# 1.0000	\$0	\$0	# 19.0000	\$1,468,982	\$77,315
(iv) Average Severity (v) Impact	before Adju	ustment							\$77,315 \$0

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis		Commuted and Compromised- As Settled		Total Aw Permane Commute	ent plus	Pending Permanen		Total Claims		
-	(1 Count	) Amount	(2) Count	Amount	(3) = (1 Count		(4) Count	Amount	Count	5) Amount	
a. Numbers and Amo											
(i) List	1	400,001	- 1	4,626			-	-			
	-	-	1	-			-	-			
	- 1	-	1	-			-	-			
	- -	90,931	- 1	-			-	-			
	-	-	1	-			-	-			
	- 1	- 87,003	1	-			-	-			
	- '	-	1	-			-	-			
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	-	-	=	-			-	-			
(i) Total (ii) Average	# 3	\$577,935 \$192,645	# 7	\$4,626 \$661	# 10	\$582,560 \$58,256	# 0	\$0 \$0	# 10	\$582,560 \$58,256	
b. Percentage of Awa (i) Number	arded and C # 3	orninutea/Com	promised within 10 # 7	oral Awarded	! # 10						
(ii) Percentage	30.0000%		70.0000%		100%						
c. Difference Between	n Average A	warded Permar	nent Claim and Av	erage Comn	nuted/Comp	romised Claim					
(i) Average		\$192,645		\$661							
(ii) Difference (Col. 2 r	minus Col. 1)					(\$191,984)					
d. Pending claims Spl		ded and Commu		Awarded Mix	<u>(</u>						
(i) Awarded Mix (ii) Number	30.0000% # 0.0000		70.0000% # 0.0000				# 0				
<ul> <li>e. Pending Average f</li> <li>(i) Pending Ave.</li> </ul>	from Above;	Commuted an \$0	d Compromised le	ess Awarded \$0	<u>Difference</u>						
(ii) C/C Difference		\$0		(\$191,984)							
(iii) (e-i) + (e-ii)	_	\$0		\$0	Limited to ze	ro: negative o	ffset is not app	ropriate.			
(iv) Total (d-ii) x (e-iii)		\$0		\$0							
(v) Total of (e-iv)								\$0			
f. Calculation of Impo	act of Adjust	ment									
		warded				ending				otal	
(i) Permanent	Count # 3	Amount \$577,935	Average \$192,645		Count # 0.0000	Amount \$0	Average \$0		Count # 3.0000	Amount \$577,935	Average \$192,645
(ii) Comm./Comp.	# 7	\$4,626	\$661		# 0.0000	\$0 \$0	\$0		# 7.0000	\$4,626	\$661
(iii) Total	# 10	\$582,560	\$58,256		# 0.0000	\$0	\$0		# 10.0000	\$582,560	\$58,256

(iv) Average Severity before Adjustment (v) Impact

# 10

\$582,560

(iii) Total

# 10.0000

\$582,560

\$58,256

\$58,256

\$0

# 0.0000

\$58,256

#### Federal Excess Before Offsets

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

1		Awarded- Permanent Basis		Commuted and Compromised- As Settled		Perman Commute	Total Awarded- Permanent plus Commuted/Comp.		on Basis	<u>Total Claims</u>		
			Amount		Amount				Amount		Amount	
1												
1   0	(i) List		34	-	-			-	-			
1   11   -			0	-	-			-	-			
1   17			-	-	-			-	-			
1   384,002   1   384,002				-	-			-	-			
(i) Total # 6 \$62 # 3 \$1,000,137 # 9 \$1,000,199 # 0 \$0 # 9 \$1,000,199 (ii) Average & 66,6667 \$ 333335 \$ 1005 \$ \$114.467 \$ 100 [blerence Cod 2 minus Col. 1] \$343,379 \$ 343,369 (ii) Total # 60,000 # 60,0		-	-					-	-			
(i) Total # 6 \$62 # 3 \$1,030,137 # 9 \$1,030,199 # 0 \$0 # 9 \$1,030,199 (ii) Average \$1,030,199		-	-					-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	- '	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	=	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	=	=			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	=			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	=			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	=	=			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	=			-	-			
5. Percentage of Awarded and Commuted/Compromised within Total Awarded   (i) Number		-	-	-	-			-	-			
(i) Number # 6 # 3 # 3 # 9 (ii) Percentage 66.6667% 33.3333% 100%  c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim (i) Average \$10 \$343.379 (ii) Difference (Col. 2 minus Col. 1) \$343.379  d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix (i) Awarded Mix 66.6667% 33.3333% (ii) Total # 0.0000 # 0.0000 # 0  e. Pending Average from Above; Commuted and Compromised less Awarded Difference (i) Pending Ave. \$0 \$0 (ii) C/C Difference \$0 \$343.369 (iii) (e-i) + (e-ii) \$0 \$343.369 (iv) Total \$0 \$0 \$0 (d-ii) x (e-iii) (v) Total of (e-iv) \$0  f. Calculation of Impact of Adjustment		# 6		# 3		# 9		# 0				
(i) Number # 6 # 3 # 3 # 9 (ii) Percentage 66.6667% 33.3333% 100%  c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim (i) Average \$10 \$343.379 (ii) Difference (Col. 2 minus Col. 1) \$343.379  d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix (i) Awarded Mix 66.6667% 33.3333% (ii) Total # 0.0000 # 0.0000 # 0  e. Pending Average from Above; Commuted and Compromised less Awarded Difference (i) Pending Ave. \$0 \$0 (ii) C/C Difference \$0 \$343.369 (iii) (e-i) + (e-ii) \$0 \$343.369 (iv) Total \$0 \$0 \$0 (d-ii) x (e-iii) (v) Total of (e-iv) \$0  f. Calculation of Impact of Adjustment	b. Percentage of Aw	arded and Co	mmuted/Comr	oromised within 1	otal Awarded							
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim         (i) Average       \$10       \$343,379         (ii) Difference (Col. 2 minus Col. 1)       \$343,369         d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix       (i) Awarded Mix       66.6667%       33.3333%         (ii) Total       # 0.0000       # 0       # 0         e. Pending Average from Above; Commuted and Compromised less Awarded Difference       (i) Pending Ave.       \$0       \$0         (ii) C/C Difference       \$0       \$343,369       (iii) (e-i) + (e-ii)       \$0       \$343,369         (iv) Total       \$0       \$0       \$0       \$0         (d-ii) x (e-iii)       \$0       \$0       \$0         (v) Total of (e-iv)       \$0       \$0       \$0         f. Calculation of Impact of Adjustment       \$0       \$0	(i) Number	# 6		# 3								
(i) Average \$10 \$343,379 (ii) Difference (Col. 2 minus Col. 1) \$343,379  d. Pendling claims Split into Awarded and Commuted/Comp using Awarded Mix (i) Awarded Mix 66.6667% 33,3333% (ii) Total # 0.0000 # 0.0000 # 0  e. Pendling Average from Above; Commuted and Compromised less Awarded Difference (i) Pending Ave. \$0 \$0 (ii) C/C Difference \$0 \$343,369 (iii) (e-i) + (e-ii) \$0 \$343,369 (iv) Total \$0 \$0 (d-ii) x (e-iii) (v) Total of (e-iv) \$0  f. Calculation of Impact of Adjustment	(ii) Percentage	66.6667%		33.3333%		100%						
(ii) Difference (Col. 2 minus Col. 1)  d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix (i) Awarded Mix (ii) Awarded Mix (iii) Total (iii) Total (iii) Total (iii) Total (iii) Total (iii) Total (iii) (e-i) + (e-ii) (iii) Total (iiii) Total (iiiii) Total (iiiiii) Total (iiiiii) Total (iiiiii) Total (iiiii) Total (iiiiii) Total (iiiiiiii) Total (iiiiiii) Total (iiiiii) Total (iiiiiii) Total (iiiiiiii) Total (iiiiiii) Total (iiiiiii) Total (iiiiiii) Total (iiiiiiii) Total (iiiiiii) Total (iiiiiii) Total (iiiiii) Total (iiiiiiii) Total (iiiiiiii) Total (iiiiiii) Total (iiiiiii) Total (iiiiiii) Total (iiiiiii) Total (iiiiiii) Total (iiiiiii) Total (iiiiii) Total (iiiiiii) Total (iiiiiii) Total (iiiiii) Total (iiiiii) Total (iiiiii) Total (iii	c. Difference Betwee	en Average Aw	arded Permane	ent Claim and A	verage Commi	uted/Comp	oromised Claim					
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix         (i) Awarded Mix       66.6667%       33.3333%         (ii) Total       # 0.0000       # 0         e. Pending Average from Above; Commuted and Compromised less Awarded Difference       (i) Pending Ave.       \$0         (ii) C/C Difference       \$0       \$343,369         (iii) (e-i) + (e-ii)       \$0       \$343,369         (iv) Total       \$0       \$0         (d-ii) x (e-iii)       \$0       \$0         (v) Total of (e-iv)       \$0       \$0         f. Calculation of Impact of Adjustment       \$0		minus Col. 1)	\$10		\$343,379		\$343,369					
(i) Awarded Mix 66.6667% 33.3333% # 0.0000 # 0.0000 # 0  e. Pending Average from Above; Commuted and Compromised less Awarded Difference (i) Pending Ave. \$0 \$0 \$0 (ii) C/C Difference \$0 \$343.369 (iii) (e-i) + (e-ii) \$0 \$343.369 (iv) Total \$0 \$0 (d-ii) x (e-iii) (v) Total of (e-iv) \$0  f. Calculation of Impact of Adjustment							4- 1-71					
			ed and Commu		Awarded Mix							
e. Pending Average from Above; Commuted and Compromised less Awarded Difference  [i) Pending Ave. \$0 \$0  [ii) C/C Difference \$0 \$343,369  [iii) (e-i) + (e-ii) \$0 \$343,369  [iv) Total \$0 \$0  (d-ii) x (e-iii)  (v) Total of (e-iv) \$0   f. Calculation of Impact of Adjustment								# 0				
[i) Pending Ave. \$0 \$0 [ii) C/C Difference \$0 \$343,369 [iii) (e-i) + (e-ii) \$0 \$343,369 [iv] Total \$0 \$0 (d-ii) x (e-iii) (v) Total of (e-iv) \$0  f. Calculation of Impact of Adjustment								•				
(ii) C/C Difference     \$0     \$343,369       (iii) (e-i) + (e-ii)     \$0     \$343,369       (iv) Total     \$0     \$0       (d-ii) x (e-iii)     \$0     \$0       (v) Total of (e-iv)     \$0       f. Calculation of Impact of Adjustment     \$0		from Above; (		d Compromised		oifference						
(iii) (e-i) + (e-ii) \$0 \$343,369 (iv) Total \$0 \$0 \$0 (d-ii) x (e-iii) \$0 \$0 \$0 (d-iii) x (e-iii) \$0 \$0 \$0 (d-iii) x (e-iii) \$0 \$0 \$0 (d-iii) x (e-iiiii) \$0 \$0 \$0 (d-iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii												
(d-ii) x (e-iii)       \$0         f. Calculation of Impact of Adjustment       \$0	(iii) (e-i) + (e-ii)	_	\$0	_	\$343,369							
(v) Total of (e-iv) \$0 <u>f. Calculation of Impact of Adjustment</u>			\$0		\$0							
f. Calculation of Impact of Adjustment									\$0			
		act of Adjustm	ent						•			
	i. Calculation of Imp											

		Awarded		P€	Total				
-	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 6	\$62	\$10	# 0.0000	\$0	\$0	# 6.0000	\$62	\$10
(ii) Comm./Comp.	# 3	\$1,030,137	\$343,379	# 0.0000	\$0	\$0	# 3.0000	\$1,030,137	\$343,379
(iii) Total	# 9	\$1,030,199	\$114,467	# 0.0000	\$0	\$0	# 9.0000	\$1,030,199	\$114,467
(iv) Average Severity	before Adju	ustment							\$114,467

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarde Permanen		Commute Compron As Settl	nised-	Total Awarded- Permanent plus Commuted/Comp.	Pending, Permanent		<u>Total Cla</u>	aims_
	(1) Count	Amount	(2) Count	Amount	(3) = (1) + (2) Count Amount	(4) Count	Amount	(5) Count	Amount
a. Numbers and Am									
(i) List	1	-	-	-		-	-		
	-	-	1	206,280		-	-		
	-	-	1	203,835		-	-		
	-	-	1	251,743 220,359		-	-		
	-	-	1	217,674		-	-		
	-	-	1	263,144		-	-		
	- 1	-	1	202,302		-	-		
	1	-	-	-		-	-		
	1	-	-	_		-	-		
	-	-	1	229,278		-	-		
	- 1	-	1	98,384		-	-		
	_ '	-	1	274,028		-	-		
	-	-	i	232,966		-	-		
	1	-	-	-		-	-		
	-	-	1	432,885		-	-		
	-	-	1	260,585 458,666		-	-		
	_	-	i	273,337		-	-		
	-	-	1	259,320		-	-		
	=	-	1	516,972		-	-		
	-	-	1	406,831		-	-		
	-	-	i	251,247 179,984		-	-		
	-	-	1	276,384		-	-		
	-	-	1	300,800		-	-		
	-	-	1	238,443		-	-		
	-	-	1	674,513 351,411		-	-		
	-	-	i	100,539		-	-		
	-	-	1	524,948		-	-		
	=	-	1	206,113		-	-		
	-	-	1	352,902 253,566		-	-		
	-	-	i	462,951		-	-		
	-	-	1	75,820		-	-		
	-	-	1	243,735		-	-		
	-	-	1	113,830		-	-		
	-	-	1	210,667 256,322		-	-		
	-	-	1	282,838		-	-		
	-	-	1	130,019		-	-		
	-	-	1	103,796		-	-		
	-	-	1	92,959		1	-		
	-	-	1	239,978		-	-		
(i) Total (ii) Average	# 6	\$0 \$0	# 41	\$10,932,355 \$266,643	# 47 \$10,932,355 \$232,603	# 1	\$0 \$0	# 48 \$10	),932,355 \$227,757
b. Percentage of Aw	arded and Co	mmuted/Com	oromised within	Total Awarded					
(i) Number	# 6		# 41		# 47				
(ii) Percentage	12.7660%		87.2340%		100%				
	en Average Aw		ent Claim and		uted/Compromised Claim				
(i) Average (ii) Difference (Col. 2	minus Col. 1)	\$0		\$266,643	\$266,643				
al Daniello III I	. material and the	-11 C							
d. Pending claims Sp (i) Awarded Mix	12.7660%	a ana Commu	87.2340%	g Awaraea Mix					
(ii) Number	# 0.1277		# 0.8723			# 1			
a Dandir - A	from Al	3amama: :t1 -	d Canan:	lless Aurente 17	Nifference				
e. Pending Average (i) Pending Ave.	rrom Above; (	Commuted and \$0	a Compromised	d less Awarded E \$0	<u>virrerence</u>				
(ii) C/C Difference		\$0 \$0		\$266,643					
(iii) (e-i) + (e-ii)	_	\$0	_	\$266,643					
(iv) Total		\$0		\$232,603					
(d-ii) x (e-iii) (v) Total of (e-iv)							\$232,603		
f. Calculation of Imp	oact of Adjustm	<u>ent</u>							
		arded			Pending			Tota	al.

Awarded					lotal						
	Count	Amount	Average	-	Count	Amount	Average		Count	Amount	Average
(i) Permanent	# 6	\$0	\$0		# 0.1277	\$0	\$0	#	6.1277	\$0	\$0
(ii) Comm./Comp.	# 41	\$10,932,355	\$266,643		# 0.8723	\$232,603	\$266,643	# 4	11.8723	\$11,164,958	\$266,643
(iii) Total	# 47	\$10,932,355	\$232,603		# 1.0000	\$232,603	\$232,603	# 4	18.0000	\$11,164,958	\$232,603
(iv) Average Severity (v) Impact	before Adju	ustment									\$227,757 \$4,846

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awara Permane		Commute Compron As Settl	nised-	Total Aw Perman Commute	ent plus	Pending Permanen		Total Claims	
	(1) Count		(2) Count	Amount	(3) = (1 Count		(4) Count	Amount	(5) Count Amount	
		AITIOUTII	Coorn	AITIOUTII	Coorii	AITIOUTII	Coom	AITIOUTII	Coorii Arioorii	
a. Numbers and Am	<u>ounts</u> 1		_	_						
(1) E131	- '	-	1	77,667			-	-		
	1	14,683 36	-	-			-	-		
	1	-	-	-			-	-		
	- ,	-	1	294,404			-	-		
	1	-	-	-			-	-		
		-	1	138,079			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	- 60,712	-	-			-	-		
	- '	-	1	260,050			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	-	-	1	119,134			-	-		
	1	0 30	-	-			-	-		
	1	-	-	-			-	-		
	1	-	=	-			-	-		
	1	1	-	-			-	-		
	1	-	- ,	- 205 4/1			-	-		
	1	1,637	-	225,461			-	-		
	- ,	-	1	267,077			-	-		
	1	37	-	-			-	-		
	-	-	1	101,069			-	-		
	-	-	1	170,537 102,615			-	-		
	1	-	- '	-			-	-		
	-	-	1 1	152,539 101,549			-	-		
	-	-	- '	101,347			1	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total	# 25	¢77 120	# 10	¢2.010.101	# 27	\$2,087,319	# 1	*0	# 20 \$2,007,210	
(i) Total (ii) Average	# 25	\$77,138 \$3,086	# 12	\$2,010,181 \$167,515	# 37	\$56,414	# 1	\$0 \$0	# 38 \$2,087,319 \$54,929	
b. Percentage of Aw		ommuted/Com		Total Awarded						
(i) Number (ii) Percentage	# 25 67.5676%		# 12 32.4324%		# 37 100%					
c. Difference Between (i) Average	en Average A	warded Permai \$3,086	nent Claim and	Average Comn \$167,515	nuted/Comp	romised Clain	<u>n</u>			
(ii) Difference (Col. 2	minus Col. 1)					\$164,430				
d. Pending claims Sp	olit into Award	led and Comm	uted/Comp usin	g Awarded Mix						
(i) Awarded Mix	67.5676%		32.4324%							
(ii) Number	# 0.6757		# 0.3243				# 1			
e. Pending Average	from Above;		d Compromised		Difference					
(i) Pending Ave. (ii) C/C Difference		\$0 \$0		\$0 \$164,430						
(iii) (e-i) + (e-ii)	_	\$0	_	\$164,430						
(iv) Total (d-ii) x (e-iii)		\$0		\$53,329						
(v) Total of (e-iv)								\$53,329		
f. Calculation of Imp	act of Adiustr	ment								
carcoranon or imp						_				
	Count	warded Amount	Average		Count	ending Amount	Average		Total Count Amount	Average
(i) Permanent	# 25	\$77,138	\$3,086		# 0.6757	\$0	\$0		# 25.6757 \$77,138	\$3,004
(ii) Comm./Comp. (iii) Total		\$2,010,181 \$2,087,319	\$167,515 \$56,414		# 0.3243 # 1.0000	\$53,329 \$53,329	\$164,430 \$53,329		# 12.3243 \$2,063,510 # 38.0000 \$2,140,647	\$167,434 \$56,333
(iii) IUIUI	# 3/	Ψ∠,UO/,JI7	φJ0,414		# 1.0000	<b>φυυ,υΖ7</b>	φυυ,3 <b>2</b> 7		π JO.UUUU \$2,14U,64/	<b>\$30,3</b> 3

# 1.0000

\$53,329

\$53,329

(v) Impact Source: Exhibit IX-A

(iv) Average Severity before Adjustment

(iii) Total

# 37

\$2,087,319

\$56,414

\$56,333

\$54,929

\$1,403

# 38.0000 \$2,140,647

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarde Permanen		Commuted Compromi As Settle	ised-	Perman	varded- ent plus ed/Comp.	Pending Permanen		<u>Total Cl</u>	aims
_	(1) Count		(2) Count	Amount		1) + (2) Amount	(4)	Amount	(5) Count	Amount
		Amount	Coom	Amouni	Coorn	AITIOUTII	Count	AITIOUTII	Coom	AITIOUTII
<ul> <li>a. Numbers and Amo</li> <li>(i) List</li> </ul>	<u>unts</u> 1	_	_	_			_	_		
(1) 2.31	i	16	-	-			-	-		
	-	-	1	501,652 93,511			-	-		
	-	-	i	291,371			-	-		
	1	5	- 1	- 251,142			-	-		
	-	-	1	295,616			-	-		
	-	-	1	221,420 334,900			-	-		
	-	-	1	329,228			-	-		
	-	-	1	91,817			-	-		
	-	-	1	309,014 91,336			-	-		
	-	-	1	282,816			-	-		
	- 1	-	- 1	- 185,206			-	-		
	-	-	- '	-			1	-		
	-	-	1	302,714			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	=	-			-	-		
	-	-	-	-			-	-		
	-	-	=	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	=	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total (ii) Average	# 4	\$21 \$5	# 14	\$3,581,743 \$255,839	# 18	\$3,581,764 \$198,987	# 1	\$0 \$0	#19 \$	3,581,764 \$188,514
h Dansant C	and a discount			Fatal According						
<ul> <li>b. Percentage of Awa</li> <li>(i) Number</li> </ul>	raea ana Cor # 4	mmutea/Comp	# 14	lotal Awaraea	# 18					
(ii) Percentage	22.2222%		77.7778%		100%					
c. Difference Between	n Average Aw	arded Permane	ent Claim and A	verage Comm	uted/Comr	promised Claim				
(i) Average		\$5		\$255,839						
(ii) Difference (col. 2 n	ninus Col.1)					\$255,833				
d. Pending claims Spl	it into Awarde	d and Commu	ted/Comp using	Awarded Mix						
(i) Awarded Mix	22.2222% # 0.2222		77.7778% # 0.7778				щ 1			
(ii) Number	# 0.2222		# 0.7776				# 1			
e. Pending Average f	rom Above; (		Compromised		Difference					
(i) Pending Ave. (ii) C/C Difference		\$0 \$0		\$0 \$255,833						
(iii) (e-i) + (e-ii)	_	\$0	_	\$255,833						
(iv) Total (d-ii) x (e-iii)		\$0		\$198,982						
(v) Total of (e-iv)								\$198,982		
f. Calculation of Impo	act of Adjustm	<u>ent</u>								

		Awarded		P	ending		Total			
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average	
(i) Permanent	# 4	\$21	\$5	# 0.2222	\$0	\$0	# 4.2222	\$21	\$5	
(ii) Comm./Comp.	# 14	\$3,581,743	\$255,839	# 0.7778	\$198,982	\$255,833	# 14.7778	\$3,780,725	\$255,839	
(iii) Total	# 18	\$3,581,764	\$198,987	# 1.0000	\$198,982	\$198,982	# 19.0000	\$3,780,746	\$198,987	
(iv) Average Severity (v) Impact	before Adju	ustment							\$188,514 \$10,473	

# Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarde Permanen		Commuted Comprom As Settle	sed-	Total Aw Perman Commute	ent plus ed/Comp.	Pending, Permanen		<u>Total Cl</u>	aims
	(1) Count	Amount	(2) Count	Amount	(3) = (1 Count	Amount	(4) Count	Amount	(5) Count	Amount
a. Numbers and Amoun	ts									
(i) List	1	-	- ,	-			-	-		
	-	-	1	308,601 362,402			-	-		
	-	-	1	113,459			-	-		
	1	43	- 1	- 198,264			-	-		
	-	-	1	141,155			-	-		
		-	1	707,108			-	-		
	- 1	-	- 1	- 194,718			-	-		
	-	-	-	=			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
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	-	-	-	-			-	-		
	-	-	-	=			-	-		
(i) Total (ii) Average	# 3	\$43 \$14	# 7	\$2,025,706 \$289,387	# 10	\$2,025,749 \$202,575	# O	\$0 \$0		2,025,749 \$202,575
b. Percentage of Award	ed and Co	mmuted/Compr	omised within	Total Awarded						
(i) Number	# 3	milorody comp.	# 7	orar / waraoa	# 10					
(ii) Percentage 30	0.0000%		70.0000%		100%					
c. Difference Between A	verage Aw	arded Permane	nt Claim and A	verage Commu	uted/Comp	romised Claim				
(i) Average (ii) Difference (col. 2 min	us Col.1)	\$14		\$289,387		\$289,372				
d. Pending claims Split in	nto Awarde	d and Commute	ed/Comp using	Awarded Mix						
(i) Awarded Mix 30	0.0000%		70.0000% # 0.0000				# 0			
e. Pending Average from	n Above; (		Compromised		ifference					
(i) Pending Ave.		\$0 \$0		\$0 \$289.372						
(ii) C/C Difference (iii) (e-i) + (e-ii)		\$0 \$0	_	\$289,372 \$289,372						
(iv) Total		\$0		\$0						
(d-ii) x (e-iii) (v) Total of (e-iv)								\$0		
								ΨΟ		
f. Calculation of Impact	of Adjustm	<u>ent</u>								
	Aw	arded			Р	ending			Total	al

Awarded				Pe	ending		Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 3	\$43	\$14	# 0.0000	\$0	\$0	# 3.0000	\$43	\$14
(ii) Comm./Comp.	# 7	\$2,025,706	\$289,387	# 0.0000	\$0	\$0	# 7.0000	\$2,025,706	\$289,387
(iii) Total	# 10	\$2,025,749	\$202,575	# 0.0000	\$0	\$0	# 10.0000	\$2,025,749	\$202,575
(iv) Average Severity (v) Impact	before Adju	ustment							\$202,575 \$0

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Award Permaner		Commuted Comprom As Settle	ised-	Total Awa Permaner Commuted	nt plus /Comp.	Pending, Permanent		Total Cl	aims_
	(1) Count	Amount	(2) Count	Amount	(3) = (1) Count	+ (2) Amount	(4) Count	Amount	(5) Count	Amount
a. Numbers and Amoun	t <u>s</u>									
(i) List	1	34	-	-			-	-		
	1	28,551	-	-			-	-		
	1	-	-	-			-	-		
	1	11	-	-			-	-		
	1	47,346	- 1	208,423			-	-		
	-	-	i	437,712			-	-		
	-	-	1	384,002			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
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	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total (ii) Average	# 6	\$75,942 \$12,657	# 3	\$1,030,137 \$343,379		1,106,079 \$122,898	# 0	\$0 \$0		1,106,079 \$122,898
b. Percentage of Awarde	ed and Co	mmuted/Compre	omised within	Total Awarded						
(i) Number	# 6		# 3		# 9					
(ii) Percentage 66	.6667%		33.3333%		100%					
c. Difference Between A	verage Av	varded Permaner	nt Claim and A	verage Commu	ited/Compra	mised Claim				
(i) Average (ii) Difference (Col. 2 min		\$12,657		\$343,379		\$330,722				
d Panding eleiess Cottain	to Acces	ad and Caman t	d/Community	Awardad M:						
	6.6667% 0.0000	ea ana Commute	33.3333% # 0.0000	3 Awaraea MIX			# 0			
e. Pending Average from	n Above:	Commuted and a	Compromised	less Awarded Di	fference					
(i) Pending Ave.	II ADUVE,	\$0	SOMBIOMISEC	\$0	HOIGHCE					
(ii) C/C Difference		\$0		\$330,722						
(iii) (e-i) + (e-ii)		\$0	_	\$330,722						
(iv) Total (d-ii) x (e-iii)		\$0		\$0						
(v) Total of (e-iv)								\$0		
f. Calculation of Impact	ot Adjustn	<u>nent</u>								
	Av	varded			Per	nding			Total	lc

		Awarded		Pe	ending		Total			
•	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average	
(i) Permanent	# 6	\$75,942	\$12,657	# 0.0000	\$0	\$0	# 6.0000	\$75,942	\$12,657	
(ii) Comm./Comp.	# 3	\$1,030,137	\$343,379	# 0.0000	\$0	\$0	# 3.0000	\$1,030,137	\$343,379	
(iii) Total	# 9	\$1,106,079	\$122,898	# 0.0000	\$0	\$0	# 9.0000	\$1,106,079	\$122,898	
(iv) Average Severity (v) Impact	before Adju	ustment							\$122,898 \$0	

# Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarde	2d-	Commute Compron		Total Awa		Pending	on		
	Permanen		As Settl		Commuted		Permanen		Total Cla	aims_
_	(1)		(2)		(3) = (1)		(4)		(5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amou	nts									
(i) List	1	-	-	-			-	-		
	-	-	1	206,280			-	-		
	-	-	1 1	203,835 251,743			-	-		
	-	-	1	220,359			-	-		
	-	-	i	217,674			-	-		
	-	-	1	279,802			-	-		
	- ,	-	1	202,302			-	-		
	1	-	-	-			-	-		
	1	3,322	-	-			-	-		
	- '	-	1	229,278			-	-		
	-	-	1	98,384			-	-		
	1	-	-	-			-	-		
	-	-	1	298,072			-	-		
	- 1	3,826	1	232,966			-	-		
	_ '	-	1	432,885			-	-		
	-	-	i	260,585			-	-		
	-	-	1	458,751			-	-		
	-	-	1	316,900			-	-		
	-	-	1	259,320			-	-		
	-	-	1	516,972 406,831			-	-		
	-	-	i	297,497			-	-		
	-	-	1	179,984			-	-		
	-	-	1	307,441			-	-		
	-	-	1	324,181			-	-		
	-	-	1	238,443			-	-		
	-	-	1	674,513 353,664			-	-		
	-	-	i	100,539			-	_		
	-	-	1	524,948			-	-		
	-	-	1	206,113			-	-		
	-	-	1	381,920			-	-		
	-	-	1	253,566			-	-		
	-	-	1 1	462,951 75,820			-	-		
	-	-	i	243,735			-	-		
	-	-	1	152,918			-	-		
	-	-	1	210,667			-	-		
	-	-	1	256,322			-	-		
	-	-	1	312,014			-	-		
	-	-	1	130,019 103,796			-	-		
	-	-	i	92,959			-	-		
	-	-	-	-			1	-		
	-	-	1	239,978			-	-		
(i) Total (ii) Average	# 6	\$7,148 \$1,191	# 41	\$11,216,927 \$273,584		1,224,074 \$238,810	# 1	\$0 \$0		1,224,074 \$233,835
				<b>-</b>						
b. Percentage of Awar	ded and Cor # 6	mmuted/Comp	oromised within # 41	lotal Awarded	# 47					
(i) Number (ii) Percentage	12.7660%		87.2340%		100%					
( )										
c. Difference Between	Average Aw		ent Claim and	Average Commi	uted/Compro	mised Claim				
(i) Average (ii) Difference (Col. 2 m	inus Col. 1)	\$1,191		\$273,584		\$272,392				
d. Pending claims Split	into Awardo	d and Commi	ited/Compusin	na Awarded Miv						
	12.7660%	a ana comma	87.2340%	ig Awarded Mix						
	# 0.1277		# 0.8723				# 1			
e. Pending Average fro	om Above; C		d Compromised		ifference					
(i) Pending Ave.		\$0 \$0		\$0 \$272,392						
(ii) C/C Difference (iii) (e-i) + (e-ii)		\$0 \$0	_	\$272,392						
(iii) (e-i) + (e-ii) (iv) Total		\$0 \$0		\$272,392 \$237,619						
(d-ii) x (e-iii)		7-		T						
(v) Total of (e-iv)								\$237,619		
f. Calculation of Impac	ct of Adjustm	ent								

Awarded				P	ending		Total		
•	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 6	\$7,148	\$1,191	# 0.1277	\$0	\$0	# 6.1277	\$7,148	\$1,166
(ii) Comm./Comp.	# 41 \$	11,216,927	\$273,584	# 0.8723	\$237,619	\$272,392	# 41.8723 \$	11,454,545	\$273,559
(iii) Total	# 47 \$	11,224,074	\$238,810	# 1.0000	\$237,619	\$237,619	# 48.0000 \$	11,461,693	\$238,785
(iv) Average Severity (v) Impact	before Adjus	tment							\$233,835 \$4,950

# Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awara Permane	nt Basis	Commuted Comprom As Settle	ised-	Perman Commute	warded- nent plus ed/Comp.	Pending Permanen		<u>Total C</u>	
	(1) Count	Amount	(2) Count	Amount	(3) = ( Count	1) + (2) Amount	(4) Count	Amount	(5) Count	Amount
a. Numbers and Amour	nts									
(i) List	1	-	- ,	-			-	-		
	- 1	14,683	1	77,667			-	-		
	i	36	-	-			-	-		
	1	-	- 1	- 294,404			-	-		
	1	-	- '	274,404			-	-		
	1	-		-			-	-		
	- 1	-	1	138,079			-	-		
	i	-	-	-			-	-		
	1	-	-	-			-	-		
	1	60,712	-	-			-	-		
	-	-	1	260,050			-	-		
	1	-	-	-			-	-		
	i	-	=	-			-	-		
			1	119,134			-	-		
	1	0 30	-	-			-	-		
	i	-	-	-			-	-		
	1	-	-	-			-	-		
	1	- 1	-	-			-	-		
	1	4,122	=	-			-	-		
	- 1	- 111,509	1	225,461			-	-		
	- '	-	1	267,077			-	-		
	1		-	-			-	-		
	1	37	- 1	101,069			-	-		
	-	-	1	170,537			-	-		
	- ,	-	1	102,615			-	-		
	- 1	-	- 1	152,539			-	-		
	-	-	1	101,549			-	-		
	-	-	-	-			1	-		
	-	-	-	-			-	-		
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	-	-	-	-			-	-		
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	-	-	=	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total	# 25	\$191,132	# 12	\$2,010,181	# 37	\$2,201,313	# 1	\$0	# 38 9	52,201,313
(ii) Average	20	\$7,645	" 12	\$167,515	07	\$59,495		\$0	" 00 4	\$57,929
b. Percentage of Award		ommuted/Comp		Total Awarded						
(i) Number (ii) Percentage 6	# 25		# 12		# 37					
(ii) rercentage 6	7.5676%		32.4324%		100%					
c. Difference Between /	Average Av		ent Claim and A		nuted/Comp	oromised Claim				
(i) Average (ii) Difference (Col. 2 mi	nus Col. 1)	\$7,645		\$167,515		\$159,870				
d. Pending claims Split i (i) Awarded Mix 6	into Award 7.5676%	ed and Commu	32.4324%	g Awarded Mix						
	# 0.6757		# 0.3243				# 1			
o Ponding Average for	m Abaus:	Commisted	N Comprania	loce Aurerdo -	Difforesses					
<ul> <li>e. Pending Average fro</li> <li>(i) Pending Ave.</li> </ul>	III ADUVE,	\$0	a comploinised	\$0	PHICHOLOGICE					
(ii) C/C Difference		\$0	_	\$159,870						
(iii) (e-i) + (e-ii) (iv) Total		\$0 \$0		\$159,870 \$51,850						
(d-ii) x (e-iii)		Ψ~		,000						
(v) Total of (e-iv)								\$51,850		
f. Calculation of Impac	t of Adjustr	<u>ment</u>								
	Α.	warded			r	Pendina			То	tal
_	Count	warded	Average		Count	Pending	Average	-	Count	Amount

Awarded				Pending			Total			
•	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average	
(i) Permanent	# 25	\$191,132	\$7,645	# 0.6757	\$0	\$0	# 25.6757	\$191,132	\$7,444	
(ii) Comm./Comp.	# 12	\$2,010,181	\$167,515	# 0.3243	\$51,850	\$159,870	# 12.3243	\$2,062,031	\$167,314	
(iii) Total	# 37	\$2,201,313	\$59,495	# 1.0000	\$51,850	\$51,850	# 38.0000	\$2,253,163	\$59,294	
(iv) Average Severity (v) Impact	before Adju	ustment							\$57,929 \$1,364	

# Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

_	Award Permaner		Commuted Compromi As Settle	sed-	Total Aw Permane Commute	ent plus d/Comp.	Pending Permanen		<u>Total C</u>	
	(1) Count	Amount	(2) Count	Amount	(3) = (1 Count	) + (2) Amount	(4) Count	Amount	(5) Count	Amount
a. Numbers and Amo										
(i) List	1	40,016	- -	-			-	-		
	- '	-	1	501,652			-	-		
	-	-	1	93,511			-	-		
	- 1	53,084	-	293,864			-	-		
	-	-	1	251,142			-	-		
	-	-	1	295,616			-	-		
	-	-	1	221,420 357,204			-	-		
	-	-	1	331,821			-	-		
	-	-	1	91,817 323,846			-	-		
	-	-	1	91,336			-	-		
	-	-	1	282,816			-	-		
	1	-	- 1	-			-	-		
	-	-	- '	185,206			- 1	-		
	-	-	1	302,714			-	-		
	-	-	-	-			-	-		
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	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total (ii) Average	# 4	\$93,100 \$23,275	# 14	\$3,623,965 \$258,855	# 18	\$3,717,065 \$206,504	# 1	\$0 \$0	#19 \$	3,717,065 \$195,635
b Dereentone of Ave	urdad and Ca	an an at a d / C a na	aramaiaa duuithin T	akal Aaralaal						
b. Percentage of Awa (i) Number	# 4	mmulea/Com	# 14	olal Awaraea	# 18					
(ii) Percentage	22.2222%		77.7778%		100%					
a Difference Returne	a Avorago Av	varded Perman	ont Claim and A	vorago Comm	utad/Camp	romicod Claim				
c. Difference Between (i) Average	i Average Av	\$23,275	eni Cidim and A	\$258,855	iulea/Compi	ornisea Ciairri				
(ii) Difference (col. 2 n	ninus Col.1)	,		,		\$235,580				
d Danding alginos Col	ikinka Aurara	ad and Carons	to al (Canana unin a	Accomplised by the						
d. Pending claims Spl (i) Awarded Mix	22.2222%	ea ana Commi	77.7778%	Awarded Mix						
(ii) Number	# 0.2222		# 0.7778				# 1			
e. Pending Average f	rom Ahous:	Commuted co	1 Compromised	less Awardad F	Oifference					
(i) Pending Average i	IOIII ADOVE;	\$0	a COMPROMISED	s0 \$0	VIII GI GI I C G					
(ii) C/C Difference		\$0		\$235,580						
(iii) (e-i) + (e-ii)		\$0 \$0		\$235,580 \$183,229						
(iv) Total (d-ii) x (e-iii)		\$0		φ100,227						
(v) Total of (e-iv)								\$183,229		
f. Calculation of Impo	act of Adjustn	<u>nent</u>								
					_					

Awarded				F		Total			
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 4	\$93,100	\$23,275	# 0.2222	\$0	\$0	# 4.2222	\$93,100	\$22,050
(ii) Comm./Comp.	# 14	\$3,623,965	\$258,855	# 0.7778	\$183,229	\$235,580	# 14.7778	\$3,807,194	\$257,630
(iii) Total	# 18	\$3,717,065	\$206,504	# 1.0000	\$183,229	\$183,229	# 19.0000	\$3,900,293	\$205,279
(iv) Average Severity (v) Impact	before Adj	ustment							\$195,635 \$9,644

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted Comprom As Settle	ised-	Total Aw Perman Commute	ent plus	Pending, Permanent		<u>Total Cla</u>	<u>iims</u>	
	Count	Amount	(2) Count	Amount	(3) = (1 Count	) + (2) Amount	(4) Count	Amount	(5) Count	Amount	
	Coom	AIIIOOIII	Coom	AIIIOOIII	Coom	AIIIOOIII	Coom	AITIOUTII	Coom	AIIIOOIII	
<ul> <li>a. Numbers and Am</li> <li>(i) List</li> </ul>	nounts 1		_	_				_			
(1) 2.51	- '	-	1	328,726			-	-			
	-	-	1	362,402			-	-			
	- 1	54,509	1 -	152,563			-	-			
	-	=	1	199,229			-	-			
	-	-	1 1	141,155			-	-			
	1	-	- '	707,108 -			-	-			
	-	-	1	194,718			-	-			
	-	-	-	-			-	-			
	-	-	-	-			-	-			
	-	-	-	-			-	-			
	-	-	-	-			-	-			
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(i) Total (ii) Average	# 3	\$54,509 \$18,170	# 7	\$2,085,900 \$297,986	# 10	\$2,140,410 \$214,041	# 0	\$0 \$0	#10 \$2 \$	,140,410 \$214,041	
h Percentage of A.	arded and C	`ommutod/Co-	annomiced within	Total Awards							
<ul> <li>b. Percentage of Aw</li> <li>(i) Number</li> </ul>	raraea ana C # 3	.ornmulea/Con	npromised within #7	rorai Awaraea	# 10						
(ii) Percentage	30.0000%		70.0000%		100%						
c. Difference Betwe	en Average 4	warded Perma	nent Claim and A	verage Comm	nuted/Comp	romised Claim					
(i) Average	cii7Wolage 7	\$18,170	richi Cidini dila i	\$297,986	ioica, comp	TOTTIBEE CIGITT					
(ii) Difference (col. 2	minus Col.1)					\$279,816					
d. Pending claims S	plit into Awar	ded and Comm	uted/Comp using	a Awarded Mix							
(i) Awarded Mix	30.0000%		70.0000%	,							
(ii) Number	# 0.0000		# 0.0000				# 0				
e. Pending Average	from Above	: Commuted ar	nd Compromised	less Awarded	<u>Differe</u> nce						
(i) Pending Ave.	-	\$0		\$0							
(ii) C/C Difference (iii) (e-i) + (e-ii)	_	\$0 \$0	_	\$279,816 \$279,816							
(iv) Total		\$0		\$277,010							
(d-ii) x (e-iii)		•		•				**			
(v) Total of (e-iv)								\$0			
f. Calculation of Imp	oact of Adjust	ment									
		hwardod				ondina			T. 1	d	
	Count	Awarded Amount	Average		Count	ending Amount	Average		Tota Count		Average
(i) Permanent	# 3	\$54,509	\$18,170		# 0.0000	\$0	\$0		# 3.0000	\$54,509	\$18,170
(ii) Comm./Comp.	# 7	\$2,085,900	\$297,986		# 0.0000 # 0.0000	\$0 \$0	\$0 \$0				297,986 214,041
(iii) Total	# IU	\$2,140,410	\$214,041		# U.UUUU	\$0	\$0		# 10.0000 \$2	,140,410	p∠14,U41

\$0

# 0.0000

(v) Impact

# 10 \$2,140,410

(iv) Average Severity before Adjustment

(iii) Total

# 10.0000 \$2,140,410

\$214,041 \$214,041 \$0

\$214,041

# Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awara Permanei		Commuted Compromis As Settle	sed-	Total Award Permanent Commuted/0	plus	Pending, Permanent		Total (	Claims	
	(1) Count	Amount	(2) Count	Amount	(3) = (1) + Count	(2) Amount	(4) Count	Amount	Count (5	5) Amount	
a. Numbers and Am	iounts										
(i) List	1	5,407	-	=			=	-			
	1	166,234	-	-			-	-			
	1 1	282 2,642	-	-			-	-			
	i	183,091	-	-			-	-			
	-	-	1	269,802 437,712			-	-			
	-	-	1	384,002			-	-			
	-	-	-	-			-	-			
	-	-	-	-			-	-			
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	-	-	-	-			-	-			
(i) Total (ii) Average	# 6	\$357,656 \$59,609	# 3	\$1,091,516 \$363,839	#9 \$1. \$	449,171 161,019	# 0	\$0 \$0	# 9	\$1,449,171 \$161,019	
b. Percentage of Aw		mmuted/Com		otal Awarded	" 0						
(i) Number (ii) Percentage	# 6 66.6667%		# 3 33.3333%		# 9 100%						
c. Difference Betwee	an Average Av	varded Perman	ent Claim and A	verage Comm	uted/Compron	nised Claim					
(i) Average (ii) Difference (Col. 2		\$59,609	ieni cidim dila A	\$363,839		304,229					
d. Pending claims Sp		ed and Commi		Awarded Mix							
(i) Awarded Mix (ii) Total	66.6667% # 0.0000		33.3333% # 0.0000				# 0				
e. Pending Average (i) Pending Ave. (ii) C/C Difference	from Above;	Commuted an \$0 \$0	d Compromised I	ess Awarded E \$0 \$304,229	<u> Difference</u>						
(iii) (e-i) + (e-ii)	_	\$0	_	\$304,229							
(iv) Total (d-ii) x (e-iii) (v) Total of (e-iv)		\$0		\$0				\$0			
f. Calculation of Imp	pact of Adjustn	nent									
·		varded			Pend	dina			T/	otal	
	Count	Amount	Average	-	Count	Amount	Average		Count	Amount	Average
(i) Permanent (ii) Comm./Comp.	# 6 # 3	\$357,656 1,091,516	\$59,609 \$363,839		# 0.0000 # 0.0000	\$0 \$0	\$0 \$0		# 6.0000 # 3.0000	\$357,656 \$1.091,516	\$59,609 \$363,839
(iii) Total		\$1,449,171	\$161,019		# 0.0000	\$0	\$0		# 9.0000		\$161,019

Source: Exhibit IX-A

(iv) Average Severity before Adjustment

(v) Impact

\$161,019

# Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Award Permane		Commute Compro As Set	mised- tled	Total Awarded- Permanent plus Commuted/Comp.	Pending Permaner		<u>Total Claims</u>
	(1) Count	Amount	(2) Count	Amount	(3) = (1) + (2) Count Amount	(4) Count	Amount	(5) Count Amount
	Coom	AHOOH	Coom	Amouni	Coom Amount	Coom	AITIOOTII	Coom Amount
a. Numbers and Amo								
(i) List	1	-	- 1	- 297,910		-	-	
	-	-	i	303,669		-	-	
	-	-	1	251,743		-	-	
	-	-	1	266,806		=	-	
	-	-	1 1	234,568 297,315		-	-	
	-	-	i	293,379		-	-	
	1	13	-	=		-	-	
	1	24	-	-		-	-	
	- 1	128,355	1	229,278		-	-	
	-	-	i	152,001		-	-	
	1	0	-	=		-	-	
	-	-	1	298,148		-	-	
	- 1	93,693	1	246,486		=	-	
	- '	-	- 1	432,885		-	-	
	-	-	1	333,986		-	-	
	-	-	1	458,751		-	-	
	-	-	1 1	317,020 261,189		-	-	
	-	-	1	516,972		-	-	
	-	-	i	406,831		-	-	
	-	-	1	297,604		-	-	
	-	-	1	248,147		-	-	
	-	-	1	307,441 324,181		-	-	
	-	-	1	290,474		-	-	
	-	-	1	674,513		-	-	
	-	-	1	353,664		-	-	
	-	-	1	152,173		-	-	
	-	-	1 1	524,948 270,845		-	-	
	-	-	i	381,920		-	-	
	-	-	1	339,845		-	-	
	-	=	1	462,951		=	-	
	-	=	1 1	75,820 301,758		=	-	
	-	-	i	152,918		-	-	
	-	-	i	276,507		-	-	
	-	-	1	307,746		-	-	
	-	-	1	318,475		-	-	
	-	-	1 1	130,019 146,664		-	-	
	-	-	i	151,503		-	-	
	-	-	-	-		1	-	
	-	-	1	256,335		-	-	
(i) Total (ii) Average	# 6	\$222,085 \$37,014	# 41	\$12,345,387 \$301,107	# 47 \$12,567,472 \$267,393	# 1	\$0 \$0	# 48 \$12,567,472 \$261,822
b. Percentage of Aw	arded and Co	ommuted/Com	promised within	n Total Awarded				
(i) Number (ii) Percentage	# 6 12.7660%		# 41 87.2340%		# 47 100%			
	en Average Av		ent Claim and		uted/Compromised Clair	<u>m</u>		
(i) Average (ii) Difference (Col. 2	minus Col. 1)	\$37,014		\$301,107	\$264,093			
d. Pending claims Sp		led and Commu		ng Awarded Mix				
(i) Awarded Mix (ii) Number	12.7660% # 0.1277		87.2340% # 0.8723			# 1		
e. Pending Average	from Above;		d Compromise		ifference			
(i) Pending Ave.		\$0		\$0				
(ii) C/C Difference	_	\$0	-	\$264,093				
(iii) (e-i) + (e-ii) (iv) Total		\$0 \$0		\$264,093 \$230,379				
(d-ii) x (e-iii)		ΨΟ		Ψ200,077				
(v) Total of (e-iv)							\$230,379	
f Calantair C								
f. Calculation of Imp	act ot Adjustr	nent						
	A	warded			Pendina			Total

Awarded				P		Total			
-	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 6	\$222,085	\$37,014	# 0.1277	\$0	\$0	# 6.1277	\$222,085	\$36,243
(ii) Comm./Comp.	# 41	\$12,345,387	\$301,107	# 0.8723	\$230,379	\$264,093	# 41.8723	\$12,575,765	\$300,336
(iii) Total	# 47	\$12,567,472	\$267,393	# 1.0000	\$230,379	\$230,379	# 48.0000	\$12,797,850	\$266,622
(iv) Average Severity (v) Impact	before Adj	ustment							\$261,822 \$4,800

# Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awar Permane		Commuted Comprom As Settle	nised-	Total Aw Perman Commute	ent plus	Pending Permanen		<u>Total C</u>	<u>Claims</u>	
	(1 Count		(2) Count	Amount	(3) = (1		(4)	Amount	Count (5		
		Amount	Couni	Amount	Count	Amount	Count	Amouni	Count	Amount	
a. Numbers and Am (i) List	nounts 1	0		_							
(1) E131	- '	-	1	77,667			-	-			
	1	22,446	-	-			-	-			
	1	6,261	-	-			-	-			
	- ,	-	1	314,469			=	-			
	1 1	-	-	-			-	-			
	- ,	-	1	138,079			-	-			
	1	19	-	-			-	-			
	i	0	=	-			-	-			
	1	- 60,712	-	-			-	-			
	- '	-	1	260,050			-	-			
	1	0	-	-			-	-			
	1	- 69	-	-			-	-			
	-	-	1	119,134			-	-			
	1	540 4,142	-	-			-	-			
	1	-	-	-			-	-			
	1	3 2	-	-			-	-			
	1	1,589	-	-			-	-			
	1	69,040	-	- 000 105			-	-			
	1	203,114	-	238,135			-	-			
	-	-	1	304,773			-	-			
	1	0 4,336	-	-			-	-			
	- '	-	1	153,008			-	-			
	-	=	1	246,162			-	-			
	1	-	-	154,086			-	-			
	-	-	1	180,678			-	-			
	-	-	1	146,139			- 1	- 0			
	-	-	=	-			-	-			
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	-	-	-	-			-	-			
	-	-	-	-			-	-			
(i) Total (ii) Average	# 25	\$372,272 \$14,891	# 12	\$2,332,379 \$194,365	# 37	\$2,704,651 \$73,099	# 1	\$0 \$0	# 38	\$2,704,651 \$71,175	
() / 1. 3. 4 9 5		ψ11,071		ψ171,000		φ, σ,σ,,		Ψο		ψ, ι,σ	
b. Percentage of Aw	arded and C	Commuted/Com	promised within	Total Awarded							
(i) Number	# 25		# 12		# 37						
(ii) Percentage	67.5676%		32.4324%		100%						
c. Difference Between	en Average A		nent Claim and		nuted/Comp	romised Clain	<u>n</u>				
(i) Average (ii) Difference (Col. 2	minus Col. 11	\$14,891		\$194,365		\$179,474					
(ii) Dilierence (Coi. 2	. 11111103 COI. 1)	'				ψ1//,4/4					
d. Pending claims Sp		ded and Comm		g Awarded Mix	[						
(i) Awarded Mix (ii) Number	67.5676% # 0.6757		32.4324% # 0.3243				# 1				
		Canancite		Lloss Average	Differen						
<ul> <li>e. Pending Average</li> <li>(i) Pending Ave.</li> </ul>	rom Above;	Commuted ar \$0	ia Compromised	l less Awarded \$0	Difference						
(ii) C/C Difference		\$0		\$179,474							
(iii) (e-i) + (e-ii) (iv) Total		\$0 \$0	_	\$179,474 \$58,208							
(d-ii) x (e-iii)		φυ		φυυ,200							
(v) Total of (e-iv)								\$58,208			
f. Calculation of Imp	oact of Adjust	ment									
					_				_	4-1	
	Count	Awarded Amount	Average		Count	ending Amount	Average		Count	Amount	Average
(i) Permanent	# 25	\$372,272	\$14,891		# 0.6757	\$0	\$0		# 25.6757	\$372,272	\$14,499
(ii) Comm./Comp. (iii) Total	# 12 # 37	\$2,332,379 \$2,704,651	\$194,365 \$73,099		# 0.3243 # 1.0000	\$58,208 \$58,208	\$179,474 \$58,208			\$2,390,586 \$2,762,859	\$193,973 \$72,707
(III) TOTAL	# 3/	Ψ∠,/ U4,63 I	\$1.0,U77		# 1.0000	φυ0,2U0	φυ0,2U0		# 30.0000	ΨZ,/ OZ,OJ7	Φ/∠,/U

\$58,208

\$58,208

# 1.0000

Source: Exhibit IX-A

(iv) Average Severity before Adjustment

# 37 \$2,704,651

(iii) Total

(v) Impact

\$73,099

# 38.0000 \$2,762,859

\$72,707

\$71,175

\$1,532

#### Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Award Permaner		Commuted Comprom As Settle	ised-	Perman	warded- nent plus ed/Comp.	Pending Permanen		<u>Total C</u>	laims
-	(1)		(2)		(3) = (	1) + (2)	(4)		(5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amou	unts									
(i) List	1	2	-	-			-	-		
	1	169,512	- 1	- 501,652			-	-		
	-	-	i	154,079			-	-		
	-	-	1	315,997			-	-		
	1	189,589	-	-			-	-		
	-	-	1	251,142 301,842			-	-		
	-	-	1	296,741			-	-		
	-	-	1	357,204			-	-		
	-	-	1 1	343,069 177,017			=	-		
	-	-	i	323,846			-	-		
	-	-	1	152,091			-	-		
	- ,	-	1	282,816			-	-		
	- 1	-	- 1	- 268,732			-	-		
	-	-	- '	-			1	-		
	-	-	1	318,491			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
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	-	-	-	-			-	-		
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(i) Total (ii) Average	# 4	\$359,102 \$89,776	# 14	\$4,044,718 \$288,908	# 18	\$4,403,821 \$244,657	# 1	\$0 \$0	# 19 \$	4,403,821 \$231,780
b. Percentage of Awar	rded and Ca	mmuted/Comp	romised within	Total Awarded						
(i) Number	# 4	orninolea/Comp	# 14	ioidi Awaided	# 18					
	22.2222%		77.7778%		100%					
a Difference Bahwasa	A	. arded Deres en	ant Clains and I	Lucrana Canana	ta al /Cana	aramina d Claina				
<ul> <li>c. Difference Between</li> <li>(i) Average</li> </ul>	Average Av	\$89,776	eni Cidim dha A	\$288,908	ulea/Comp	oromisea Ciaim				
(ii) Difference (Col. 2 m	ninus Col. 1)			•		\$199,133				
	22.2222%	ed and Commu	77.7778%	g Awarded Mix			# 1			
(ii) Number	# 0.2222		# 0.7778				# 1			
e. Pending Average fr	om Above;		Compromised		oifference					
(i) Pending Ave. (ii) C/C Difference		\$0 \$0		\$0 \$199,133						
(iii) (e-i) + (e-ii)	_	\$0	_	\$199,133						
(iv) Total		\$0		\$154,881						
(d-ii) x (e-iii) (v) Total of (e-iv)								\$154,881		
								T.01,001		
f. Calculation of Impa	ct ot Adjustn	<u>nent</u>								

		Awarded		P	ending		Total			
•	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average	
(i) Permanent	# 4	\$359,102	\$89,776	# 0.2222	\$0	\$0	# 4.2222	\$359,102	\$85,051	
(ii) Comm./Comp.	# 14	\$4,044,718	\$288,908	# 0.7778	\$154,881	\$199,133	# 14.7778	\$4,199,599	\$284,183	
(iii) Total	# 18	\$4,403,821	\$244,657	# 1.0000	\$154,881	\$154,881	# 19.0000	\$4,558,702	\$239,932	
(iv) Average Severity (v) Impact	before Adju	ustment							\$231,780 \$8,152	

# Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted Comprom As Settle	ised-	Total Awarded- Permanent plus Commuted/Comp.	Pending Permanen		Total Claims
	Count	Amount	(2) Count	Amount	(3) = (1) + (2) Count Amoun	(4) It Count	Amount	(5) Count Amount
a. Numbers and Amount	<u>'S</u>							
(i) List	1	223	- ,	-		-	-	
	-	-	1	333,281 362,402		-	-	
	-	-	1	152,563		-	-	
	1	139,824		-		-	-	
	-	-	1	199,229		-	-	
	-	-	1	141,155		-	-	
	- 1	- 5	1	707,108		-	-	
	- '	-	1	194,718		-	-	
	-	-	-	-		-	-	
	-	-	-	-		-	-	
	-	-	-	-		-	-	
	-	-	-	-		-	-	
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	-	-	-	-		-	-	
	-	-	-	-		-	-	
(i) Total (ii) Average	# 3	\$140,052 \$46,684	# 7	\$2,090,455 \$298,636	# 10 \$2,230,508 \$223,051		\$0 \$0	# 10 \$2,230,508 \$223,051
h Percentage of August	ad and C	ommuted/Com	omiced within	Total Awardad				
<ul> <li>b. Percentage of Awards</li> <li>(i) Number</li> </ul>	# 3	Janinolea/Compr	# 7	ioiui Awaiaea	# 10			
	.0000%		70.0000%		100%			
D.W			-1.01-1-		+1/0			
c. Difference Between Av (i) Average	verage A	warded Permane \$46,684	nt Claim and A	verage Commu \$298,636	red/Compromised Cl	<u>aim</u>		
(ii) Difference (Col. 2 min	us Col. 1)	φ40,004		Ψ270,030	\$251,952	!		
d. Pending claims Split in		ed and Commute		Awarded Mix				
	0.0000		70.0000% # 0.0000			# 0		
(ii) (10111DOI #	2.0000		# 0.0000			π 0		
e. Pending Average from	n Above;		Compromised		ifference			
(i) Pending Ave.		\$0		\$0				
(ii) C/C Difference	_	\$0		\$251,952				
(iii) (e-i) + (e-ii) (iv) Total		\$0 \$0		\$251,952 \$0				
(d-ii) x (e-iii)		ΨΟ		ΨΟ				
(v) Total of (e-iv)							\$0	
f. Calculation of Impact	ot Adjustr	<u>nent</u>						
	A	warded			Pending			Total

Awarded				F		Total			
-	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 3	\$140,052	\$46,684	# 0.0000	\$0	\$0	# 3.0000	\$140,052	\$46,684
(ii) Comm./Comp.	# 7	\$2,090,455	\$298,636	# 0.0000	\$0	\$0	# 7.0000	\$2,090,455	\$298,636
(iii) Total	# 10	\$2,230,508	\$223,051	# 0.0000	\$0	\$0	# 10.0000	\$2,230,508	\$223,051
(iv) Average Severity (v) Impact	before Adju	ustment							\$223,051 \$0

# COAL MINE COMPENSATION RATING BUREAU Wage Level Adjustment to Current Level State Occupational Disease Model

			U/G	U/G		Surface	Wage Level
		Year	<u>Anthracite</u>	<u>Bituminous</u>	<u>Anthracite</u>	<u>Bituminous</u>	<u>Decrease</u>
	Pre Act 57:	1990	\$513.23	701.35	484.53	523.42	5.1817%
		1991	529.88	724.15	498.40	541.05	5.1817%
		1992	547.07	747.69	512.66	559.27	5.1817%
		1993	564.81			578.11	5.1817%
		1994	583.13	797.10	542.42		5.1817%
		1995		823.01			5.1817%
Adhen	od Don 8 Dont Ant 57.	1996		849.77			
MIXE	ed Pre & Post Act 57:				573.91 590.34*	638.51	3.3220% ***
	Post Act 57:	1997				660.01 *	0.0%
		1998			607.23 *		0.0%
		1999			624.61 *		0.0%
		2000	706.24 *		642.48 *	728.97 *	0.0%
		2001	729.15 *	997.17 *	660.87 *	753.52 *	0.0%
		2002	752.81 *	1,029.59 *	679.78 *	778.90 *	0.0%
		2003	777.23 *	1,063.06*	699.24 *	805.13 *	0.0%
		2004	802.44 *	1,097.62*	719.25 *	832.25 *	0.0%
		2005		1.133.30 *		860.28 *	0.0%
		2006			761.00 *		0.0%
		2007			782.78 *		0.0%
		2008			805.18 *		0.0%
		2009		1,288.01 *		982.16 *	0.0%
		2010			851.93*		0.0%
				1,373.12*			0.0%
				1,417.75*			0.0%
		2013		1,463.84*		1,121.31 *	0.0%
		2014	1,104.22 *	1,511.43*	953.72 *	1,159.07 *	0.0%
				1,560.57 *		1,198.11 *	0.0%
					1,009.09 *		0.0%
		Average:					1.2745%
							1.27 1070
	D	ojected to:					
			1 214 00	1,683.42	1,109.94	1.265.33	
		4/1/2019					
	Post Act 57:	4/1/2019	1,153.92 *	1,596.19 *	1,052.42 *	1,199.//*	
b) Conve	ersion Calculation:						
	Pre Act 57:	1996			573.91	638.51	
	Pre Act 57:	1997	641.74	877.39	590.34	660.01	
	Pre Act 57:	1998	662.56	905.91	607.23	682.24	
	Pre Act 57:	1999	684.05	935.37	624.61	705.22	
	Pre Act 57:	2000	706.24	965.77	642.48	728.97	
	Pre Act 57:	2001	729.15	997.17	660.87	753.52	
	Pre Act 57:	2002		1,029.59		778.90	
	Pre Act 57:	2002		1,063.06		805.13	
	Pre Act 57:	2004		1,097.62		832.25	
	Pre Act 57:	2005				860.28	
	Pre Act 57:	2006	855.34	1,170.14	761.00	889.25	
	Pre Act 57:	2007	883.09	1,208.18	782.78	919.20	
	Pre Act 57:	2008	911.73	1,247.46	805.18	950.16	
	Pre Act 57:	2009	941.31	1,288.01	828.23	982.16	
	Pre Act 57:	2010	971.85	1,329.88	851.93	1,015.24	
	Pre Act 57:	2011		1,373.12		1,049.43	
	Pre Act 57:	2012		1,417.75		1,084.77	
	Pre Act 57:	2012				1,121.31	
	Pre Act 57:	2014					
	Pre Act 57:	2015				1,198.11	
	Pre Act 57:	2016			1,009.09		
	Pre Act 57:	4/1/2019	1,216.98	1,683.42	1,109.94		
	Conversion Factor:		5.1817%	5.1817%	5.1817%	5.1817%	
							Note:
	Post Act 57:	1996	\$589.37	\$805.73	\$544.17	\$605.42	Pre Act 57 times (1.0 - Fac
	Post Act 57:	1997					Pre Act 57 times (1.0 - Fac
	Post Act 57:	1998	628.23	858.97			Pre Act 57 times (1.0 - Fac
	Post Act 57:	1999	648.61	886.90			Pre Act 57 times (1.0 - Fac
	Post Act 57:	2000	669.65				Pre Act 57 times (1.0 - Fac
	Post Act 57:	2000	691.37	945.50			
					626.63		Pre Act 57 times (1.0 - Fac
	Post Act 57:	2002	713.80	976.24	644.56		Pre Act 57 times (1.0 - Fac
	Post Act 57:	2003	736.95	1,007.97	663.00		Pre Act 57 times (1.0 - Fac
	Post Act 57:	2004	760.86	1,040.74	681.98		Pre Act 57 times (1.0 - Fac
	Post Act 57:	2005	785.54	1,074.57	701.50	815.70	Pre Act 57 times (1.0 - Fac
	Post Act 57:	2006	811.02	1,109.51	721.57	843.17	Pre Act 57 times (1.0 - Fac
	Post Act 57:	2007	837.33	1,145.58	742.22	871.57	Pre Act 57 times (1.0 - Fac
		2008	864.49	1,182.82	763.46		Pre Act 57 times (1.0 - Fac
	Post Act 57:		892.53	1,221.27	785.31		Pre Act 57 times (1.0 - Fac
	Post Act 57: Post Act 57:			1,260.97	807.79		Pre Act 57 times (1.0 - Fac
	Post Act 57:	2009			007.79		
	Post Act 57: Post Act 57:	2009 2010	921.49		020.00		
	Post Act 57: Post Act 57: Post Act 57:	2009 2010 2011	921.49 951.38	1,301.96	830.90		,
	Post Act 57: Post Act 57: Post Act 57: Post Act 57:	2009 2010 2011 2012	921.49 951.38 982.24	1,301.96 1,344.29	854.68	1,028.56	Pre Act 57 times (1.0 - Fac
	Post Act 57: Post Act 57: Post Act 57: Post Act 57: Post Act 57:	2009 2010 2011	921.49 951.38	1,301.96		1,028.56 1,063.21	Pre Act 57 times (1.0 - Fac Pre Act 57 times (1.0 - Fac
	Post Act 57: Post Act 57: Post Act 57: Post Act 57:	2009 2010 2011 2012	921.49 951.38 982.24	1,301.96 1,344.29	854.68	1,028.56 1,063.21	Pre Act 57 times (1.0 - Fac Pre Act 57 times (1.0 - Fac
	Post Act 57: Post Act 57: Post Act 57: Post Act 57: Post Act 57:	2009 2010 2011 2012 2013	921.49 951.38 982.24 1,014.10	1,301.96 1,344.29 1,387.99	854.68 879.14	1,028.56 1,063.21 1,099.01	Pre Act 57 times (1.0 - Fac Pre Act 57 times (1.0 - Fac Pre Act 57 times (1.0 - Fac
	Post Act 57: Post Act 57: Post Act 57: Post Act 57: Post Act 57: Post Act 57: Post Act 57:	2009 2010 2011 2012 2013 2014 2015	921.49 951.38 982.24 1,014.10 1,047.00 1,080.96	1,301.96 1,344.29 1,387.99 1,433.11 1,479.70	854.68 879.14 904.30 930.18	1,028.56 1,063.21 1,099.01 1,136.03	Pre Act 57 times (1.0 - Fac Pre Act 57 times (1.0 - Fac Pre Act 57 times (1.0 - Fac Pre Act 57 times (1.0 - Fac
	Post Act 57: Post Act 57:	2009 2010 2011 2012 2013 2014 2015 2016	921.49 951.38 982.24 1,014.10 1,047.00 1,080.96 1,116.03	1,301.96 1,344.29 1,387.99 1,433.11 1,479.70 1,527.81	854.68 879.14 904.30 930.18 956.80	1,028.56 1,063.21 1,099.01 1,136.03 1,174.29	Pre Act 57 times (1.0 - Fac Pre Act 57 times (1.0 - Fac
	Post Act 57: Post Act 57: Post Act 57: Post Act 57: Post Act 57: Post Act 57: Post Act 57:	2009 2010 2011 2012 2013 2014 2015	921.49 951.38 982.24 1,014.10 1,047.00 1,080.96	1,301.96 1,344.29 1,387.99 1,433.11 1,479.70	854.68 879.14 904.30 930.18	1,028.56 1,063.21 1,099.01 1,136.03 1,174.29	Pre Act 57 times (1.0 - Fac Pre Act 57 times (1.0 - Fac
al Wes	Post Act 57: Post Act 57:	2009 2010 2011 2012 2013 2014 2015 2016 4/1/2019	921.49 951.38 982.24 1,014.10 1,047.00 1,080.96 1,116.03	1,301.96 1,344.29 1,387.99 1,433.11 1,479.70 1,527.81	854.68 879.14 904.30 930.18 956.80	1,028.56 1,063.21 1,099.01 1,136.03 1,174.29	Pre Act 57 times (1.0 - Fac Pre Act 57 times (1.0 - Fac
c) Wage	Post Act 57: Post Act 57:	2009 2010 2011 2012 2013 2014 2015 2016 4/1/2019	921.49 951.38 982.24 1,014.10 1,047.00 1,080.96 1,116.03 1,153.92	1,301.96 1,344.29 1,387.99 1,433.11 1,479.70 1,527.81 1,596.19	854.68 879.14 904.30 930.18 956.80 1,052.42	1,028.56 1,063.21 1,099.01 1,136.03 1,174.29 1,199.77	Pre Act 57 times (1.0 - Fac Pre Act 57 times (1.0 - Fac
c) Wage	Post Act 57: Post Act 57:	2009 2010 2011 2012 2013 2014 2015 2016 4/1/2019	921.49 951.38 982.24 1,014.10 1,047.00 1,080.96 1,116.03 1,153.92	1,301.96 1,344.29 1,387.99 1,433.11 1,479.70 1,527.81 1,596.19	854.68 879.14 904.30 930.18 956.80 1,052.42	1,028.56 1,063.21 1,099.01 1,136.03 1,174.29 1,199.77	Pre Act 57 times (1.0 - Fac Pre Act 57 times (1.0 - Fac
c) Wage	Post Act 57: Post Act 57: (i) Year (ii) Wage on claim re	2009 2010 2011 2012 2013 2014 2015 2016 4/1/2019 mples:	921.49 951.38 982.24 1,014.10 1,047.00 1,080.96 1,116.03 1,153.92	1,301.96 1,344.29 1,387.99 1,433.11 1,479.70 1,527.81 1,596.19	854.68 879.14 904.30 930.18 956.80 1,052.42	1,028.56 1,063.21 1,099.01 1,136.03 1,174.29 1,199.77	Pre Act 57 times (1.0 - Fac Pre Act 57 times (1.0 - Fac
c) Wage	Post Act 57: Post Act 57:	2009 2010 2011 2012 2013 2014 2015 2016 4/1/2019 mples:	921.49 951.38 982.24 1,014.10 1,047.00 1,080.96 1,116.03 1,153.92	1,301.96 1,344.29 1,387.99 1,433.11 1,479.70 1,527.81 1,596.19	854.68 879.14 904.30 930.18 956.80 1,052.42	1,028.56 1,063.21 1,099.01 1,136.03 1,174.29 1,199.77	Pre Act 57 times (1.0 - Fac Pre Act 57 times (1.0 - Fac
c) Wage	Post Act 57: Post Act 57: (i) Year (ii) Wage on claim re	2009 2010 2011 2012 2013 2014 2015 2016 4/1/2019 mples:	921.49 951.38 982.24 1,014.10 1,047.00 1,080.96 1,116.03 1,153.92	1,301.96 1,344.29 1,387.99 1,433.11 1,479.70 1,527.81 1,596.19	854.68 879.14 904.30 930.18 956.80 1,052.42	1,028.56 1,063.21 1,099.01 1,136.03 1,174.29 1,199.77	Pre Act 57 times (1.0 - Fac Pre Act 57 times (1.0 - Fac
c) Wage	Post Act 57: Vervel Adjustment Exa (i) Year (ii) Wage on claim re Wage Adjustment (iii) Projection to 0-	2009 2010 2011 2012 2013 2014 2015 2016 4/1/2019 mples: cord	921.49 951.38 982.24 1,014.10 1,047.00 1,080.96 1,116.03 1,153.92 1993 \$400.00	1,301.96 1,344.29 1,387.99 1,433.11 1,479.70 1,527.81 1,596.19 1995 \$450.00	854.68 879.14 904.30 930.18 956.80 1,052.42 1997 \$420.00	1,028.56 1,063.21 1,099.01 1,136.03 1,174.29 1,199.77 1999 \$430.00	Pre Act 57 times (1.0 - Fac Pre Act 57 times (1.0 - Fac
:) Wage	Post Act 57: (i) Year (ii) Wage on claim re Wage Adjustment	2009 2010 2011 2012 2013 2014 2015 2016 4/1/2019 mples: cord : 4/01/2019	921.49 951.38 982.24 1,014.10 1,047.00 1,080.96 1,116.03 1,153.92 1993 \$400.00 \$1,216.98	1,301.96 1,344.29 1,387.99 1,433.11 1,479.70 1,527.81 1,596.19 1995 \$450.00 \$1,683.42	854.68 879.14 904.30 930.18 956.80 1,052.42 1997 \$420.00	1,028.56 1,063.21 1,099.01 1,136.03 1,174.29 1,199.77 1999 \$430.00 \$1,199.77	Pre Act 57 times (1.0 - Fac Pre Act 57 times (1.0 - Fac

Source: Average Weekly Wage (Smoothed) - Exhibit VII-H, pages 1, 2, 3 and 4 - Column (8)
Projected 04/01/2019 Weekly Wage - Exhibit VII-H, pages 1, 2, 3 and 4 - Column (6)
Wage level decrease - Exhibit VII-G, Page 2.
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<sup>\*</sup> Post Act 57 for 1997-2016 and Projected to 04/01/2019

\*\* Post Act 57 applies to one 1996 case on or after 8-23-96 - Pre Act 57 applies to four 1996 cases on or before 8-22-96

\*\*\* Factor reflects that 234/3651hs of 1996 was Pre Act 57.

#### COAL MINE COMPENSATION RATING BUREAU

#### WAGE LEVEL OFFSET (Act 57, Section 309) and PENSION PERCENTAGE

State Occupational Disease and Federal Excess

Calculation of Wage Offset	Average	State OD	
	Before	After	Claim Count
(a) Wage Ranges	<u>Offset</u>	Offset	
Above 869.55	527.00	527.00	32
\$790.50 - 869.55	527.00	503.09	10
\$447.95 - 790.49	408.00	370.95	63
\$395.25 - 447.94	272.00	263.50	11
\$316.20 - 395.24	263.50	263.50	3
\$289.95 - 316.19	263.50	247.94	0
\$0.00 - 289.94	207.00	188.21	1
Average/Total	\$431.90	\$409.52	120

#### (b) Selected State Indemnity Factor:

(i) After ÷ Before (\$409.52 ÷ \$431.90) 94.8183% (ii) Complement (1.0 minus 0.948183) 5.1817% (iii) Reduced by 10% for Phase-in of Act 4.6635% (See Exhibit VII-G, Page 1)

#### Source:

Wage Ranges - Pennsylvania Compensation Rating Bureau

Evaluation of SB801 Amendments to Section 309 of Act 57

Above \$869.55 - Claims eligible for maximum under either wage calculation.

\$790.50-869.55 - Claims at maximum under current but 2/3 of wage under proposed method.

\$447.95-790.49 - Claims at 2/3 under either wage calculation.

\$395.25-447.94 - Claims at 2/3 under current method but 50% of maximum under proposed method

\$316.20-395.24 - Claims at 50% under either method.

\$289.95-316.19 - Claims at 50% under current method but 90% of maximum under proposed meth \$.00-289.94 - Claims at 90% under either method.

Estimatos

Average Benefits Before and After Act 57

State Claim Counts - Claimant wages from 1987 through 1996 Exposure Years from CMCRB database, projected to 1996 level.

#### Calculation of Pension Offset Percentage

	ESIIITIGIES
(a) Union Membership	50.0%
(b) Pension Paid by Employers	50.0%
(c) Present Employer Directly Liable for Pension	50.0%
(d) Resulting Offset for State O.D.	12.5%

Sources: Percentage of Miners eligible: estimate.

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# Wage Level Adjustment to Current Level - State Occupational Disease Model Anthracite Underground (1011)

Page 1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Claimants'				(1) Adjusted		Exponentially
	Statewide		(2) Adjusted			To Claimants'	Adjusted	Fitted
	Avg Wage		For Act 57	(3)/(1)		Wage Level		Wages
1990		539.87	539.87	1.2885	539.87		539.87	
1991	436.00	0.00				510.68	510.68	
1992		608.33	608.33	1.3370	608.33		608.33	
1993		419.67	419.67	0.8835 Low		556.37	556.37	564.81
1994		0.00				577.45	577.45	583.13
1995	509.00	0.00				596.19	596.19	602.05
1996		0.00				617.27	617.27	621.58
1997	542.00	0.00				634.84	634.84	641.74
1998	561.00	0.00				657.10	657.10	662.56
1999		501.00	528.38	0.8986	528.38		528.38	
2000	611.00	0.00				715.66	715.66	706.24
2001	644.00	0.00				754.31	754.31	729.15
2002	662.00	0.00				775.40	775.40	752.81
2003	675.00	0.00				790.62	790.62	777.23
2004	690.00	0.00				808.19	808.19	802.44
2005	716.00	0.00				838.65	838.65	828.47
2006	745.00	0.00				872.61	872.61	855.34
2007	779.00	0.00				912.44	912.44	883.09
2008	807.00	0.00				945.23	945.23	911.73
2009	836.00	0.00				979.20	979.20	941.31
2010	845.00	0.00				989.74	989.74	971.85
2011	858.00	1400.00	1476.51	1.7209 High		1004.97	1004.97	1003.37
2012	888.00	0.00				1040.11	1040.11	1035.92
2013	917.00	1009.57	1064.74	1.1611	1064.74		1064.74	1069.52
2014	932.00	0.00				1091.65	1091.65	1104.22
2015	951.00	0.00				1113.90	1113.90	1140.04
2016	978.00	0.00				1145.53	1145.53	1177.02
2017	995.00							

High 1.7209 Low 0.8835

Average Ratio Claimant/State - High & Low 1.1713

Projected

4/1/2019

2018 1,020.00 2019 1,045.00 2020 1,072.00

Projected Avg. Wage at Claimants' Level 1,039.00 \* 1.1713 = \$1,216.98

Act 57 Factor: 94.8183%

(1) Statewide average weekly wage

1.039.00

(2) CMCRB database, reported State OD average weekly wage

the reported wages were adjusted to pre-act 57 wage level by dividing them by the wage offset of (1.0 minus .051817)

(3)= Column (2) adjusted for Act 57

(4) = (3)/(1), (3a) average index

(5) Actual adjusted wages excluding High and Low

(6) Wage history based on State OD wages, except for high, low, and zeroes where SAWW times average indices was used

(7) Adjusted Wages using Cols. (5) & (6)

(8) Fitted Wages using Regression on raw data inCol.(7)

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Effective Date - April 01, 2018 204,744.668125

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	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Claimants'				(1) Adjusted	(5) & (6)	Exponentially
	Statewide	Actual	(2) Adjusted		(3) Ex. High	To Claimants'	Adjusted	Fitted
	Avg Wage	Avg Wage	For Act 57	(3)/(1)	& Low	Wage Level	Avg Wages	Wages
1990	419.00	779.92	779.92	1.8614	779.92		779.92	
1991	436.00	827.00	827.00	1.8968	827.00		827.00	724.15
1992	455.00	702.04	702.04	1.5429	702.04		702.04	747.69
1993	475.00	729.40	729.40	1.5356	729.40		729.40	772.00
1994	493.00	1043.85	1043.85	2.1173	1043.85		1043.85	797.10
1995	509.00	1525.00	1525.00	2.9961 High		824.70	824.70	823.01
1996		706.64	706.64	1.3409	706.64		706.64	849.77
1997	542.00	672.19	708.92	1.3080	708.92		708.92	877.39
1998	561.00	1058.08	1115.90	1.9891	1115.90		1115.90	905.91
1999	588.00	675.00	711.89	1.2107	711.89		711.89	935.37
2000	611.00	927.70	978.40	1.6013	978.40		978.40	965.77
2001	644.00	604.79	637.84	0.9904 Low		1043.43	1043.43	997.17
2002	662.00	800.15	843.88	1.2747	843.88		843.88	1029.59
2003	675.00	1324.39	1396.77	2.0693	1396.77		1396.77	1063.06
2004	690.00	876.68	924.59	1.3400	924.59		924.59	1097.62
2005	716.00	912.44	962.30	1.3440	962.30		962.30	1133.30
2006	745.00	0.00				1207.07	1207.07	1170.14
2007	779.00	0.00				1262.16	1262.16	1208.18
2008	807.00	1164.02	1227.63	1.5212	1227.63		1227.63	1247.46
2009	836.00	0.00				1354.51	1354.51	1288.01
2010		0.00				1369.09	1369.09	1329.88
2011	858.00	1269.97	1339.37	1.5610	1339.37		1339.37	1373.12
2012	888.00	1326.96	1399.48	1.5760	1399.48		1399.48	1417.75
2013	917.00	1480.57	1561.48	1.7028	1561.48		1561.48	1463.84
2014	932.00	2031.17	2142.17	2.2985	2142.17		2142.17	1511.43
2015	951.00	1183.93	1248.63	1.3130	1248.63		1248.63	1560.57
2016	978.00	0.00				1584.58	1584.58	1611.30
2017	995.00							
			High	2 9961				

High 2.9961 Low 0.9904

Average Ratio Claimant/State - High & Low 1.6202

Projected

2018 1,020.00 2019 1,045.00 2020 1,072.00

Projected Avg. Wage at Claimants' Level 4/1/2019 1,039.00 1,039.00 1,039.00 \$1,6202 = \$1,683.42

Act 57 Factor: 94.8183%

- (1) Statewide average weekly wage
- (2) CMCRB database, reported State OD average weekly wage

the reported wages were adjusted to pre-act 57 wage level by dividing them by the wage offset of (1.0 minus .051817)

(3)= Column (2) adjusted for Act 57

(4) = (3)/(1), (3a) average index

(5) Actual adjusted wages excluding High and Low

(6) Wage history based on State OD wages, except for high, low, and zeroes where SAWW times average indices was used

(7) Adjusted Wages using Cols. (5) & (6)

(8) Fitted Wages using Regression on raw data inCol.(7)

Run Date: September 15, 2017 - 01:20:12 PM

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PAB Effective Date - April 01, 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Claimants'				(1) Adjusted		Exponentially
	Statewide		(2) Adjusted		(3) Ex. High	To Claimants'	Adjusted	Fitted
	Avg Wage	Avg Wage	For Act 57	(3)/(1)	& Low	Wage Level	Avg Wages	Wages
1990	419.00	549.31	549.31	1.3110	549.31		549.31	484.53
1991	436.00	492.75	492.75	1.1302	492.75		492.75	498.40
1992	455.00	565.40	565.40	1.2426	565.40		565.40	512.66
1993	475.00	544.73	544.73	1.1468	544.73		544.73	527.33
1994	493.00	543.95	543.95	1.1033	543.95		543.95	542.42
1995	509.00	645.11	645.11	1.2674	645.11		645.11	557.94
1996	527.00	453.71	453.71	0.8609	453.71		453.71	573.91
1997	542.00	530.26	559.24	1.0318	559.24		559.24	590.34
1998	561.00	744.92	785.63	1.4004	785.63		785.63	607.23
1999	588.00	571.47	602.70	1.0250	602.70		602.70	624.61
2000	611.00	133.68	140.99	0.2307 Low		652.72	652.72	642.48
2001	644.00	517.49	545.77	0.8475	545.77		545.77	660.87
2002	662.00	589.00	621.19	0.9384	621.19		621.19	679.78
2003	675.00	633.40	668.01	0.9897	668.01		668.01	699.24
2004	690.00	1568.35	1654.06	2.3972 High		737.11	737.11	719.25
2005	716.00	575.91	607.38	0.8483	607.38		607.38	739.83
2006	745.00	0.00				795.87	795.87	761.00
2007	779.00	733.08	773.14	0.9925	773.14		773.14	782.78
2008	807.00	775.13	817.49	1.0130	817.49		817.49	805.18
2009	836.00	0.00				893.08	893.08	828.23
2010	845.00	0.00				902.69	902.69	851.93
2011	858.00	466.84	492.35	0.5738	492.35		492.35	876.31
2012	888.00	0.00				948.63	948.63	901.39
2013	917.00	905.31	954.78	1.0412	954.78		954.78	927.18
2014	932.00	0.00				995.63	995.63	953.72
2015	951.00	0.00				1015.93	1015.93	981.01
2016	978.00	1422.00	1499.71	1.5334	1499.71		1499.71	1009.09
2017	995.00						Į.	
			High	2.3972				

2.3972 Low 0.2307

Average Ratio Claimant/State - High & Low 1.0683

# Projected

4/1/2019

2018 1,020.00 2019 1,045.00 2020 1,072.00

Projected Avg. Wage at Claimants' Level 1,039.00 \* 1.0683 = \$1,109.94

94.8183% Act 57 Factor:

(1) Statewide average weekly wage

1.039.00

(2) CMCRB database, reported State OD average weekly wage

the reported wages were adjusted to pre-act 57 wage level by dividing them by the wage offset of (1.0 minus .051817)

(3)= Column (2) adjusted for Act 57

(4) = (3)/(1), (3a) average index

(5) Actual adjusted wages excluding High and Low

(6) Wage history based on State OD wages, except for high, low, and zeroes where SAWW times average indices was used

(7) Adjusted Wages using Cols. (5) & (6)

(8) Fitted Wages using Regression on raw data inCol.(7)

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PAB

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				D	J 4 . 5 . 6 . 6 . 6 . 6 . 6 . 6 . 6 . 6 . 6	,		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	(	Claimants'				(1) Adjusted	(5) & (6)	Exponentially
	Statewide	Actual	(2) Adjusted		(3) Ex. High	To Claimants'	Adjusted	Fitted
	Avg Wage /		For Act 57	(3)/(1)	& Low	Wage Level	Avg Wages	Wages
1990	419.00	555.88	555.88	1.3267	555.88		555.88	523.42
1991	436.00	612.13	612.13	1.4040	612.13		612.13	
1992		652.89	652.89	1.4349	652.89		652.89	559.27
1993	475.00	705.41	705.41	1.4851 High		578.47	578.47	578.11
1994	493.00	621.91	621.91	1.2615	621.91		621.91	597.58
1995		477.90	477.90	0.9389	477.90		477.90	617.70
1996		628.07	628.07	1.1918	628.07		628.07	638.51
1997	542.00	698.16	736.31	1.3585	736.31		736.31	660.01
1998		500.00	527.32	0.9400	527.32		527.32	682.24
1999	588.00	569.19	600.30	1.0209	600.30		600.30	705.22
2000	611.00	0.00				744.10	744.10	728.97
2001	644.00	0.00				784.29	784.29	753.52
2002	662.00	0.00				806.21	806.21	778.90
2003	675.00	0.00				822.04	822.04	805.13
2004	690.00	0.00				840.31	840.31	832.25
2005	716.00	676.00	712.94	0.9957	712.94		712.94	860.28
2006		0.00				907.29	907.29	889.25
2007	779.00	0.00				948.69	948.69	919.20
2008	807.00	0.00				982.79	982.79	950.16
2009		0.00				1018.11	1018.11	982.16
2010	845.00	0.00				1029.07	1029.07	1015.24
2011	858.00	1111.56	1172.31	1.3663	1172.31		1172.31	1049.43
2012	888.00	1157.60	1220.86	1.3748	1220.86		1220.86	1084.77
2013	917.00	0.00				1116.76	1116.76	1121.31
2014	932.00	0.00				1135.02	1135.02	1159.07
2015		738.00	778.33	0.8184 Low		1158.16	1158.16	1198.11
2016		0.00				1191.04	1191.04	1238.46
2017	995.00	<u>'</u>						
			High	1 4851				

High 1.4851 Low 0.8184

Average Ratio Claimant/State - High & Low 1.2178

Projected

4/1/2019

2018 1,020.00 2019 1,045.00 2020 1,072.00

> Projected Avg. Wage at Claimants' Level 1,039.00 \* 1.2178 = \$1,265.33

Act 57 Factor: 94.8183%

(1) Statewide average weekly wage

1.039.00

(2) CMCRB database, reported State OD average weekly wage

the reported wages were adjusted to pre-act 57 wage level by dividing them by the wage offset of (1.0 minus .051817) only one of the three claims in 1996 was adjusted by the pre-act 57 wage level

(3)= Column (2) adjusted for Act 57

(4) = (3)/(1), (3a) average index

(5) Actual adjusted wages excluding High and Low

(6) Wage history based on State OD wages, except for high, low, and zeroes where SAWW times average indices was used

(7) Adjusted Wages using Cols. (5) & (6)

(8) Fitted Wages using Regression on raw data inCol.(7)

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# Social Security - Cost of Living Adjustment History and Projection

The following annual cost of living percentage is used to adjust the Social Security benefit calculated at time of accident to retirement age.

<u>Year</u>	Annual <u>Changes</u>
1988	4.0%
1989	4.7%
1990	5.4%
1991	3.7%
1992	3.0%
1993	2.6%
1994	2.8%
1995	2.6%
1996	2.9%
1997	2.1%
1998	1.3%
1999	2.5%
2000	3.5%
2001	2.6%
2002	1.4%
2003	2.1%
2004	2.7%
2005	4.1%
2006	3.3%
2007	2.3%
2008	5.8%
2009	0.0%
2010	0.0%
2011	3.6%
2012	1.7%
2013	1.5%
2014	1.7%
2015	0.0%
2016	0.3%
2017	2.0%
Average All years  Average latest 10 years	2.5%
Average latest 5 years	1.1%
Average latest 3 years	0.8%
Selected Annual Change Last Year's Selection was 2.5%	2.5%

Source: Social Security Administration Web Site

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# Social Security Formulas - Historic Primary Insurance Amounts (PIA) and Projections

The following projections are used to calculate the PIA (i.e., SS Benefit) in the SS Offset Model.

		Month						
			Plus		Plus		Annual	
	90%	Percent	32%	Percent	15%	Percent	SS Wage	Percent
<u>Year</u>	of First:	Change	of next:	Change	of next:	Change	<u>Base</u>	Change
1988	319		1,603		1,828		45,000	
1989	339	6.3%	1,705	6.4%	1,956	7.0%	48,000	6.7%
1990	356	5.0%	1,789	4.9%	2,130	8.9%	51,300	6.9%
1991	370	3.9%	1,860	4.0%	2,220	4.2%	53,400	4.1%
1992	387	4.6%	1,946	4.6%	2,292	3.2%	55,500	3.9%
1993	401	3.6%	2,019	3.8%	2,380	3.8%	57,600	3.8%
1994	422	5.2%	2,123	5.2%	2,505	5.3%	60,600	5.2%
1995	426	0.9%	2,141	0.8%	2,533	1.1%	61,200	1.0%
1996	437	2.6%	2,198	2.7%	2,590	2.3%	62,700	2.5%
1997	455	4.1%	2,286	4.0%	2,709	4.6%	65,400	4.3%
1998	477	4.8%	2,398	4.9%	2,825	4.3%	68,400	4.6%
1999	505	5.9%	2,538	5.8%	3,007	6.4%	72,600	6.1%
2000	531	5.1%	2,671	5.2%	3,148	4.7%	76,200	5.0%
2001	561	5.6%	2,820	5.6%	3,319	5.4%	80,400	5.5%
2002	592	5.5%	2,975	5.5%	3,508	5.7%	84,900	5.6%
2003	606	2.4%	3,047	2.4%	3,597	2.5%	87,000	2.5%
2004	612	1.0%	3,077	1.0%	3,636	1.1%	87,900	1.0%
2005	627	2.5%	3,152	2.4%	3,721	2.3%	90,000	2.4%
2006	656	4.6%	3,299	4.7%	3,895	4.7%	94,200	4.7%
2007	680	3.7%	3,420	3.7%	4,025	3.3%	97,500	3.5%
2008	711	4.6%	3,577	4.6%	4,212	4.6%	102,000	4.6%
2009	744	4.6%	3,739	4.5%	4,417	4.9%	106,800	4.7%
2010	761	2.3%	3,825	2.3%	4,314	-2.3%	106,800	0.0%
2011	749	-1.6%	3,768	-1.5%	4,383	1.6%	106,800	0.0%
2012	767	2.4%	3,857	2.4%	4,551	3.8%	110,100	3.1%
2012	791	3.1%	3,977	3.1%	4,707	3.4%	113,700	3.3%
2014	816	3.2%	4,101	3.1%	4,833	2.7%	117,000	2.9%
2015	826	1.2%	4,154	1.3%	4,895	1.3%	118,500	1.3%
2016	856	3.6%	4,134	3.5%	4,718	-3.6%	118,500	0.0%
2017	885	3.4%	4,451	3.5%	5,264	11.6%	127,200	7.3%
2018	896	1.2%	4,503	1.2%	5,326	1.2%	128,700	1.2%
2010	070	1.2/0	4,505	1.2/0	3,320	1.2/0	120,700	1.2/0
Average All years		3.5%		3.5%		3.7%		3.6%
Average latest 10 years		2.4%		2.3%		2.4%		2.4%
Average latest 5 years		2.5%		2.5%		2.6%		2.5%
Average latest 3 years		2.8%		2.7%		3.0%		2.8%
Last Year's Selection		2.5%		2.5%		2.5%		2.5%
Selection		2.5%		2.5%		2.5%		2.5%
Projections		Selected		Selected		Selected		Selected
2018	896	Actual	4,503	Actual	5,326	Actual	128,700	Actual
2019	918	2.5%	4,616	2.5%	5,459	2.5%	131,900	2.5%
2020	941	2.5%	4,731	2.5%	5,595	2.5%	135,200	2.5%
Average Break Point	913		4,588		5,426		131,100	

Note: Weighted average of the three calendar years: 2018, 2019, 2020.

Weights: 2018 28.125% 2019 68.750% 2020 3.125% 100.00%

For Policies effective between 4-1-2018 and 4-1-2019

#### Notes:

The above weights assume 1-year policies effective between 4-1-2018 and 4-1-2019

E.G.: 28.125% of the losses will occur between 4-1-2018 and 12-31-2018. 68.750% of the losses will occur between 1-1-2019 and 12-31-2019. 3.125% of the losses will occur between 1-1-2020 and 3-31-2020.

# COAL MINE COMPENSATION RATING BUREAU State OD Losses Social Security Offset

# Social Security Formulas - Primary Insurance Amount (PIA) Calculations Example Calculations

I. Break Point Monthly Wage Amounts and Factors (Exhibit VII-J, Page 2)

Break Points (Projected to average accident date of 4-1-2019 with a 4-1-2018 filing effective date.)

			Monthly Wages						
	Yearly	First	Second	Third					
	<u>Maximum</u>	Break Point	Break Point	<b>Break Point</b>					
Wage Amount:	131,100	913	4,588	5,426					
Factor:		90%	32%	15%					

## II. Example Calculations

Firemonia Mandali		Adjusted	PI	A at each Breakpoint		Takal		
Example <u>Number</u>	Monthly <u>Wage</u>	Monthly <u>Wage (a)</u>	First (b)	Second (c)	Third (d)	Total <u>PIA</u>		
1	2,000	2,000	913 <u>90%</u> 822	1,087 <u>32%</u> 348	0 <u>15%</u> 0	1,170		
2	4,000	4,000	913 <u>90%</u> 822	3,087 <u>32%</u> 988	0 <u>15%</u> 0	1,810		
3	6,000	6,000	913 <u>90%</u> 822	4,588 <u>32%</u> 1,468	499 <u>15%</u> 75	2,365		
4	8,000	8,000	913 <u>90%</u> 822	4,588 <u>32%</u> 1,468	2,499 <u>15%</u> 375	2,665		
5	10,000	10,000	913 <u>90%</u> 822	4,588 <u>32%</u> 1,468	4,499 <u>15%</u> 675	2,965		
6	12,000	10,925	913 <u>90%</u> 822	4,588 <u>32%</u> 1,468	5,424 <u>15%</u> 814	3,103		

# Notes:

- (a) Monthly Wage limited to Monthly Maximum (\$131,100/12 = \$10,925)
- (b) minimum of adjusted monthly wage and \$913
- (c) minimum of (adjusted monthly wage less \$913) and \$4,588
- (d) minimum of (adjusted monthly wage less \$913 less \$4,588) and \$5,426

Source: Exhibit VII-J, Page 2

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# ANTHRACITE UNDERGROUND (0160)

		Co	ounts		_						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Reported	Awarded	Pending	Denied	Pending Awarded	Denied Reopened	Denied Awarded	Ultimate Awarded	Ultimate Denied	IBNR	IBNR Awarded
Year				# 0	(3) * 30%	# 0 00	# 0 00	<u>(2)+(5)+(7)</u>	<u>(1)-(8)</u>	# 0 0000	(10)xAwd Ratio
1997 1998	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
1999	1	_	_	1	-	0.15	0.03	0.03	0.97	_	-
2000	-	_	_	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-	-	-	-
2006 2007	-	-	-	-	-	_	-	-	_	_	-
2007	_	_	_	_	_	_	_	_	_	_	_
2009	_	-	-	-	-	_	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	1	1	-	-	-	-	-	1.00	-	-	-
2014 2015	-	-	-	-	-	-	-	-	-	0.0048	0.0019
2013 2016	_		-	-	-	-		-	-	0.0048	0.0017
Total	2	1		1		0.15	0.03	1.03	0.97	0.0211	0.0083
		(12) Total Awarded	(13) Payroll (\$M)	(14) Frequency	(15) Statewide Average	(16) Adjustment	(17) Estimated Miner	(18) Frequency Per 100			_
Year		(8)+(11)		(12)/(13)	Weekly Wage	<u>Factor</u>	<u>Years</u>	Miner Years			-
1997		# 0.0000	\$ 1.5716	-	542	1.056	52.8	-			
1998		-	1.7623	-	561	1.056	57.2	-			
1999		0.0300	1.8142	0.0165	588	1.056	56.2	0.0534			
2000		-	1.3702	-	611	1.056	40.8	-			
2001		-	1.6365	-	644	1.056	46.3	-			
2002		-	1.3865	-	662	1.056	38.1	-			
2003		-	1.3543	-	675	1.056	36.5	-			
2004		-	1.3453	-	690	1.056	35.5	-			
2005		-	1.4176	-	716	1.056	36.1	-			
2006		-	1.4425	-	745	1.056	35.3	-			
2007		-	1.6625	-	779	1.056	38.9	-			
2008		-	2.1367	-	807	1.056	48.2	-			
2009		-	1.3359	-	836	1.056	29.1	-			
2010		-	1.2996	-	845	1.056	28.0	-			
2011		-	1.2579	-	858	1.056	26.7	-			
2012		-	1.0293	-	888	1.056	21.1	-			
2013		1.0000	0.3819	2.6185	917	1.056	7.6	13.1579			
2014		-	0.2588	-	932	1.056	5.1	-			
2015		0.0019	0.2543	0.0074	951	1.056	4.9	0.0385			
2016		0.0064	0.1638	0.0392	978	1.056	3.1	0.2070			
Total		1.0383	24.8817	0.0417			647.5	0.1604			

Sources: Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.15)xCol.(4);2000 & Prior (0.05)xCol.(4);2001 & Subseq.

Col.(7): (0.20)xCol.(6);2000 & Prior (1.00)xCol.(6);2001 & Subseq.

Col.(10): 40% of Exh. VII-C-1 thru VII-C-6

Col.(13): Exh. X-A

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IBNR Award Ratio (2000 & Prior): 0.3144

IBNR Award Ratio (2001 & Subseq.): 0.3944

Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) / ((15) x (16) x 52)

times 1000000

Col.(18): (12) / (17) x 100

# **BITUMINOUS UNDERGROUND (0158)**

Pending			C	ounts								
Pending   Pend		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1997								Denied	Ultimate	Ultimate		IBNR
1997		Reported	Awarded	Pending	Denied	Awarded	Reopened	Awarded	Awarded	Denied	IBNR	Awarded
1998	Year					(3) * 30%			(2)+(5)+(7)	(1)-(8)		(10)xAwd Ratio
1999	1997	# 2	# O	# 0	# 2	# 0.00	# 0.30	# 0.06	# 0.06	# 1.94	# 0.0000	# 0.0000
2000	1998	-	-	-	-	-	-	-	-	-	-	-
2001   2   1	1999	2	1	-	1	-	0.15	0.03	1.03	0.97	-	-
2002	2000	2	1	-	1	-	0.15	0.03	1.03	0.97	-	-
2003	2001	2	1	-	1	-	0.05	0.05	1.05	0.95	-	-
2006	2002	1	-	-	1	-	0.05	0.05	0.05	0.95	-	-
2005		-	-	-	-	-	-	-	-		-	-
2006		1	-	-	1	-	0.05	0.05	0.05	0.95	-	-
2007   -		1	1	-	-	-	-	-	1.00	-	-	-
2008		-	-	-	-	-	-	-	-	-	-	-
2009		-	-	-	-	-	-			-	-	-
2010		2	1	-	1	-	0.05	0.05	1.05	0.95	-	-
2011   2   2		-	-	-	-	-	-	-		-	-	-
2012		•	•	-	-	-	-	-		-		
2013   2				-	-	-	-					
2014   1			1	-		-						
2015		2	-	-	2	-						
2016		1	-	1		0.30						
Total   Payroll   Total   Payroll   Total   Payroll   Total   Payroll   Total   Payroll   Total   Payroll   Statewide   Estimated   Frequency   Freq		1	-	-	1	-	0.05	0.05	0.05	0.95		
Total   Payroll   Statewide   Estimated   Frequency												
Year         Result (8)+(11)         Frequency (12)/(13)         Average (12)/(13)         Adjustment (15)         Miner (15)         Per 100           1997         # 0.0600         \$70.3967         0.0009         542         1.505         1.659.6         0.0036           1998         - 61.0873         - 561         1.505         1.275.3         0.0808           2000         1.0300         58.6852         0.0176         588         1.505         1.275.3         0.0808           2001         1.0500         48.5226         0.0217         611         1.505         993.8         0.1036           2001         1.0500         48.5226         0.0216         644         1.505         962.8         0.1091           2002         0.0500         40.8380         0.0012         662         1.505         788.3         0.0063           2003         - 36.4984         - 675         1.505         690.9            2004         0.0500         46.0739         0.0011         690         1.505         853.2         0.0084           2006         - 70.4659         - 745         1.505         1.828         0.0845           2007         - 79.9043         - 779	Iotal	24	9	I	14	0.30	1.10	0.62	9.92	14.08	5.569/	2.196/
Year         Result (8)+(11)         Frequency (12)/(13)         Average (12)/(13)         Adjustment (15)         Miner (15)         Per 100           1997         # 0.0600         \$70.3967         0.0009         542         1.505         1.659.6         0.0036           1998         - 61.0873         - 561         1.505         1.275.3         0.0808           2000         1.0300         58.6852         0.0176         588         1.505         1.275.3         0.0808           2001         1.0500         48.5226         0.0217         611         1.505         993.8         0.1036           2001         1.0500         48.5226         0.0216         644         1.505         962.8         0.1091           2002         0.0500         40.8380         0.0012         662         1.505         788.3         0.0063           2003         - 36.4984         - 675         1.505         690.9            2004         0.0500         46.0739         0.0011         690         1.505         853.2         0.0084           2006         - 70.4659         - 745         1.505         1.828         0.0845           2007         - 79.9043         - 779												
Year         (B)+(11)			(12)	(13)	(14)	(15)	(16)	(1 <i>7</i> )	(18)			
Year         [8]+(11)			Total	Payroll		Statewide		Estimated	Frequency			
Year         [8]+(11)			Awarded	(\$M)	Frequency	Average	Adjustment	Miner	Per 100			
1997         # 0.0600         \$ 70.3967         0.0009         542         1.505         1,659.6         0.0036           1998         -         61.0873         -         561         1.505         1,391.4         -           1999         1.0300         58.6852         0.0176         588         1.505         1,275.3         0.0808           2000         1.0300         47.5206         0.0217         611         1.505         993.8         0.1036           2001         1.0500         48.5226         0.0216         644         1.505         962.8         0.1091           2002         0.0500         40.8380         0.0012         662         1.505         788.3         0.0063           2003         -         36.4984         -         675         1.505         690.9         -           2004         0.0500         46.0739         0.0011         690         1.505         853.2         0.0059           2005         1.0000         66.2758         0.0151         716         1.505         1,828.6         -           2007         -         79.9043         -         779         1.505         1,391.7         -           2008	Year			,,		_						-
1998         -         61.0873         -         561         1.505         1,391.4         -           1999         1.0300         58.6852         0.0176         588         1.505         1,275.3         0.0808           2000         1.0300         47.5206         0.0217         611         1.505         993.8         0.1036           2001         1.0500         48.5226         0.0216         644         1.505         962.8         0.1091           2002         0.0500         40.8380         0.0012         662         1.505         788.3         0.0063           2003         -         36.4984         -         675         1.505         690.9         -           2004         0.0500         46.0739         0.0011         690         1.505         853.2         0.0059           2005         1.0000         66.2758         0.0151         716         1.505         1,182.8         0.0845           2006         -         70.4659         -         745         1.505         1,208.6         -           2007         -         79.9043         -         779         1.505         1,310.7         -           2008         1				¢ 70 2047		<u>-</u>						
1999         1.0300         58.6852         0.0176         588         1.505         1.275.3         0.0808           2000         1.0300         47.5206         0.0217         611         1.505         993.8         0.1036           2001         1.0500         48.5226         0.0216         644         1.505         962.8         0.1091           2002         0.0500         40.8380         0.0012         662         1.505         788.3         0.0063           2003         -         36.4984         -         675         1.505         690.9         -           2004         0.0500         46.0739         0.0011         690         1.505         853.2         0.0059           2005         1.0000         66.2758         0.0151         716         1.505         1,182.8         0.0845           2006         -         70.4659         -         745         1.505         1,286.6         -           2007         -         79.9043         -         779         1.505         1,310.7         -           2008         1.0500         101.3540         0.0104         807         1.505         1,604.8         0.0654           2009 <td></td> <td></td> <td></td> <td></td> <td>0.0007</td> <td></td> <td></td> <td></td> <td>0.0036</td> <td></td> <td></td> <td></td>					0.0007				0.0036			
2000         1.0300         47.5206         0.0217         611         1.505         993.8         0.1036           2001         1.0500         48.5226         0.0216         644         1.505         962.8         0.1091           2002         0.0500         40.8380         0.0012         662         1.505         788.3         0.0063           2003         -         36.4984         -         675         1.505         690.9         -           2004         0.0500         46.0739         0.0011         690         1.505         853.2         0.0059           2005         1.0000         66.2758         0.0151         716         1.505         1,182.8         0.0845           2006         -         70.4659         -         745         1.505         1,208.6         -           2007         -         79.9043         -         779         1.505         1,310.7         -           2008         1.0500         101.3481         -         836         1.505         1,604.8         0.0654           2009         -         101.3481         -         836         1.505         1,896.2         0.0539           2010 <td< td=""><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td></td<>					-				-			
2001       1.0500       48.5226       0.0216       644       1.505       962.8       0.1091         2002       0.0500       40.8380       0.0012       662       1.505       788.3       0.0063         2003       - 36.4984       - 675       1.505       690.9       -         2004       0.0500       46.0739       0.0011       690       1.505       853.2       0.0059         2005       1.0000       66.2758       0.0151       716       1.505       1,182.8       0.0845         2006       - 70.4659       - 745       1.505       1,208.6       -         2007       - 79.9043       - 779       1.505       1,310.7       -         2008       1.0500       101.3540       0.0104       807       1.505       1,644.8       0.0654         2009       - 101.3481       - 836       1.505       1,896.2       0.0539         2011       2.0628       148.4857       0.0139       858       1.505       1,896.2       0.0539         2012       1.2598       153.6189       0.0082       888       1.505       2,210.5       0.0570         2013       0.2649       145.1463       0.0018       917 </td <td></td>												
2002       0.0500       40.8380       0.0012       662       1.505       788.3       0.0063         2003       - 36.4984       - 675       1.505       690.9       -         2004       0.0500       46.0739       0.0011       690       1.505       853.2       0.0059         2005       1.0000       66.2758       0.0151       716       1.505       1,182.8       0.0845         2006       - 70.4659       - 745       1.505       1,208.6       -         2007       - 79.9043       - 779       1.505       1,310.7       -         2008       1.0500       101.3540       0.0104       807       1.505       1,604.8       0.0654         2009       - 101.3481       - 836       1.505       1,549.1       -         2010       1.0216       125.3936       0.0081       845       1.505       1,896.2       0.0539         2011       2.0628       148.4857       0.0139       858       1.505       2,211.4       0.0933         2012       1.2598       153.6189       0.0082       888       1.505       2,210.5       0.0570         2013       0.2649       145.1463       0.0018       917 <td>2000</td> <td></td> <td>1.0300</td> <td>47.5206</td> <td>0.0217</td> <td>611</td> <td>1.505</td> <td>993.8</td> <td>0.1036</td> <td></td> <td></td> <td></td>	2000		1.0300	47.5206	0.0217	611	1.505	993.8	0.1036			
2003       -       36.4984       -       675       1.505       690.9       -         2004       0.0500       46.0739       0.0011       690       1.505       853.2       0.0059         2005       1.0000       66.2758       0.0151       716       1.505       1,182.8       0.0845         2006       -       70.4659       -       745       1.505       1,208.6       -         2007       -       79.9043       -       779       1.505       1,310.7       -         2008       1.0500       101.3540       0.0104       807       1.505       1,604.8       0.0654         2009       -       101.3481       -       836       1.505       1,549.1       -         2010       1.0216       125.3936       0.0081       845       1.505       1,896.2       0.0539         2011       2.0628       148.4857       0.0139       858       1.505       2,211.4       0.0933         2012       1.2598       153.6189       0.0082       888       1.505       2,210.5       0.0570         2013       0.2649       145.1463       0.0018       917       1.505       2,514.9       0.0313	2001		1.0500	48.5226	0.0216	644	1.505	962.8	0.1091			
2004         0.0500         46.0739         0.0011         690         1.505         853.2         0.0059           2005         1.0000         66.2758         0.0151         716         1.505         1,182.8         0.0845           2006         -         70.4659         -         745         1.505         1,208.6         -           2007         -         79.9043         -         779         1.505         1,310.7         -           2008         1.0500         101.3540         0.0104         807         1.505         1,604.8         0.0654           2009         -         101.3481         -         836         1.505         1,549.1         -           2010         1.0216         125.3936         0.0081         845         1.505         1,896.2         0.0539           2011         2.0628         148.4857         0.0139         858         1.505         2,211.4         0.0933           2012         1.2598         153.6189         0.0082         888         1.505         2,210.5         0.0570           2013         0.2649         145.1463         0.0018         917         1.505         2,514.9         0.0313	2002		0.0500	40.8380	0.0012	662	1.505	788.3	0.0063			
2004         0.0500         46.0739         0.0011         690         1.505         853.2         0.0059           2005         1.0000         66.2758         0.0151         716         1.505         1,182.8         0.0845           2006         -         70.4659         -         745         1.505         1,208.6         -           2007         -         79.9043         -         779         1.505         1,310.7         -           2008         1.0500         101.3540         0.0104         807         1.505         1,604.8         0.0654           2009         -         101.3481         -         836         1.505         1,549.1         -           2010         1.0216         125.3936         0.0081         845         1.505         1,896.2         0.0539           2011         2.0628         148.4857         0.0139         858         1.505         2,211.4         0.0933           2012         1.2598         153.6189         0.0082         888         1.505         2,210.5         0.0570           2013         0.2649         145.1463         0.0018         917         1.505         2,514.9         0.0313	2003		-	36.4984	-	675	1.505	690.9	-			
2005         1.0000         66.2758         0.0151         716         1.505         1,182.8         0.0845           2006         -         70.4659         -         745         1.505         1,208.6         -           2007         -         79.9043         -         779         1.505         1,310.7         -           2008         1.0500         101.3540         0.0104         807         1.505         1,604.8         0.0654           2009         -         101.3481         -         836         1.505         1,549.1         -           2010         1.0216         125.3936         0.0081         845         1.505         1,896.2         0.0539           2011         2.0628         148.4857         0.0139         858         1.505         2,211.4         0.0933           2012         1.2598         153.6189         0.0082         888         1.505         2,210.5         0.0570           2013         0.2649         145.1463         0.0018         917         1.505         2,514.9         0.0313           2014         0.7874         183.4320         0.0048         951         1.505         1,888.7         0.0355	2004		0.0500	46.0739	0.0011	690	1.505	853.2	0.0059			
2006       -       70.4659       -       745       1.505       1,208.6       -         2007       -       79.9043       -       779       1.505       1,310.7       -         2008       1.0500       101.3540       0.0104       807       1.505       1,604.8       0.0654         2009       -       101.3481       -       836       1.505       1,549.1       -         2010       1.0216       125.3936       0.0081       845       1.505       1,896.2       0.0539         2011       2.0628       148.4857       0.0139       858       1.505       2,211.4       0.0933         2012       1.2598       153.6189       0.0082       888       1.505       2,210.5       0.0570         2013       0.2649       145.1463       0.0018       917       1.505       2,022.5       0.0131         2014       0.7874       183.4320       0.0043       932       1.505       2,514.9       0.0313         2015       0.6698       140.5703       0.0048       951       1.505       1,583.3       0.0470												
2007       -       79,9043       -       779       1,505       1,310.7       -         2008       1,0500       101,3540       0.0104       807       1,505       1,604.8       0.0654         2009       -       101,3481       -       836       1,505       1,549.1       -         2010       1,0216       125,3936       0.0081       845       1,505       1,896.2       0.0539         2011       2,0628       148,4857       0.0139       858       1,505       2,211.4       0.0933         2012       1,2598       153,6189       0.0082       888       1,505       2,210.5       0.0570         2013       0,2649       145,1463       0.0018       917       1,505       2,022.5       0.0131         2014       0,7874       183,4320       0.0043       932       1,505       2,514.9       0.0313         2015       0,6698       140,5703       0.0048       951       1,505       1,888.7       0.0355         2016       0,7305       118,8833       0.0061       978       1,505       1,553.3       0.0470					5.0101				5.00-0			
2008       1.0500       101.3540       0.0104       807       1.505       1,604.8       0.0654         2009       -       101.3481       -       836       1.505       1,549.1       -         2010       1.0216       125.3936       0.0081       845       1.505       1,896.2       0.0539         2011       2.0628       148.4857       0.0139       858       1.505       2,211.4       0.0933         2012       1.2598       153.6189       0.0082       888       1.505       2,210.5       0.0570         2013       0.2649       145.1463       0.0018       917       1.505       2,022.5       0.0131         2014       0.7874       183.4320       0.0043       932       1.505       2,514.9       0.0313         2015       0.6698       140.5703       0.0048       951       1.505       1,888.7       0.0355         2016       0.7305       118.8833       0.0061       978       1.505       1,553.3       0.0470					-				-			
2009       -       101.3481       -       836       1.505       1,549.1       -         2010       1.0216       125.3936       0.0081       845       1.505       1,896.2       0.0539         2011       2.0628       148.4857       0.0139       858       1.505       2,211.4       0.0933         2012       1.2598       153.6189       0.0082       888       1.505       2,210.5       0.0570         2013       0.2649       145.1463       0.0018       917       1.505       2,022.5       0.0131         2014       0.7874       183.4320       0.0043       932       1.505       2,514.9       0.0313         2015       0.6698       140.5703       0.0048       951       1.505       1,888.7       0.0355         2016       0.7305       118.8833       0.0061       978       1.505       1,553.3       0.0470					-				-			
2010       1.0216       125.3936       0.0081       845       1.505       1,896.2       0.0539         2011       2.0628       148.4857       0.0139       858       1.505       2,211.4       0.0933         2012       1.2598       153.6189       0.0082       888       1.505       2,210.5       0.0570         2013       0.2649       145.1463       0.0018       917       1.505       2,022.5       0.0131         2014       0.7874       183.4320       0.0043       932       1.505       2,514.9       0.0313         2015       0.6698       140.5703       0.0048       951       1.505       1,888.7       0.0355         2016       0.7305       118.8833       0.0061       978       1.505       1,553.3       0.0470												
2011       2.0628       148.4857       0.0139       858       1.505       2,211.4       0.0933         2012       1.2598       153.6189       0.0082       888       1.505       2,210.5       0.0570         2013       0.2649       145.1463       0.0018       917       1.505       2,022.5       0.0131         2014       0.7874       183.4320       0.0043       932       1.505       2,514.9       0.0313         2015       0.6698       140.5703       0.0048       951       1.505       1,888.7       0.0355         2016       0.7305       118.8833       0.0061       978       1.505       1,553.3       0.0470												
2012     1.2598     153.6189     0.0082     888     1.505     2,210.5     0.0570       2013     0.2649     145.1463     0.0018     917     1.505     2,022.5     0.0131       2014     0.7874     183.4320     0.0043     932     1.505     2,514.9     0.0313       2015     0.6698     140.5703     0.0048     951     1.505     1,888.7     0.0355       2016     0.7305     118.8833     0.0061     978     1.505     1,553.3     0.0470	2010		1.0216	125.3936	0.0081	845	1.505	1,896.2	0.0539			
2012     1.2598     153.6189     0.0082     888     1.505     2,210.5     0.0570       2013     0.2649     145.1463     0.0018     917     1.505     2,022.5     0.0131       2014     0.7874     183.4320     0.0043     932     1.505     2,514.9     0.0313       2015     0.6698     140.5703     0.0048     951     1.505     1,888.7     0.0355       2016     0.7305     118.8833     0.0061     978     1.505     1,553.3     0.0470	2011		2.0628	148.4857	0.0139	858	1.505	2,211.4	0.0933			
2013       0.2649       145.1463       0.0018       917       1.505       2,022.5       0.0131         2014       0.7874       183.4320       0.0043       932       1.505       2,514.9       0.0313         2015       0.6698       140.5703       0.0048       951       1.505       1,888.7       0.0355         2016       0.7305       118.8833       0.0061       978       1.505       1,553.3       0.0470			1.2598	153.6189	0.0082	888	1.505		0.0570			
2014       0.7874       183.4320       0.0043       932       1.505       2,514.9       0.0313         2015       0.6698       140.5703       0.0048       951       1.505       1,888.7       0.0355         2016       0.7305       118.8833       0.0061       978       1.505       1,553.3       0.0470												
2015       0.6698       140.5703       0.0048       951       1.505       1,888.7       0.0355         2016       0.7305       118.8833       0.0061       978       1.505       1,553.3       0.0470												
<u>2016</u> <u>0.7305</u> <u>118.8833</u> <u>0.0061</u> 978 1.505 <u>1,553.3</u> <u>0.0470</u>												
Total 12.1167 1,844.5009 0.0066 29,768.8 0.0407						9/8	1.505					
	Total		12.1167	1,844.5009	0.0066			29,768.8	0.0407			

Sources: Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.15)xCol.(4);2000 & Prior (0.05)xCol.(4);2001 & Subseq.

Col.(7): (0.20)xCol.(6);2000 & Prior (1.00)xCol.(6);2001 & Subseq.

Col.(10): 40% of Exh. VII-C-1 thru VII-C-6

Col.(13): Exh. X-A

File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-07-L.xlsm]p 2

Run Date: October 09, 2017 - 02:36:27 PM

IBNR Award Ratio (2000 & Prior): 0.3144

IBNR Award Ratio (2001 & Subseq.): 0.3944

Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) / ((15) x (16) x 52)

times 1000000

Col.(18): (12) / (17) x 100

#### **ANTHRACITE SURFACE(0153)**

•		Co	ounts								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
					Pending	Denied	Denied	Ultimate	Ultimate		IBNR
	Reported	Awarded	Pending	Denied	Awarded	Reopened	Awarded	Awarded	Denied	IBNR	Awarded
Year					(3) * 30%			(2)+(5)+(7)	<u>(1)-(8)</u>		(10)xAwd Ratio
1997	# 3	# 1	# 0	# 2	# 0.00	# 0.30	# 0.06	# 1.06	# 1.94	# 0.0000	# 0.0000
1998 1999	1	-	1	-	0.30	-	-	0.30	0.70	-	-
2000	1	1	-	-	-	_	-	1.00	_	-	-
2001	1	1	_	_	_	_	_	1.00	_	_	_
2002			_	_	-	_	_	-	_	_	_
2003	2	1	-	1	-	0.05	0.05	1.05	0.95	-	-
2004	1	1	-	-	-	-	-	1.00	-	-	-
2005	-	-	-	-	-	-	-	-	-	-	-
2006	1	-	-	1	-	0.05	0.05	0.05	0.95	-	-
2007	2	-	-	2	-	0.10	0.10	0.10	1.90	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-
2010	- 1	-	-	-	- 0.20	-	-	- 0.20	0.70	-	-
2011 2012	1	-	ı	-	0.30	-	-	0.30	0.70	-	-
2012	-	_	-	-	-	_	-	-	-	-	-
2014	1	_	_	1	_	0.05	0.05	0.05	0.95	0.0432	0.0170
2015	-	_	_	-	_	-	-	-	-	0.1451	0.0572
2016	-	_	-	-	-	-	-	-	_	0.2213	0.0873
Total	14	5	2	7	0.60	0.55	0.31	5.91	8.09	0.4097	0.1616
		(12)	(13)	(14)	(15)	(16)	(17)	(18)			
		Total	Payroll		Statewide		Estimated	Frequency			
		Awarded	(\$M)	Frequency	Average	Adjustment	Miner	Per 100			_
Year		<u>(8)+(11)</u>		(12)/(13)	Weekly Wage	<u>Factor</u>	<u>Years</u>	Miner Years			
1997		# 1.0600	\$ 17.7831	0.0596	542	1.056	597.5	0.1774			
1998		0.3000	17.3763	0.0173	561	1.056	564.1	0.0532			
1999		-	18.4411	-	588	1.056	571.1	-			
2000		1.0000	16.8078	0.0595	611	1.056	501.0	0.1996			
2001		1.0000	12.9237	0.0774	644	1.056	365.5	0.2736			
2002		-	11.0466	-	662	1.056	303.9	-			
2003		1.0500	11.9282	0.0880	675	1.056	321.8	0.3263			
2004		1.0000	12.3597	0.0809	690	1.056	326.2	0.3066			
2005		-	12.1409	-	716	1.056	308.8	-			
2006		0.0500	12.0653	0.0041	745	1.056	294.9	0.0170			
2007		0.1000	14.8666	0.0067	779	1.056	347.5	0.0288			
2008		-	16.2202	-	807	1.056	366.0	-			
2009		_	15.8935		836	1.056	346.2				
2010		-	13.3192	-	845	1.056	287.0	-			
				0.0154				0.0705			
2011		0.3000	19.5074	0.0154	858	1.056	414.0	0.0725			
2012		-	24.7347	-	888	1.056	507.3	-			
2013		-	20.7200	-	917	1.056	411.5	-			
2014		0.0670	18.9113	0.0035	932	1.056	369.5	0.0181			
2015		0.0572	22.2344	0.0026	951	1.056	425.8	0.0134			
2016		0.0873	19.0433	0.0046	978	1.056	354.6	0.0246			
Total		6.0716	328.3233	0.0185			7,984.2	0.0760			

Sources: Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.15)xCol.(4);2000 & Prior (0.05)xCol.(4);2001 & Subseq.

Col.(7): (0.20)xCol.(6);2000 & Prior (1.00)xCol.(6);2001 & Subseq.

Col.(10): 40% of Exh. VII-C-1 thru VII-C-6

Col.(13): Exh. X-A

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IBNR Award Ratio (2000 & Prior): 0.3144

IBNR Award Ratio(2001 & Subseq.): 0.3944

Col.(15): Exhibit XII-D

Col.(16): Exhibit X-G

Col.(17): (13) / ((15) x (16) x 52)

times 1000000 Col.(18): (12) / (17) x 100

# **BITUMINOUS SURFACE(0156)**

		Co	ounts								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
					Pending	Denied	Denied	Ultimate	Ultimate		IBNR
	Reported	Awarded	Pending	Denied	Awarded	Reopened	Awarded	Awarded	Denied	IBNR	Awarded
Year					(3) * 30%			(2)+(5)+(7)	(1)-(8)		(10)xAwd Ratio
1997	# 2	# 0	# 0	# 2	# 0.00	# 0.30	# 0.06	# 0.06	# 1.94	# 0.0000	# 0.0000
1998 1999	1	-	-	1	-	0.15	0.03	0.03	0.97	-	-
2000	ı	-	-	ı	-	0.15	0.03	0.03	0.97	-	-
2000	-	-	-	-	-	-	-	-	_	-	-
2002	_	_	_	_	_	_	_	_	_	_	_
2003	_	_	_	_	_	_	_	_	_	_	_
2004	-	-	_	-	-	-	-	-	_	-	-
2005	-	_	-	-	-	-	-	_	_	_	-
2006	-	-	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-
2012	2	-	-	2	-	0.10	0.10	0.10	1.90	0.0272	0.0107
2013	-	-	-	-	- 0.00	-	-	-	0.70	0.0466	0.0184
2014 2015	1	-	ı	-	0.30	-	-	0.30	0.70	0.0629 0.0673	0.0248 0.0265
	-	-	-	-	-	-	-	-	-	0.0673	0.0263
<u>2016</u> Total	<del>-</del>		1	6	0.30	0.70	0.22	0.52	6.48	0.2735	0.1079
ioidi	,			0	0.50	0.70	0.22	0.52	0.40	0.2700	0.1077
		(12)	(13)	(14)	(15)	(16)	(17)	(18)			
		Total	Payroll		Statewide		Estimated	Frequency			
		Awarded	(\$M)	Frequency	Average	Adjustment	Miner	Per 100			
Year		(8)+(11)	(4)	(12)/(13)	Weekly Wage	-	<u>Years</u>	Miner Years			-
1997		# 0.0600	\$ 67.9058	0.0009	542		2,281.6	0.0026			
1998			•								
		0.0300	63.6516	0.0005	561	1.056	2,066.2	0.0015			
1999		0.0300	54.1623	0.0006	588	1.056	1,677.5	0.0018			
2000		-	49.9356	-	611	1.056	1,488.3	-			
2001		-	58.1513	-	644	1.056	1,644.4	-			
2002		-	53.5021	-	662	1.056	1,471.8	-			
2003		-	47.8737	-	675	1.056	1,291.6	-			
2004		-	56.2173	-	690	1.056	1,483.7	-			
2005		_	64.8716	-	716	1.056	1,650.0	-			
2006			63.7985	_	745	1.056	1,559.5	_			
2007		_	64.8081	_	779	1.056	1,515.0	_			
2008		_	74.6012	_	807	1.056	1,683.5	_			
		-		-				-			
2009		-	63.3067	-	836	1.056	1,379.0	-			
2010		-	74.2552	-	845	1.056	1,600.3	-			
2011		-	87.7305	-	858	1.056	1,862.1	-			
2012		0.1107	77.8905	0.0014	888	1.056	1,597.4	0.0069			
2013		0.0184	62.7181	0.0003	917		1,245.5	0.0015			
2014		0.3248	55.3686	0.0059	932	1.056	1,081.9	0.0300			
2015		0.0265	42.0001	0.0006	951	1.056	804.3	0.0033			
2016		0.0274	29.7589	0.0009	978	1.056	554.1	0.0049			
Total		0.6279	1,212.5077	0.0005			29,937.7	0.0021			

Sources: Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.15)xCol.(4);2000 & Prior (0.05)xCol.(4);2001 & Subseq.

Col.(7): (0.20)xCol.(6);2000 & Prior (1.00)xCol.(6);2001 & Subseq.

Col.(10): 40% of Exh. VII-C-1 thru VII-C-6

Col.(13): Exh. X-A

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Run Date: October 09, 2017 - 02:36:27 PM

IBNR Award Ratio (2000 & Prior): 0.3144

IBNR Award Ratio(2001 & Subseq.): 0.3944

Col.(15): Exhibit XII-D

Col.(16): Exhibit X-G

Col.(17): (13) / ((15) x (16) x 52)

times 1000000

Col.(18): (12) / (17) x 100

#### FOUR STANDARD CLASSES

		Co	ounts								
	(1)	(2)	(3)	(4)	(5) Pending	(6) Denied	(7) Denied	(8) Ultimate	(9) Ultimate	(10)	(11) IBNR
Year	Reported	Awarded	Pending	Denied	Awarded (3) * 30%	Reopened		Awarded (2)+(5)+(7)	Denied (1)-(8)	IBNR	Awarded (10)xAwd Ratio
1997	# 7	# 1	# 0	# 6	# 0.00	# 0.90	# 0.18	# 1.18	# 5.82	# 0.0000	# 0.0000
1998	2	-	3	1	0.30	0.15	0.03	0.33	1.67	-	-
1999	4	1	-	3	-		0.09	1.09	2.91	-	-
2000	3	2	-	1	-	0.15	0.03	2.03	0.97	-	-
2001	3	2	-	1	-	0.05	0.05	2.05	0.95	-	-
2002	1	-	-	1	-	0.05	0.05	0.05	0.95	-	-
2003	2	1	-	1	-	0.05	0.05	1.05	0.95	-	-
2004	2	1	-	ı	-	0.05	0.05	1.05	0.95	-	-
2005 2006	1	1	-	1	-	0.05	0.05	1.00 0.05	0.95	-	-
2007	2	-	-	2	-	0.03	0.03	0.03	1.90	-	-
2007	2	1	_	1	_	0.05	0.05	1.05	0.95	_	_
2009	-	-	-	-	-	-	-	-	-	_	-
2010	1	1	-	-	-	-	-	1.00	-	0.0547	0.0216
2011	3	2	1	-	0.30	-	-	2.30	0.70	0.1592	0.0628
2012	6	1	-	5	-	0.25	0.25	1.25	4.75	0.3056	0.1205
2013	3	1	-	2	-	0.10	0.10	1.10	1.90	0.4647	0.1833
2014	3	-	2	1	0.60	0.05	0.05	0.65	2.35	1.3419	0.5292
2015	1	-	-	1	-	0.05	0.05	0.05	0.95	1.7887	0.7054
<u>2016</u> Total	47	15	4		1.20	2.50	1.18	17.38	29.62	2.1593 6.2740	0.8516 2.4745
Year 1997 1998 1999 2000 2001 2002 2003 2004		Total Awarded (8)+(11) # 1.1800 0.3300 1.0900 2.0300 2.0500 0.0500 1.0500 1.0500	Payroll (\$M)  \$ 157.6572 143.8775 133.1028 115.6342 121.2341 106.7732 97.6546 115.9962	Frequency (12)/(13) 0.0075 0.0023 0.0082 0.0176 0.0169 0.0005 0.0108 0.0091	Statewide Average Weekly Wage 542 561 588 611 644 662 675	Adjustment <u>Factor</u>	Estimated  Miner  Years  4,591.5  4,078.9  3,580.1  3,023.9  3,019.0  2,602.1  2,340.8  2,698.6	Frequency Per 100 Miner Years 0.0257 0.0081 0.0304 0.0671 0.0679 0.0019 0.0449 0.0389			-
2005		1.0000	144.7059	0.0069	716		3,177.7	0.0315			
2006		0.0500	147.7722	0.0003	745		3,098.3	0.0016			
2007		0.1000	161.2415	0.0006	779		3,212.1	0.0031			
2008		1.0500	194.3121	0.0054	807		3,702.5	0.0284			
2009		-	181.8842	-	836		3,303.4	-			
2010		1.0216	214.2676	0.0048	845		3,811.5	0.0268			
2011		2.3628	256.9815	0.0092	858		4,514.2	0.0523			
2012		1.3705	257.2734	0.0053	888		4,336.3	0.0316			
2013		1.2833	228.9663	0.0056	917		3,687.1	0.0348			
2014		1.1792	257.9707	0.0046	932		3,971.4	0.0297			
2014		0.7554	205.0591	0.0048	951		3,123.7	0.0277			
			167.8493		978			0.0242			
<u>2016</u>		0.8516		0.0051	7/0		2,465.1				
Total		19.8545	3,410.2136	0.0058			68,338.2	0.0291			

Sources: Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.15)xCol.(4);2000 & Prior (0.05)xCol.(4);2001 & Subseq. Col.(7): (0.20)xCol.(6);2000 & Prior

(1.00)xCol.(6);2001 & Subseq.

Col.(10): 40% of Exh. VII-C-1 thru VII-C-6 Col.(13): Sum of Pages 1 to 4

Col.(16): N/A

Col.(17): Total of 4 std. classes Col.(18): (12) / (17) x 100

Col.(15): Exhibit XII-D

IBNR Award Ratio (2000 & Prior): 0.3144

IBNR Award Ratio (2001 & Subseq.): 0.3944

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# COKE(0154)

		Co	ounts								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Year	Reported	Awarded	Pending	Denied	Pending Awarded (3) * 30%	Denied Reopened	Denied Awarded	Ultimate Awarded (2)+(5)+(7)	Ultimate Denied (1)-(8)	IBNR	IBNR Awarded (10)xAwd Ratio
1997	# 0	# 0	# 0	# O	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
1998	-	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-	-	-	-
2002 2003	-	-	-	-	-	-	-	-	-	-	-
2003	_	-	_	-	-	-	-	-	_	_	-
2005	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	0.0004	0.0002
2010 2011	-	-	-	-	-	-	-	-	-	0.0009	0.0003 0.0004
2011	_	-	-	-	-	-	-	-	-	0.0011	0.0004
2013	_	_	_	_	-	_	_	_	_	0.0043	0.0017
2014	-	-	-	-	-	-	-	-	-	0.0054	0.0021
2015	-	-	-	-	-	-	-	-	-	0.0082	0.0032
2016										0.0062	0.0025
Total	-	-	-	-	-	-	-	-	-	0.0299	0.0118
		(12) Total	(13) Payroll	(14)	(15) Statewide	(16)	(17) Estimated	(18) Frequency			
		Awarded	(\$M)	Frequency	Average	Adjustment	Miner	Per 100			_
Year		(8)+(11)		(12)/(13)	Weekly Wage		<u>Years</u>	Miner Years			
1997		# 0.0000	\$ 53.1191	-	542		1,784.8	-			
1998		-	13.3539	-	561	1.056	433.5	-			
1999		-	12.2935	-	588	1.056	380.7	-			
2000		-	12.0926	-	611	1.056	360.4	-			
2001		-	10.3758	-	644	1.056	293.4	-			
2002		-	10.4850	-	662		288.4	-			
2003		-	11.5341	-	675	1.056	311.2	-			
2004		-	12.0491	-	690	1.056	318.0	-			
2005		-	12.8610	-	716	1.056	327.1	-			
2006		-	12.7374	-	745	1.056	311.4	-			
2007		-	13.6699	-	779	1.056	319.6	-			
2008		-	9.7611	-	807	1.056	220.3	-			
2009		0.0002	5.1736	0.0000	836	1.056	112.7	0.0001			
2010		0.0003	5.4357	0.0001	845	1.056	117.1	0.0003			
2011		0.0004	3.5991	0.0001	858	1.056	76.4	0.0006			
2012		0.0013	5.7381	0.0002	888	1.056	117.7	0.0011			
2013		0.0017	4.7919	0.0004	917	1.056	95.2	0.0018			
2014		0.0021	4.4644	0.0005	932	1.056	87.2	0.0025			
2015		0.0032	4.3404	0.0007	951	1.056	83.1	0.0039			
2016		0.0025	2.3137	0.0011	978	1.056	43.1	0.0057			
Total		0.0118	220.1894	0.0001			6,081.3	0.0002			

Sources: Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.15)xCol.(4);2000 & Prior (0.05)xCol.(4);2001 & Subseq.

Col.(7): (0.20)xCol.(6);2000 & Prior (1.00)xCol.(6);2001 & Subseq.

Col.(10): 40% of Exh. VII-C-1 thru VII-C-6

Col.(13): Exh. X-A

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Run Date: October 09, 2017 - 02:36:27 PM

IBNR Award Ratio (2000 & Prior): 0.3144

IBNR Award Ratio (2001 & Subseq.): 0.3944

Col.(15): Exhibit XII-D

Col.(16): Exhibit X-G

Col.(17): (13) / ((15) x (16) x 52)

times 1000000

Col.(18): (12) / (17) x 100

# AUGER(0157)

		Co	ounts								
	(1)	(2)	(3)	(4)	(5) Pending	(6) Denied	(7) Denied	(8) Ultimate	(9) Ultimate	(10)	(11) IBNR
Year	Reported	Awarded	Pending	Denied	Awarded (3) * 30%	Reopened	Awarded	Awarded (2)+(5)+(7)	Denied (1)-(8)	IBNR	Awarded (10)xAwd Ratio
1997	# 0	# 0	# O	# 0	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
1998	-	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-	-
2003 2004	-	-	-	-	-	-	-	-	-	-	-
2004	_				_		_		-		
2006	_	_	_	_	_	_	_	_	_	_	_
2007	_	_	_	_	-	_	_	_	_	_	_
2008	-	_	-	-	-	_	-	-	_	-	-
2009	-	-	-	-	-	-	-	-	-	0.0001	0.0000
2010	-	-	-	-	-	-	-	-	-	0.0001	0.0000
2011	-	-	-	-	-	-	-	-	-	0.0004	0.0001
2012	-	-	-	-	-	-	-	-	-	0.0005	0.0002
2013	-	-	-	-	-	-	-	-	-	0.0009	0.0004
2014	-	-	-	-	-	-	-	-	-	0.0010	0.0004
2015	-	-	-	-	-	-	-	-	-	0.0011	0.0004
<u>2016</u> Total										0.0010	<u>0.0004</u> 0.0020
		Total Awarded	Payroll (\$M)	Frequency	Statewide Average	Adjustment	Estimated Miner	Frequency Per 100			_
Year		(8)+(11)		(12)/(13)	Weekly Wage	Factor	Years	Miner Years			=
1997		# 0.0000	\$ 1.1935	-	542	1.056	40.1	-			
1998		-	1.2379	-	561	1.056	40.2	-			
1999		_	1.1369	-	588	1.056	35.2	-			
2000		_	1.2059	-	611	1.056	35.9	-			
2001		_	1.4291	_	644	1.056	40.4	_			
2002		_	1.1508	_	662		31.7	_			
2003		_	1.1022	_	675		29.7	_			
2004		_	1.0588	_	690	1.056	27.9	_			
2004		_	1.0265	_	716	1.056	26.1	_			
2006		_	1.0668	_	745	1.056	26.1	_			
2007			1.1212	_	743	1.056	26.2	-			
2007		-	2.5068	-	807	1.056	56.6	-			
		0.0000	0.9470	0.0000				0.0000			
2009 2010		0.0000		0.0000	836	1.056	20.6	0.0002			
		0.0000	0.8275	0.0001	845	1.056	17.8	0.0003			
2011		0.0001	1.1763	0.0001	858	1.056	25.0	0.0006			
2012		0.0002	0.8082	0.0002	888	1.056	16.6	0.0011			
2013		0.0004	1.0469	0.0003	917		20.8	0.0017			
2014		0.0004	0.8616	0.0005	932		16.8	0.0023			
2015		0.0004	0.6548	0.0007	951	1.056	12.5	0.0035			
2016		0.0004	0.3928	0.0010	978	1.056	7.3	0.0054			
Total		0.0020	21.9515	0.0001			553.5	0.0004			

Sources: Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.15)xCol.(4);2000 & Prior (0.05)xCol.(4);2001 & Subseq.

Col.(7): (0.20)xCol.(6);2000 & Prior (1.00)xCol.(6);2001 & Subseq.

Col.(10): 40% of Exh. VII-C-1 thru VII-C-6

Col.(13): Exh. X-A

Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) / ((15) x (16) x 52) times 1000000

Col.(18): (12) / (17) x 100

IBNR Award Ratio (2000 & Prior): 0.3144

IBNR Award Ratio (2001 & Subseq.): 0.3944

PAB

# ANTHRACITE CO-GEN(0181)

Pending				ounts	_							
1997			(2) Awarded	(3) Pending	(4) Denied	Awarded					(10) IBNR	Awarded
1998	Year											(10)xAwd Ratio
1999		# O	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00		# 0.00	# 0.0000	# 0.0000
2000		-	-	-	-	-	-	-	-	-	-	-
1000		-	-	-	-	-	-	-	-	-	-	-
1000   1		-		-	-	-	-		-	-	-	_
1		_	_	_	_	_	_	_	_	_	_	
1000   1		1	_	_	1	-	0.05	0.05	0.05	0.95	-	
1000   10000   10000   10000   10000   10000   10000   10000   10000   10000   10000   10000   10000   10	2004	-	-	-	-	-	-	-	-	-	-	
1000   1	2005	-	-	-	-	-	-	-	-	-	-	-
2008	2006	-	-	-	-	-	-	-	-	-	-	-
2009	2007	-	-	-	-	-	-	-	-	-	-	-
2010   -		-	-	-	-	-	-	-	-	-	-	-
2011   -		-	-	-	-	-	-	-	-	-		0.0003
2012		-	-	-	-	-	-	-	-	-		0.0005
2013		-	-	-	-	-	-	-	-			
2014		-	-	-	-	-	-	-	-			
Company		_	-	_	_	-	-	_	_	_		0.0027
Company		_	_	_	_	-	_	_	_	_		0.0078
Total   Payroll   Statewide   Estimated   Frequency   Awarded   Statewide   Estimated   Frequency   Awarded   Statewide   Estimated   Frequency   Awarded   Statewide   Statewide   Statewide   Frequency   Awarded   Statewide   Statewide   Statewide   Frequency   Awarded   Statewide   Statewide   Frequency   Awarded   Statewide   Statewide   Frequency   Awarded   Statewide   Statewide   Frequency   Awarded   Statewide   Frequency   Frequency   Statewide   St		_	_	_	_	-	_	_	_	-		0.0116
Total	Total	1		_	1	-	0.05	0.05	0.05	0.95		0.0312
1997         # 0.0000         \$ 3.5202         -         542         1.056         118.3         -           1998         -         3.4588         -         561         1.056         112.3         -           1999         -         3.6043         -         588         1.056         111.6         -           2000         -         4.4618         -         644         1.056         131.8         -           2001         -         4.6618         -         644         1.056         131.8         -           2002         -         5.6588         -         662         1.056         155.7         -           2003         0.0500         7.0096         0.0071         675         1.056         189.1         0.0264           2004         -         7.3515         -         690         1.056         194.0         -           2005         -         7.8553         -         716         1.056         199.8         -           2006         -         8.4125         -         745         1.056         295.6         -           2007         -         9.1867         -         779         1.05					Frequency		Adjustment					
1997         # 0.0000         \$ 3.5202         -         542         1.056         118.3         -           1998         -         3.4588         -         561         1.056         112.3         -           1999         -         3.6043         -         588         1.056         111.6         -           2000         -         4.4618         -         644         1.056         131.8         -           2001         -         4.6618         -         644         1.056         131.8         -           2002         -         5.6588         -         662         1.056         155.7         -           2003         0.0500         7.0096         0.0071         675         1.056         189.1         0.0264           2004         -         7.3515         -         690         1.056         194.0         -           2005         -         7.8553         -         716         1.056         199.8         -           2006         -         8.4125         -         745         1.056         295.6         -           2007         -         9.1867         -         779         1.05	Year			(1 /		=	-					
1998       -       3.4588       -       561       1.056       112.3       -         1999       -       3.6043       -       588       1.056       111.6       -         2000       -       4.4735       -       611       1.056       133.3       -         2001       -       4.6618       -       644       1.056       131.8       -         2002       -       5.6588       -       662       1.056       155.7       -         2003       0.0500       7.096       0.0071       675       1.056       189.1       0.0264         2004       -       7.3515       -       690       1.056       189.1       0.0264         2005       -       7.8553       -       716       1.056       199.8       -         2006       -       8.4125       -       745       1.056       205.6       -         2007       -       9.1867       -       779       1.056       214.8       -         2009       0.0003       7.5347       0.0000       836       1.056       164.1       0.0002         2010       0.0005       7.9580       0.0001				\$ 3.5202	-	·		·				
1999       -       3.6043       -       588       1.056       111.6       -         2000       -       4.4735       -       611       1.056       133.3       -         2001       -       4.6618       -       644       1.056       131.8       -         2002       -       5.6588       -       662       1.056       155.7       -         2003       0.0500       7.0996       0.0071       675       1.056       189.1       0.0264         2004       -       7.3515       -       690       1.056       194.0       -         2005       -       7.8553       -       716       1.056       199.8       -         2006       -       8.4125       -       745       1.056       205.6       -         2007       -       9.1867       -       779       1.056       214.8       -         2008       -       7.5214       -       807       1.056       169.7       -         2010       0.0003       7.9580       0.0001       845       1.056       171.5       0.0003         2011       0.014       10.9816       0.0001					_				_			
2000       -       4.4735       -       611       1.056       133.3       -         2001       -       4.6618       -       644       1.056       131.8       -         2002       -       5.6588       -       662       1.056       155.7       -         2003       0.0500       7.096       0.0071       675       1.056       189.1       0.0264         2004       -       7.3515       -       690       1.056       194.0       -         2005       -       7.8553       -       716       1.056       199.8       -         2006       -       8.4125       -       745       1.056       205.6       -         2007       -       9.1867       -       779       1.056       214.8       -         2008       -       7.5214       -       807       1.056       169.7       -         2009       0.0003       7.5347       0.0000       836       1.056       164.1       0.0002         2010       0.0005       7.9580       0.0001       845       1.056       171.5       0.0003         2011       0.0014       10.9816       0.0					_				_			
2001       -       4.6618       -       644       1.056       131.8       -         2002       -       5.6588       -       662       1.056       155.7       -         2003       0.0500       7.0996       0.0071       675       1.056       189.1       0.0264         2004       -       7.3515       -       690       1.056       194.0       -         2005       -       7.8553       -       716       1.056       199.8       -         2006       -       8.4125       -       745       1.056       205.6       -         2007       -       9.1867       -       779       1.056       214.8       -         2008       -       7.5214       -       807       1.056       169.7       -         2009       0.0003       7.5347       0.0000       836       1.056       164.1       0.0002         2010       0.0005       7.9580       0.0001       845       1.056       171.5       0.0003         2011       0.0014       10.9816       0.0001       858       1.056       191.0       0.0012         2013       0.0024       9.3118 <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td>					_				_			
2002       -       5.6588       -       662       1.056       155.7       -         2003       0.0500       7.0096       0.0071       675       1.056       189.1       0.0264         2004       -       7.3515       -       690       1.056       194.0       -         2005       -       7.8553       -       716       1.056       199.8       -         2006       -       8.4125       -       745       1.056       205.6       -         2007       -       9.1867       -       779       1.056       214.8       -         2008       -       7.5214       -       807       1.056       169.7       -         2009       0.0003       7.5347       0.0000       836       1.056       164.1       0.0002         2010       0.0005       7.9580       0.0001       845       1.056       171.5       0.0003         2011       0.0014       10.9816       0.0001       858       1.056       191.0       0.0012         2013       0.0029       7.6308       0.0004       917       1.056       151.5       0.0019         2014       0.0043												
2003         0.0500         7.096         0.0071         675         1.056         189.1         0.0264           2004         -         7.3515         -         690         1.056         194.0         -           2005         -         7.8553         -         716         1.056         199.8         -           2006         -         8.4125         -         745         1.056         205.6         -           2007         -         9.1867         -         779         1.056         214.8         -           2008         -         7.5214         -         807         1.056         169.7         -           2009         0.0003         7.5347         0.0000         836         1.056         164.1         0.0002           2010         0.0005         7.9580         0.0001         845         1.056         171.5         0.0003           2011         0.0014         10.9816         0.0001         858         1.056         233.1         0.0006           2012         0.0024         9.3118         0.0003         888         1.056         151.5         0.0019           2014         0.0043         8.3609					-				_			
2004       -       7.3515       -       690       1.056       194.0       -         2005       -       7.8553       -       716       1.056       199.8       -         2006       -       8.4125       -       745       1.056       205.6       -         2007       -       9.1867       -       779       1.056       214.8       -         2008       -       7.5214       -       807       1.056       169.7       -         2009       0.0003       7.5347       0.0000       836       1.056       164.1       0.0002         2010       0.0005       7.9580       0.0001       845       1.056       171.5       0.0003         2011       0.0014       10.9816       0.0001       858       1.056       233.1       0.0006         2012       0.0024       9.3118       0.0003       888       1.056       191.0       0.0012         2013       0.0029       7.6308       0.0004       917       1.056       163.4       0.0027         2015       0.0078       9.5548       0.0008       951       1.056       183.0       0.0063         2016       0					0.0071				0.0074			
2005       -       7.8553       -       716       1.056       199.8       -         2006       -       8.4125       -       745       1.056       205.6       -         2007       -       9.1867       -       779       1.056       214.8       -         2008       -       7.5214       -       807       1.056       169.7       -         2009       0.0003       7.5347       0.0000       836       1.056       164.1       0.0002         2010       0.0005       7.9580       0.0001       845       1.056       171.5       0.0003         2011       0.0014       10.9816       0.0001       858       1.056       233.1       0.0006         2012       0.0024       9.3118       0.0003       888       1.056       191.0       0.0012         2013       0.0029       7.6308       0.0004       917       1.056       151.5       0.0019         2014       0.0043       8.3609       0.0005       932       1.056       163.4       0.0027         2015       0.0078       9.5548       0.0008       951       1.056       182.2       0.0063					0.0071				0.0264			
2006       -       8.4125       -       745       1.056       205.6       -         2007       -       9.1867       -       779       1.056       214.8       -         2008       -       7.5214       -       807       1.056       169.7       -         2009       0.0003       7.5347       0.0000       836       1.056       164.1       0.0002         2010       0.0005       7.9580       0.0001       845       1.056       171.5       0.0003         2011       0.0014       10.9816       0.0001       858       1.056       233.1       0.0006         2012       0.0024       9.3118       0.0003       888       1.056       191.0       0.0012         2013       0.0029       7.6308       0.0004       917       1.056       151.5       0.0019         2014       0.0043       8.3609       0.0005       932       1.056       163.4       0.0027         2015       0.0078       9.5548       0.0008       951       1.056       182.2       0.0063					-				-			
2007         -         9.1867         -         779         1.056         214.8         -           2008         -         7.5214         -         807         1.056         169.7         -           2009         0.0003         7.5347         0.0000         836         1.056         164.1         0.0002           2010         0.0005         7.9580         0.0001         845         1.056         171.5         0.0003           2011         0.0014         10.9816         0.0001         858         1.056         233.1         0.0006           2012         0.0024         9.3118         0.0003         888         1.056         191.0         0.0012           2013         0.0029         7.6308         0.0004         917         1.056         151.5         0.0019           2014         0.0043         8.3609         0.0005         932         1.056         163.4         0.0027           2015         0.0078         9.5548         0.0008         951         1.056         182.2         0.0063           2016         0.0116         9.7840         0.0012         978         1.056         182.2         0.0063			-		-				-			
2008       -       7.5214       -       807       1.056       169.7       -         2009       0.0003       7.5347       0.0000       836       1.056       164.1       0.0002         2010       0.0005       7.9580       0.0001       845       1.056       171.5       0.0003         2011       0.0014       10.9816       0.0001       858       1.056       233.1       0.0006         2012       0.0024       9.3118       0.0003       888       1.056       191.0       0.0012         2013       0.0029       7.6308       0.0004       917       1.056       151.5       0.0019         2014       0.0043       8.3609       0.0005       932       1.056       163.4       0.0027         2015       0.0078       9.5548       0.0008       951       1.056       182.2       0.0063         2016       0.0116       9.7840       0.0012       978       1.056       182.2       0.0063			-		-				-			
2009         0.0003         7.5347         0.0000         836         1.056         164.1         0.0002           2010         0.0005         7.9580         0.0001         845         1.056         171.5         0.0003           2011         0.0014         10.9816         0.0001         858         1.056         233.1         0.0006           2012         0.0024         9.3118         0.0003         888         1.056         191.0         0.0012           2013         0.0029         7.6308         0.0004         917         1.056         151.5         0.0019           2014         0.0043         8.3609         0.0005         932         1.056         163.4         0.0027           2015         0.0078         9.5548         0.0008         951         1.056         183.0         0.0043           2016         0.0116         9.7840         0.0012         978         1.056         182.2         0.0063			-		-				-			
2010       0.0005       7.9580       0.0001       845       1.056       171.5       0.0003         2011       0.0014       10.9816       0.0001       858       1.056       233.1       0.0006         2012       0.0024       9.3118       0.0003       888       1.056       191.0       0.0012         2013       0.0029       7.6308       0.0004       917       1.056       151.5       0.0019         2014       0.0043       8.3609       0.0005       932       1.056       163.4       0.0027         2015       0.0078       9.5548       0.0008       951       1.056       183.0       0.0043         2016       0.0116       9.7840       0.0012       978       1.056       182.2       0.0063			-		-				-			
2011       0.0014       10.9816       0.0001       858       1.056       233.1       0.0006         2012       0.0024       9.3118       0.0003       888       1.056       191.0       0.0012         2013       0.0029       7.6308       0.0004       917       1.056       151.5       0.0019         2014       0.0043       8.3609       0.0005       932       1.056       163.4       0.0027         2015       0.0078       9.5548       0.0008       951       1.056       183.0       0.0043         2016       0.0116       9.7840       0.0012       978       1.056       182.2       0.0063	2009					836						
2012     0.0024     9.3118     0.0003     888     1.056     191.0     0.0012       2013     0.0029     7.6308     0.0004     917     1.056     151.5     0.0019       2014     0.0043     8.3609     0.0005     932     1.056     163.4     0.0027       2015     0.0078     9.5548     0.0008     951     1.056     183.0     0.0043       2016     0.0116     9.7840     0.0012     978     1.056     182.2     0.0063	2010					845						
2013       0.0029       7.6308       0.0004       917       1.056       151.5       0.0019         2014       0.0043       8.3609       0.0005       932       1.056       163.4       0.0027         2015       0.0078       9.5548       0.0008       951       1.056       183.0       0.0043         2016       0.0116       9.7840       0.0012       978       1.056       182.2       0.0063	2011		0.0014	10.9816	0.0001	858	1.056	233.1	0.0006			
2014       0.0043       8.3609       0.0005       932       1.056       163.4       0.0027         2015       0.0078       9.5548       0.0008       951       1.056       183.0       0.0043         2016       0.0116       9.7840       0.0012       978       1.056       182.2       0.0063	2012		0.0024	9.3118	0.0003	888	1.056	191.0	0.0012			
2014       0.0043       8.3609       0.0005       932       1.056       163.4       0.0027         2015       0.0078       9.5548       0.0008       951       1.056       183.0       0.0043         2016       0.0116       9.7840       0.0012       978       1.056       182.2       0.0063	2013		0.0029	7.6308	0.0004	917	1.056	151.5	0.0019			
2015       0.0078       9.5548       0.0008       951       1.056       183.0       0.0043         2016       0.0116       9.7840       0.0012       978       1.056       182.2       0.0063	2014		0.0043						0.0027			
<u>0.0116</u> <u>9.7840</u> <u>0.0012</u> 978 1.056 <u>182.2</u> <u>0.0063</u>	2015											
									0.0063			
5,57,515												
	Total											

Sources: Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.15)xCol.(4);2000 & Prior (0.05)xCol.(4);2001 & Subseq.

Col.(7): (0.20)xCol.(6);2000 & Prior (1.00)xCol.(6);2001 & Subseq.

Col.(10): 40% of Exh. VII-C-1 thru VII-C-6

Col.(13): Exh. X-A

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Run Date: October 09, 2017 - 02:36:27 PM

IBNR Award Ratio (2000 & Prior): 0.3144

IBNR Award Ratio (2001 & Subseq.): 0.3944

Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) / ((15) x (16) x 52)

times 1000000 Col.(18): (12) / (17) x 100

## BITUMINOUS CO-GEN(0182)

			ounts								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Year	Reported	Awarded	Pending	Denied	Pending Awarded (3) * 30%	Denied Reopened	Denied Awarded	Ultimate Awarded (2)+(5)+(7)	Ultimate Denied (1)-(8)	IBNR	IBNR Awarded (10)xAwd Ratio
1997	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
1998	-	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-	-
2003 2004	-	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	-	-	-
2006	_	_	_	_	_	_	_	_	_	_	-
2007	1	_	-	1	-	0.05	0.05	0.05	0.95	_	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	0.0006	0.0003
2010	-	-	-	-	-	-	-	-	-	0.0014	0.0006
2011	-	-	-	-	-	-	-	-	-	0.0027	0.0011
2012	-	-	-	-	-	-	-	-	-	0.0052	0.0021
2013 2014	-	_	-	-	-	-	-	-	-	0.0092 0.0142	0.0036 0.0056
2014	_	_	_	_	_	_	_	_	_	0.0222	0.0088
2016	_	_	-	-	-	_	-	-	_	0.0308	0.0121
Total	1			1		0.05	0.05	0.05	0.95	0.0864	0.0341
		(12) Total	(13) Payroll	(14)	(15) Statewide	(16)	(17) Estimated	(18) Frequency			
		Awarded	(\$M)	Frequency	Average	Adjustment	Miner	Per 100			-
Year		<u>(8)+(11)</u>		<u>(12)/(13)</u>	Weekly Wage		<u>Years</u>	Miner Years			
1997		# 0.0000	\$ 0.8561	-	542	1.056	28.8	-			
1998		-	1.1612	-	561	1.056	37.7	-			
1999		-	1.4943	-	588	1.056	46.3	-			
2000		-	1.8707	-	611	1.056	55.8	-			
2001		-	2.1213	-	644	1.056	60.0	-			
2002		-	2.3861	-	662	1.056	65.6	-			
2003		-	3.0525	-	675	1.056	82.4	-			
2004		-	6.3745	-	690	1.056	168.2	-			
2005		-	8.5248	-	716	1.056	216.8	-			
2006		-	9.4236	-	745	1.056	230.4	-			
2007		0.0500	10.8291	0.0046	779	1.056	253.2	0.0197			
2008		-	8.4819	-	807	1.056	191.4	-			
2009		0.0003	7.8664	0.0000	836	1.056	171.4	0.0001			
2010		0.0006	8.7327	0.0001	845	1.056	188.2	0.0003			
2011		0.0011	9.1024	0.0001	858	1.056	193.2	0.0005			
2012		0.0021	9.0477	0.0002	888	1.056	185.5	0.0011			
2013		0.0036	10.3559	0.0004	917	1.056	205.7	0.0018			
2014		0.0056	11.7212	0.0005	932	1.056	229.0	0.0025			
2015		0.0088	11.7482	0.0007	951	1.056	225.0	0.0039			
<u>2016</u>		0.0121	11.3868	0.0011	978	1.056	212.0	0.0057			
Total		0.0841	136.5374	0.0006			3,046.6	0.0028			

Sources: Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.15)xCol.(4);2000 & Prior (0.05)xCol.(4);2001 & Subseq.

Col.(7): (0.20)xCol.(6);2000 & Prior (1.00)xCol.(6);2001 & Subseq.

Col.(10): 40% of Exh. VII-C-1 thru VII-C-6

Col.(13): Exh. X-A

Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) / ((15) x (16) x 52) times 1000000

Col.(18): (12) / (17) x 100

IBNR Award Ratio (2000 & Prior): 0.3144

IBNR Award Ratio (2001 & Subseq.): 0.3944

Run Date: October 09, 2017 - 02:36:27 PM

PAB Effective Date - April 01, 2018 101,708.759618

# ANTHRACITE PREP PLANT(0183)

		Co	ounts								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
					Pending	Denied	Denied	Ultimate	Ultimate		IBNR
	Reported	Awarded	Pending	Denied	Awarded	Reopened	Awarded	Awarded	Denied	IBNR	Awarded
Year					(3) * 30%	# 0 00	# 0 00	(2)+(5)+(7)	<u>(1)-(8)</u>	# 0 0000	(10)xAwd Ratio
1997 1998	# 1	# 1	# 0	# 0	# 0.00	# 0.00	# 0.00	# 1.00	# 0.00	# 0.0000	# 0.0000
1999	-	-	-	-	-	-	-	-	-	-	-
2000	_	_	_	_	_	_	_	_	_	_	_
2001	_	_	_	_	_	_	_	_	_	_	_
2002	_	_	_	_	-	_	_	_	-	_	_
2003	-	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-
2007	1	-	-	1	-	0.05	0.05	0.05	0.95	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	0.0014	0.0005
2010	ı	I	-	-	-	-	-	1.00	-	0.0023	0.0009
2011 2012	-	-	-	-	-	-	-	-	-	0.0054 0.0126	0.0021 0.0050
2012	-	-	-	-	-	-	-	-	-	0.0126	0.0030
2013	_	-	_	_	-	_	_	-	_	0.0164	0.0073
2015	1	_	1	_	0.30	_	_	0.30	0.70	0.0360	0.0142
2016	-	_	_	_	-	_	_	-	-	0.0471	0.0186
Total	4	2	1	1	0.30	0.05	0.05	2.35	1.65	0.1482	0.0585
		(12)	(13)	(14)	(15)	(16)	(17)	(18)			
		Total	Payroll		Statewide		Estimated	Frequency			
		Awarded	(\$M)	Frequency	Average	Adjustment	Miner	Per 100			
Year		<u>(8)+(11)</u>	( 7	(12)/(13)	Weekly Wage	-	Years	Miner Years			-
1997		# 1.0000	\$ 1.1494	0.8700	542		38.6	2.5907			
1998		11 1.0000	1.0329	0.0700	561	1.056	33.5	2.5707			
1999		_		_	588	1.056	38.1	_			
		-	1.2311	-				-			
2000		-	1.3195	-	611	1.056	39.3	-			
2001		-	2.2163	-	644	1.056	62.7	-			
2002		-	2.3228	-	662		63.9	-			
2003		-	3.4080	-	675	1.056	91.9	-			
2004		-	4.4067	-	690	1.056	116.3	-			
2005		-	5.1701	-	716	1.056	131.5	-			
2006		-	4.8859	-	745	1.056	119.4	-			
2007		0.0500	5.8173	0.0086	779	1.056	136.0	0.0368			
2008		-	5.7335	-	807	1.056	129.4	-			
2009		0.0005	6.2646	0.0001	836	1.056	136.5	0.0004			
2010		1.0009	4.8769	0.2052	845	1.056	105.1	0.9523			
2011		0.0021	6.1233	0.0003	858	1.056	130.0	0.0016			
2012		0.0050	7.5690	0.0007	888	1.056	155.2	0.0032			
2013		0.0073	7.0749	0.0010	917		140.5	0.0052			
2013		0.0073			932		127.4	0.0032			
			6.5215	0.0015							
2015		0.3142	6.1966	0.0507	951	1.056	118.7	0.2647			
2016		0.0186	5.4583	0.0034	978	1.056	101.6	0.0183			
Total		2.4085	88.7786	0.0271			2,015.6	0.1195			

Sources: Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.15)xCol.(4);2000 & Prior (0.05)xCol.(4);2001 & Subseq.

Col.(7): (0.20)xCol.(6);2000 & Prior (1.00)xCol.(6);2001 & Subseq.

Col.(10): 40% of Exh. VII-C-1 thru VII-C-6

Col.(13): Exh. X-A

File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-07-L.xlsm]p 10

Run Date: October 09, 2017 - 02:36:27 PM

IBNR Award Ratio (2000 & Prior): 0.3144

IBNR Award Ratio(2001 & Subseq.): 0.3944

Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) / ((15) x (16) x 52)

times 1000000

Col.(18): (12) / (17) x 100

# Page 11

#### **BITUMINOUS PREP PLANT(0184)**

			ounts								
	(1)	(2)	(3)	(4)	(5) Pending	(6) Denied	(7) Denied	(8) Ultimate	(9) Ultimate	(10)	(11) IBNR
Year	Reported	Awarded	Pending	Denied	Awarded (3) * 30%	Reopened	Awarded	Awarded (2)+(5)+(7)	Denied (1)-(8)	IBNR	Awarded (10)xAwd Ratio
1997	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
1998	-	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-	-
2000	1	-	-	1	-	0.15	0.03	0.03	0.97	-	-
2001	-	-	-	-	-	-	-	-	-	-	-
2002 2003	-	-	-	-	-	-	-	-	-	-	-
2003	-	-	_	-	-	-	_	-	_	_	-
2005	_	_	_	_	-	_		_	_	-	_
2006	-	-	-	-	-	-	-	-	_	-	-
2007	-	-	-	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	0.0016	0.0006
2010	-	-	-	-	-	-	-	-	-	0.0042	
2011 2012	-	-	-	-	-	-	-	-	-	0.0104 0.0199	0.0041 0.0078
2012	-	-	_	-	-	_	-	-	_	0.0199	0.0120
2013	_	_	_	_	-	_	_	-	_	0.0529	0.0209
2015	_	_	-	-	-	_	_	-	_	0.0636	0.0251
2016								<u>-</u> _		0.0598	0.0236
Total	1	-	-	1	-	0.15	0.03	0.03	0.97	0.2429	0.0958
		(12) Total Awarded	(13) Payroll (\$M)	(14) Frequency	(15) Statewide Average	(16) Adjustment	(17) Estimated Miner	(18) Frequency Per 100			
Year		<u>(8)+(11)</u>	(+)	(12)/(13)	Weekly Wage	-	Years	Miner Years			-
1997		# 0.0000	\$ 13.7836	-	542	1.505	325.0	-			
1998			11.1121	_	561	1.505	253.1	_			
1999		_	10.6918	_	588	1.505	232.3	_			
2000		0.0300	8.5748	0.0035	611	1.505	179.3	0.0167			
2001		-	10.1550	-	644	1.505	201.5	-			
2002		_	10.0945	_	662		194.8	_			
2003		_	10.1952	_	675	1.505	193.0	_			
2004		_	13.4602	_	690	1.505	249.3	_			
2004		_	16.5483	_	716	1.505	295.3	_			
2006		_	17.0510	_	745	1.505	292.5	_			
2007		_	18.8952	_	779	1.505	309.9	_			
2008		_	21.2503	_	807	1.505	336.5	_			
2009		0.0006	19.8280	0.0000	836	1.505	303.1	0.0002			
2010		0.0008	26.3131	0.0001	845	1.505	397.9	0.0002			
2010		0.0017	35.1551	0.0001	858	1.505	523.6	0.0004			
2011		0.0041	34.2117	0.0001	888	1.505	492.3	0.0008			
2012		0.0078	33.6400	0.0002	917		468.8	0.0016			
2013		0.0120	31.8544	0.0004	932		436.7	0.0028			
2014		0.0209		0.0007	951	1.505	436.7 326.8	0.0046			
			24.3206		978						
2016		0.0236	18.5101	0.0013	7/8	1.505	6,253.5	0.0098			
Total		0.1258	385.6450	0.0003			0,233.3	0.0020			

Sources: Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.15)xCol.(4);2000 & Prior (0.05)xCol.(4);2001 & Subseq.

Col.(7): (0.20)xCol.(6);2000 & Prior (1.00)xCol.(6);2001 & Subseq.

Col.(10): 40% of Exh. VII-C-1 thru VII-C-6

Col.(13): Exh. X-A

File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-07-L.xlsm]p 11 Run Date: October 09, 2017 - 02:36:27 PM

IBNR Award Ratio (2000 & Prior): 0.3144

IBNR Award Ratio (2001 & Subseq.): 0.3944

Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) / ((15) x (16) x 52)

times 1000000

Col.(18): (12) / (17) x 100

#### TOTAL OTHER CLASSES

		Co	ounts								
	(1)	(2)	(3)	(4)	(5) Pending	(6) Denied	(7) Denied	(8) Ultimate	(9) Ultimate	(10)	(11) IBNR
Year	Reported	Awarded	Pending	Denied	Awarded (3) * 30%	Reopened	Awarded	Awarded (2)+(5)+(7)	Denied (1)-(8)	IBNR	Awarded (10)xAwd Ratio
1997	# 1	# 1	# 0	# O	# 0.00	# 0.00	# 0.00	# 1.00	# 0.00	# 0.0000	# 0.0000
1998	-	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-	-
2000 2001	1	-	-	1	-	0.15	0.03	0.03	0.97	-	-
2001	-	_	-	-	-	-	-	-	_	-	-
2002	1	_	-	1	-	0.05	0.05	0.05	0.95	_	_
2004	-	_	-	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-
2007	2	-	-	2	-	0.10	0.10	0.10	1.90	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	1.00	-	0.0047	0.0019
2010 2011	'	I	-	-	-	-	-	1.00	-	0.0103 0.0234	0.0041 0.0092
2012	_	_	-	_	-	-	_	_	_	0.0234	0.0187
2013	_	_	_	_	_		_	_	_	0.0707	0.0279
2014	-	-	-	-	-	-	-	-	-	0.1096	0.0432
2015	1	-	1	-	0.30	-	-	0.30	0.70	0.1511	0.0596
<u>2016</u>										0.1743	0.0688
Total	7	2	1	4	0.30	0.30	0.18	2.48	4.52	0.5916	0.2333
		(12)	(13)	(14)	(15)	(16)	(17)	(18)			
		Total	Payroll	_	Statewide		Estimated	Frequency			
		Awarded	(\$M)	Frequency	Average	Adjustment		Per 100			-
Year		<u>(8)+(11)</u>		(12)/(13)	Weekly Wage	<u>Factor</u>	<u>Years</u>	Miner Years			
1997		# 1.0000	\$ 73.6219	0.0136	542		2,335.6	0.0428			
1998		-	31.3568	-	561		910.3	-			
1999		-	30.4519	-	588		844.2	-			
2000		0.0300	29.5370	0.0010	611		804.0	0.0037			
2001		-	30.9593	-	644		789.8	-			
2002		-	32.0980	-	662		800.1	-			
2003		0.0500	36.3016	0.0014	675		897.3	0.0056			
2004		-	44.7008	-	690		1,073.7	-			
2005		-	51.9860	-	716		1,196.6	-			
2006		-	53.5772	-	745		1,185.4	-			
2007		0.1000	59.5194	0.0017	779		1,259.7	0.0079			
2008		-	55.2550	-	807		1,103.9	-			
2009		0.0019	47.6143	0.0000	836		908.4	0.0002			
2010		1.0041	54.1439	0.0185	845		997.6	0.1006			
2011		0.0092	66.1378	0.0001	858		1,181.3	0.0008			
2012		0.0187	66.6865	0.0003	888		1,158.3	0.0016			
2013		0.0279	64.5404	0.0004	917		1,082.5	0.0026			
2014		0.0432	63.7840	0.0007	932		1,060.5	0.0041			
2015		0.3596	56.8154	0.0063	951		949.1	0.0379			
<u>2016</u>		0.0688	47.8457	0.0014	978		788.0	0.0087			
<u>zoro</u> Total		2.7133	996.9329	0.0027	,,,		21,326.3	0.0127			
10101		2.7 100	,,0.,02/	0.002/			21,020.0	3.012/			

Sources: Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.15)xCol.(4);2000 & Prior (0.05)xCol.(4);2001 & Subseq.

Col.(7): (0.20)xCol.(6);2000 & Prior (1.00)xCol.(6);2001 & Subseq.

Col.(10): 40% of Exh. VII-C-1 thru VII-C-6

Col.(13): Sum of Pages 6 to 11

IBNR Award Ratio (2000 & Prior): 0.3144 IBNR Award Ratio (2001 & Subseq.): 0.3944

PAB Effective Date - April 01, 2018 140,012.088660

Col.(15): Exhibit XII-D

Col.(17): Total of other classes

Col.(18): (12) / (17) x 100

Col.(16): N/A

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#### **GRAND TOTAL**

		Co	ounts								
	(1)	(2)	(3)	(4)	(5) Pending	(6) Denied	(7) Denied	(8) Ultimate	(9) Ultimate	(10)	(11) IBNR
Year	Reported	Awarded	Pending	Denied	Awarded (3) * 30%	Reopened	Awarded	Awarded (2)+(5)+(7)	Denied (1)-(8)	IBNR	Awarded (10)xAwd Ratio
1997	# 8	# 2	# 0	# 6	# 0.00	# 0.90	# 0.18	# 2.18	# 5.82	# 0.0000	# 0.0000
1998	2	-	1	1	0.30	0.15	0.03	0.33	1.67	-	-
1999	4	1	-	3	-	0.45	0.09	1.09	2.91	-	-
2000	4	2	-	2	-	0.30	0.06	2.06	1.94	-	-
2001	3	2	-	1	-	0.05	0.05	2.05	0.95	-	-
2002	1	-	-	1	-	0.05	0.05	0.05	0.95	-	-
2003	3	1	-	2	-	0.10	0.10	1.10	1.90	-	-
2004	2	1	-	1	-	0.05	0.05	1.05	0.95	-	-
2005	1	1	-	-	-	-	-	1.00	- 0.05	-	-
2006	I d	-	-	l l	-	0.05	0.05	0.05	0.95	-	-
2007	4	-	-	4	-	0.20	0.20	0.20	3.80	-	-
2008 2009	2	1	-	ı	-	0.05	0.05	1.05	0.95	0.0047	0.0019
2007	2	2	-	-	-	-	-	2.00	-	0.0650	0.0256
2010	3	2	1	_	0.30	-	_	2.30	0.70	0.1825	0.0720
2012	6	1		5	-	0.25	0.25	1.25	4.75	0.3531	0.1392
2013	3	1	_	2	_	0.10	0.10	1.10	1.90	0.5354	0.2112
2014	3	-	2	1	0.60	0.05	0.05	0.65	2.35	1.4515	0.5725
2015	2	-	1	1	0.30	0.05	0.05	0.35	1.65	1.9397	0.7650
2016										2.3337	0.9204
Total	54	17	5	32	1.50	2.80	1.36	19.86	34.14	6.8656	2.7078
		(12)	(13)	(14)	(15)	(16)	(1 <i>7</i> )	(18)			
		Total	Payroll		Statewide		Estimated	Frequency			
		Awarded	(\$M)	Frequency	Average	Adjustment	Miner	Per 100			. <del>-</del>
Year		(8)+(11)		(12)/(13)	Weekly Wage	<u>Factor</u>	<u>Years</u>	Miner Years			
1997		# 2.1800	\$ 231.2791	0.0094	542		6,927.1	0.0315			
1998		0.3300	175.2343	0.0019	561		4,989.2	0.0066			
1999		1.0900	163.5547	0.0067	588		4,424.3	0.0246			
2000		2.0600	145.1712	0.0142	611		3,827.9	0.0538			
2001		2.0500	152.1934	0.0135	644		3,808.8	0.0538			
2002		0.0500	138.8712	0.0004	662		3,402.2	0.0015			
2003		1.1000	133.9562	0.0082	675		3,238.1	0.0340			
2004		1.0500	160.6970	0.0065	690		3,772.3	0.0278			
2005		1.0000	196.6919	0.0051	716		4,374.3	0.0229			
2006		0.0500	201.3494	0.0002	745		4,283.7	0.0012			
2007		0.2000	220.7609	0.0002	779		4,471.8	0.0012			
2007		1.0500			807			0.0043			
			249.5671	0.0042			4,806.4				
2009		0.0019	229.4985	0.0000	836		4,211.8	0.0000			
2010		2.0256	268.4115	0.0075	845		4,809.1	0.0421			
2011		2.3720	323.1193	0.0073	858		5,695.5	0.0416			
2012		1.3892	323.9599	0.0043	888		5,494.6	0.0253			
2013		1.3112	293.5067	0.0045	917		4,769.6	0.0275			
2014		1.2225	321.7547	0.0038	932		5,031.9	0.0243			
2015		1.1150	261.8745	0.0043	951		4,072.8	0.0274			
<u>2016</u>		0.9204	215.6950	0.0043	978		3,253.1	0.0283			
Total		22.5678	4,407.1465	0.0051			89,664.5	0.0252			

Sources: Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.15)xCol.(4);2000 & Prior (0.05)xCol.(4);2001 & Subseq. Col.(7): (0.20)xCol.(6);2000 & Prior

(1.00)xCol.(6);2001 & Subseq.

Col.(10): 40% of Exh. VII-C-1 thru VII-C-6 Col.(13): Sum of Pages 5 & 12

File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-07-L.xlsm]p 13

Run Date: October 09, 2017 - 02:36:27 PM

IBNR Award Ratio (2000 & Prior): 0.3144

IBNR Award Ratio (2001 & Subseq.): 0.3944

PAB Effective Date - April 01, 2018 283,858.242152

Col.(15): Exhibit XII-D Col.(16): N/A

Col.(17): Total of all classes Col.(18): (12) / (17) x 100

## Coal Mine Compensation Rating Bureau Summary of Individual Claim Detail for Federal Basic Claims from Exposure Years 1990 to 2016

#### Federal Basic Severities

Underground Anthracite C	Indemnity	Medical	Total
Total	7,324,646	993,407	8,318,053
Number of Claims Average	20 366,232		20 415,903
Average	300,232	47,070	410,700
Underground Bituminous (	Class 158		
Total	25,206,665	3,639,556	28,846,221
Number of Claims	74		
Average	340,631	49,183	389,814
Surface Anthracite Class 1	153		
Total	11,599,230	1,550,834	13,150,064
Number of Claims	40		
Average	289,981	38,771	328,752
Surface Bituminous Class	156		
Total	14,894,280	1,942,321	16,836,600
Number of Claims	53		
Average	281,024	36,648	317,672
Four Standard Classes Co	mbined		
Total	59,024,821	8,126,118	67,150,939
Number of Claims	187	187	
Average	315,641	43,455	359,096
Other Classes			
Total	4,063,110	632,358	4,695,468
Number of Claims	13	13	13
Average	312,547	48,643	361,190
All Classes Combined			
Total	63,087,931	8,758,476	71,846,407
Number of Claims	200	200	200
Average	315,440	43,792	359,232

Source: Exhibit IX-B

#### FEDERAL BASIC OCCUPATIONAL DISEASE

ANTHRACITE UN	IDERGROUNE	0 (0160)												10-Year
Year 2007 2008 2009 2010 2011 2012 2013 2014	Reported 0 1 1 0 2 2 0 1 0 0	Awarded 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Pending 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Denied 0 1 1 0 1 0 1 0 0 1 0 0 0 1 0 0 0 0 0	IBNR 0.1668 0.3329 0.2839 0.3500 0.4158 0.4031 0.1813 0.1451	IBNR + <u>Pending</u> 0.1668 0.3329 0.2839 0.3500 1.4158 0.4031 0.1813 0.1451	0.200 Award <u>Ratio</u> 0.033360 0.066584 0.056788 0.070008 0.283150 0.080622 0.036252 0.029022	Payroll 1,662,537 2,136,713 1,335,866 1,299,588 1,257,944 1,029,260 381,876 258,809	Expected Ultimate Awarded 0.033360 0.066584 0.056788 0.070008 0.283150 0.080622 0.036252 0.029022	Statewide Average Weekly Wage 779 807 836 845 858 888 917 932	Adjustment <u>Factor</u> 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Estimated Miner <u>Years</u> 38.9 48.2 29.1 28.0 26.7 21.1 7.6 5.1	Frequency Claims per 100 Miner Years 0.085758 0.138141 0.195148 0.250029 1.060487 0.382095 0.477000 0.569059	Payroll Weighted <u>Frequency</u>
2014 2015 <u>2016</u> TOTAL AVERAGE	0 0 5	0 0	0 0	0 0 4	0.1431 0.1806 0.1534 2.6129	0.1806 0.1534 3.6129	0.027022 0.036120 0.030676 0.722582	254,336 254,336 163,760 9,780,689	0.036120 0.030676 0.722582	951 978	1.056 1.056	4.9 3.0 212.6	0.737143 1.022533 4.917393 0.491739	
BITUMINOUS UN	IDERGROUNE	(0158)				IBNR +	0.024		Expected	Statewide	Adjustmont	Estimated	Frequency	Payroll Woodstad
Year 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL AVERAGE	Reported 4 0 5 4 4 4 6 11 12 6 56	Awarded 0 0 0 0 0 0 1 0 0 1 1 0 1	Pending 2 0 0 0 1 0 0 1 3 3 3 5 15	Denied 2 0 5 3 4 4 4 4 8 8 9 1 40	IBNR 4.9101 7.1424 8.1403 11.3745 15.0490 17.3436 18.6992 26.6435 23.0142 22.9944 155.3111	Pending 6.9101 7.1424 8.1403 12.3745 15.0490 17.3436 19.6992 29.6435 26.0142 27.9944 170.3111	Award Ratio 0.165843 0.171418 0.195367 0.296987 0.361177 0.416246 0.472781 0.711444 0.624340 0.671866 4.087467	Poyroll 79,904,266 101,353,977 101,348,140 125,393,576 148,485,709 153,618,908 145,146,253 183,431,952 110,570,755 1118,803,275 11,298,136,351	Ultimate <u>Awarded</u> 0.165843 0.171418 0.195367 0.296987 0.361177 0.416246 1.472781 0.711444 0.624340 0.671866 5.087467	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932 951 978	Adjustment <u>Factor</u> 1.505 1.505 1.505 1.505 1.505 1.505 1.505 1.505 1.505 1.505	Miner Years 1,310.7 1,604.8 1,549.1 1,896.2 2,211.4 2,210.5 2,022.5 2,514.9 1,888.7 1,553.3 18,762.1	Claims per 100 Miner Years 0.012653 0.012653 0.010682 0.012612 0.015662 0.016332 0.018830 0.072820 0.028289 0.033057 0.043254 0.264191 0.026419	Weighted Frequency
Year 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 AVERAGE	REPORTED  2 1 2 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Awarded 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Pending 0 0 0 0 0 0 0 0 0 1 1	Denied 0 1 1 0 1 1 0 1 1 0 1 0 6	IBNR 0.6159 0.8491 1.0196 1.0167 1.7364 2.6080 2.6180 2.8668 3.9888 4.0096 21.3288	IBNR + <u>Pending</u> 0.6159 0.8491 1.0196 1.0167 1.7364 2.6080 2.6180 2.8668 3.9888 5.0096	0.400 Award Rafio 0.246368 0.339652 0.407628 0.406660 0.694544 1.047188 1.146708 1.595536 2.003828	Poyroll 14.866.556 16.220.231 15.893.528 13.319.185 19.507.428 24.734.711 20.720.014 18.911.339 22.234.350 19.043.330 185.450.672	Expected Ultimate <u>Awarded</u> 2.246368 0.339652 1.407828 0.406660 0.694544 1.043212 2.047188 1.146708 1.595536 2.003828	Statewide Average Weekly Wage 779 807 836 845 858 888 917 932 951 978	Adjustment <u>Factor</u> 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Estimated Miner Years 347.5 366.0 346.2 287.0 414.0 507.3 411.5 369.5 425.8 354.6	Frequency Claims per 100 Miner Years 0.646437 0.092801 0.406652 0.141693 0.167764 0.205640 0.497494 0.310340 0.374715 0.565095 3.408631 0.340863	Payroll Weighted <u>Frequency</u>
Year 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL AVERAGE	Reported 5 5 5 0 2 2 3 8 4 1 3 3 0 31	Awarded 1 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Pending	Denied 4 2 0 2 2 6 4 0 1 0 21	IBNR 1.8321 2.4048 2.4006 3.1908 4.3821 4.0447 4.0641 3.4885 2.8982 33.0998	IBNR + <u>Pencling</u> 1.8321 3.4648 2.4006 3.1908 5.3339 4.3821 4.0447 5.0641 4.4885 2.8982 37.0998	0.222 Award Ratio 0.406731 0.769190 0.532931 0.708347 1.184124 0.972831 0.897921 1.124221 0.996454 0.643405 8.236153	Payroll 64,808,093 74,601,231 63,306,695 74,255,177 87,730,506 77,890,500 62,718,061 55,368,615 42,000,092 29,758,888 632,437,858	Expected Ultimate Awarded 1.406731 2.769190 0.532931 0.708347 1.184124 2.972831 0.897921 1.124221 1.996454 0.643405 14.236153	Statewide Average Weekly Wage 779 807 836 845 858 888 9177 932 951 978	Adjustment Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Estimated Miner Years 1,515.0 1,883.5 1,379.0 1,600.3 1,862.1 1,597.4 1,245.5 1,081.9 804.3 554.1 13,323.1	Frequency Claims per 100 Miner Years 0.092854 0.164490 0.038646 0.043591 0.186104 0.072093 0.103912 0.248223 0.116117 1.130299	Payroll Weighted <u>Frequency</u>
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL AVERAGE	Reported 11 7 8 6 10 13 12 13 16 7 103	Awarded 3 2 1 0 2 2 2 0 11	Pending 2 1 0 1 2 0 1 4 4 4 6 21	Denied  6 4 7 5 8 11 9 9 11 11 71	IBNR 7.5250 10.7893 11.8444 15.9319 21.5350 24.7368 25.5431 33.7194 30.6721 30.0556 212.3526	IBNR + <u>Pending</u> 9.5250 11.7893 11.8444 16.9319 23.5350 24.7368 26.5431 37.7194 34.6721 36.0556 233.3526	0.134 Award <u>Ratio</u> 1.276345 1.579764 1.587147 2.268873 3.153694 3.314735 3.556777 5.054404 4.646067 4.831448 21.977726	Payroll 161,241,452 194,312,152 181,884,229 214,267,526 256,981,587 257,273,379 228,966,204 257,970,715 205,059,053 167,849,273 2,125,805,570	Expected Ultimate <u>Awarded</u> 3.852302 3.344844 2.192914 1.482001 2.522994 4.512910 4.454142 3.011395 4.252450 3.349775 32.977726	Statewide Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932 951 978	Adjustment <u>Factor</u>	Estimated Miner Years 3,212.1 3,702.5 3,303.4 3,811.5 4,514.2 4,336.3 3,687.1 3,971.4 3,123.7 2,465.0 36,127.2	Frequency Claims per 100 Miner Years 0.119931 0.090394 0.066384 0.035890 0.104073 0.120803 0.075827 0.136135 0.135893 0.944212 0.094421	Weighted Frequency

Source: Claim counts - CMCRB OD Database as of 4/30/2017 IBNR: Exhibit VIII-C

IBNR: Exhibit VIII-C
Payroll- Exhibit X-A-1
The Award Ratio is equal to Awarded ÷ (Awarded plus Denied). Other Classes use the Total Award Ratio: 0.126=11 / [11 + 76]
The Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G
Estimated Miner Years = Payroll / (SAWW x Adj. Factor x 52)
Frequency per 100 Miner Years = (Expected Ult. Awarded / Est. Miner Years) x 100
File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-08-B-2.xlsm]\VIII-B-1
Run Date: October 11, 2017 - 03:20:04 PM

#### COAL MINE COMPENSATION RATING BUREAU

#### FEDERAL BASIC OCCUPATIONAL DISEASE

COKE (0154)							0.126		Expected	Statewide		Estimated	Frequency	10-Year Payroll
<u>Year</u> 2007	Reported 0	Awarded 0	Pending 0	Denied 0	<u>IBNR</u> 0.1306	IBNR + Pending 0.1306	Award <u>Ratio</u> 0.016456	Payroll 13,669,925	Ultimate Awarded 0.016456	Average Weekly Wage 779	Adjustment <u>Factor</u> 1.056	Miner Years 319.6	Claims per 100 Miner Years 0.005149	Weighted <u>Frequency</u>
2008	0	0	0	0	0.1067	0.1067	0.013444	9,761,146	0.013444	807	1.056	220.3	0.006103	
2009 2010	0	0	0	0	0.0637 0.0747	0.0637 0.0747	0.008026 0.009412	5,173,552 5,435,658	0.008026 0.009412	836 845	1.056 1.056	112.7 117.1	0.007122 0.008038	
2010	0	0	0	0	0.0554	0.0554	0.007412	3,599,086	0.007412	858	1.056	76.4	0.009137	
2012	0	0	0	0	0.0982	0.0982	0.012373	5,738,105	0.012373	888	1.056	117.7	0.010512	
2013	0	0	0	0	0.0911	0.0911	0.011479	4,791,910	0.011479	917	1.056	95.2	0.012057	
2014 2015	0	0	0	0	0.0934 0.0997	0.0934 0.0997	0.011768 0.012562	4,464,398 4,340,376	0.011768 0.012562	932 951	1.056 1.056	87.2 83.1	0.013496 0.015117	
2016	0	0	0	0	0.0589	0.0589	0.007421	2,313,724	0.007421	978	1.056	43.1	0.017219	
TOTAL	0	0	0	0	0.8724	0.8724	0.109922	59,287,880	0.109922			1,272.4	0.103950	
AVERAGE													0.010395	
AUGER (0157)	tor adjusted I	au 0.4000					0.126		Expected	Statewide		Estimated	Frequency	
IBINK FUCI	or aajosiea i	Jy 0.4000				IBNR +	Award		Ultimate	Average	Adjustment	Miner	Claims per 100	Weighted
YEAR	Reported	Awarded	Pending	Denied	IBNR	Pending	Ratio	Payroll	Awarded	Weekly Wage	Factor	<u>Years</u>	Miner Years	Frequency
2007	0	0	0	0	0.0214	0.0214	0.002696	1,121,156	0.002696	779	1.056	26.2	0.010292	
2008 2009	0	0	0	0	0.0548 0.0233	0.0548 0.0233	0.006905 0.002936	2,506,758 946,963	0.006905 0.002936	807 836	1.056 1.056	56.6 20.6	0.012199 0.014251	
2010	1	Ö	1	0	0.0228	1.0228	0.128873	827,496	0.128873	845	1.056	17.8	0.724004	
2011	0	0	0	0	0.0362	0.0362	0.004561	1,176,255	0.004561	858	1.056	25.0	0.018245	
2012 2013	0	0	0	0	0.0277 0.0398	0.0277 0.0398	0.003490 0.005015	808,208 1,046,947	0.003490 0.005015	888 917	1.056 1.056	16.6 20.8	0.021025 0.024110	
2013	0	0	0	0	0.0346	0.0361	0.003013	861,590	0.003013	932	1.056	16.8	0.024110	
2015	0	0	0	0	0.0301	0.0301	0.003793	654,766	0.003793	951	1.056	12.5	0.030341	
2016	0	0	0	0	0.0200	0.0200	0.002520	392,776	0.002520	978	1.056	7.3	0.034521	
TOTAL	1	0	1	0	0.3122	1.3122	0.165337	10,342,915	0.165337			220.2	0.916063	
AVERAGE													0.091606	
ANTHRACITE CO	o-GEN (0181 for adjusted l						0.126		Expected	Statewide		Estimated	Frequency	
IBNR Fact	tor adjusted l	oy 0.5000				IBNR +	Award		Ultimate	Average	Adjustment	Miner	Claims per 100	Weighted
IBNR Fact	tor adjusted l	oy 0.5000 Awarded	Pending	<u>Denied</u>	<u>IBNR</u>	Pending	Award <u>Ratio</u>	<u>Payroll</u>	Ultimate Awarded	Average Weekly Wage	<u>Factor</u>	Miner Years	Claims per 100 Miner Years	Weighted Frequency
IBNR Fact	tor adjusted l	oy 0.5000	Pending 0 0	Denied 0 0	<u>IBNR</u> 0.2194 0.2056		Award	Payroll 9,186,706 7,521,400	Ultimate	Average		Miner	Claims per 100	
IBNR Fact <u>YEAR</u> 2007 2008 2009	Reported 0 0 0	Awarded 0 0 0	0 0 0	0 0 0	0.2194 0.2056 0.2320	Pending 0.2194 0.2056 0.2320	Award <u>Ratio</u> 0.027644 0.025906 0.029232	9,186,706 7,521,400 7,534,735	Ultimate <u>Awarded</u> 0.027644 0.025906 0.029232	Average Weekly Wage 779 807 836	Factor 1.056 1.056 1.056	Miner <u>Years</u> 214.8 169.7 164.1	Claims per 100 <u>Miner Years</u> 0.012870 0.015266 0.017814	
YEAR 2007 2008 2009 2010	Reported 0 0 0 0	Awarded 0 0 0 0	0 0 0 0	0 0 0	0.2194 0.2056 0.2320 0.2735	Pending 0.2194 0.2056 0.2320 0.2735	Award <u>Ratio</u> 0.027644 0.025906 0.029232 0.034461	9,186,706 7,521,400 7,534,735 7,958,048	Ultimate <u>Awarded</u> 0.027644 0.025906 0.029232 0.034461	Average <u>Weekly Wage</u> 779 807 836 845	Factor 1.056 1.056 1.056 1.056	Miner <u>Years</u> 214.8 169.7 164.1 171.5	Claims per 100 <u>Miner Years</u> 0.012870 0.015266 0.017814 0.020094	
IBNR Fact YEAR 2007 2008 2009 2010 2011	Reported 0 0 0	Awarded 0 0 0 0 0 0	0 0 0	0 0 0	0.2194 0.2056 0.2320 0.2735 0.4226	Pending 0.2194 0.2056 0.2320 0.2735 0.4226	Award <u>Ratio</u> 0.027644 0.025906 0.029232 0.034461 0.053248	9,186,706 7,521,400 7,534,735 7,958,048 10,981,642	Ultimate <u>Awarded</u> 0.027644 0.025906 0.029232 0.034461 0.053248	Average <u>Weekly Wage</u> 779 807 836 845 858	1.056 1.056 1.056 1.056 1.056	Miner <u>Years</u> 214.8 169.7 164.1 171.5 233.1	Claims per 100 <u>Miner Years</u> 0.012870 0.015266 0.017814 0.020094 0.022843	
IBNR Fact  YEAR  2007  2008  2009  2010  2011  2012  2013	Reported 0 0 0 0 0 0	Awarded 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0.2194 0.2056 0.2320 0.2735	Pending 0.2194 0.2056 0.2320 0.2735	Award <u>Ratio</u> 0.027644 0.025906 0.029232 0.034461	9,186,706 7,521,400 7,534,735 7,958,048	Ultimate <u>Awarded</u> 0.027644 0.025906 0.029232 0.034461	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917	Factor 1.056 1.056 1.056 1.056	Miner <u>Years</u> 214.8 169.7 164.1 171.5	Claims per 100 <u>Miner Years</u> 0.012870 0.015266 0.017814 0.020094	
IBNR Fact  YEAR  2007 2008 2009 2010 2011 2012 2013 2014	Reported 0 0 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0	Awarded 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 1 1	0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375	Pending 0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375	Award Ratio 0.027644 0.025906 0.029232 0.034461 0.053248 0.050186 0.045700 0.055125	9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898	Ultimate <u>Awarded</u> 0.027644 0.025906 0.029232 0.034461 0.053248 0.050186 0.045700 0.055125	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner <u>Years</u> 214.8 169.7 164.1 171.5 233.1 191.0 151.5 163.4	Claims per 100 Miner Years 0.012870 0.015266 0.017814 0.020094 0.022843 0.026275 0.030165 0.033736	
IBNR Fact  YEAR  2007 2008 2009 2010 2011 2012 2013 2014 2015	Reported 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	xy 0.5000  Awarded 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 1 1 0	0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487	Pending 0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487	Award Ratio 0.027644 0.025906 0.029232 0.034461 0.053248 0.050186 0.045700 0.055125 0.069136	9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,554,806	Ultimate <u>Awarded</u> 0.027644 0.025906 0.029232 0.034461 0.053248 0.050186 0.045700 0.055125 0.069136	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932 951	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner <u>Years</u> 214.8 169.7 164.1 171.5 233.1 191.0 151.5 163.4 183.0	Claims per 100 Miner Years 0.012870 0.015266 0.017814 0.020094 0.022843 0.026275 0.030165 0.033736 0.037779	
IBNR Fact  YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016	Reported 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Awarded 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 1 1 0 0	0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487 0.6222	Pending 0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487	Award <u>Ratio</u> 0.027644 0.025906 0.029232 0.034461 0.053248 0.0550186 0.045700 0.055125 0.069136 0.078397	9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,554,806 9,784,031	Ultimate <u>Awarded</u> 0.027644 0.025906 0.029232 0.034461 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner Years 214.8 169.7 164.1 171.5 233.1 191.0 151.5 163.4 183.0 182.2	Claims per 100  Miner Years 0.012870 0.015266 0.017814 0.020094 0.022843 0.026275 0.030165 0.033736 0.037779 0.043028	
IBNR Fact  YEAR  2007 2008 2009 2010 2011 2012 2013 2014 2015	Reported 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	xy 0.5000  Awarded 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 1 1 0	0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487	Pending 0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487	Award Ratio 0.027644 0.025906 0.029232 0.034461 0.053248 0.050186 0.045700 0.055125 0.069136	9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,554,806	Ultimate <u>Awarded</u> 0.027644 0.025906 0.029232 0.034461 0.053248 0.050186 0.045700 0.055125 0.069136	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932 951	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner <u>Years</u> 214.8 169.7 164.1 171.5 233.1 191.0 151.5 163.4 183.0	Claims per 100 Miner Years 0.012870 0.015266 0.017814 0.020094 0.022843 0.026275 0.030165 0.033736 0.037779	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL AVERAGE	Reported	6y 0.5000  Awarded 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 1 1 0 0	0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487 0.6222	Pending 0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487	Award Rottio 0.027644 0.025906 0.029232 0.034461 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397 0.469035	9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,554,806 9,784,031	Ultimate <u>Awarded</u> 0.027644 0.025906 0.029232 0.034461 0.053248 0.055125 0.055125 0.069136 0.078397 0.469035	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932 951 978	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner Years 214.8 169.7 164.1 171.5 233.1 191.0 151.5 163.4 183.0 182.2 1.824.3	Claims per 100 Miner Years	
YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL AVERAGE	Reported  Reported  0  0  0  1  1  2	6y 0.5000  Awarded 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 1 1 0 0	0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487 0.6222	Pending 0.2194 0.2056 0.2320 0.2735 0.4226 0.3783 0.3627 0.4375 0.5487 0.6222	Award Ratio 0.027644 0.025906 0.029232 0.034461 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397 0.469035	9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,554,806 9,784,031	Ultimate Awarded 0.02764d 0.025906 0.029932 0.03446l 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397 0.469035	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932 951 978 Statewide	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner Years 214.8 169.7 164.1 171.5 233.1 191.0 151.5 163.4 183.0 182.2 1.824.3	Claims per 100 Miner Years	Frequency
IBNR Fact  YEAR  2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL AVERAGE  BITUMINOUS CO	Reported	Awarded 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 1 1 0 0 0 2	0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487 0.6222 3.7225	Pending 0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487 0.6222 3.7225	Award Radio 0.027644 0.025906 0.029232 0.034461 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397 0.469035	9,186,706 7,521,400 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,554,806 9,784,031 87,824,840	Ultimate <u>Awarded</u> 0.027644 0.025906 0.02932 0.033441 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397 0.469035	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932 951 978 Statewide Average	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner Years 214.8 169.7 164.1 171.5 233.1 191.0 151.5 163.4 183.0 182.2 1.824.3	Claims per 100  Miner Years 0.012870 0.015266 0.017814 0.020094 0.022843 0.026275 0.030165 0.033736 0.037779 0.043028 0.259870 0.025987	Frequency
IBNR Fact   YEAR   2007   2008   2009   2010   2011   2012   2013   2014   2015   2016   TOTAL   AVERAGE   BITUMINOUS CC   IBNR Fact   YEAR   2007	reported  Reported  0 0 0 0 0 0 1 1 0 0 2  D-GEN (0182  Reported  Reported	Awarded 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 1 1 0 0 0 2	0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487 0.6222 3.7225	Pending 0.2194 0.2054 0.2054 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487 0.6222 3.7225	Award Ratio 0.027644 0.025906 0.027644 0.025906 0.029232 0.034461 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397 0.469035  0.126 Award Ratio 0.032596	9,186,706 7,521,400 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,754,806 9,784,031 87,824,840	Ultimate <u>Awarded</u> 0.027644 0.0275906 0.029232 0.034461 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397 0.469035 Expected Ultimate <u>Awarded</u> 0.032596	Average Weekly Wage 779 807 836 845 858 87 972 978 978 Statewide Average Weekly Wage	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner Years 214.8 169.7 164.1 171.5 233.1 191.0 151.5 163.4 183.0 182.2 1.824.3	Claims per 100 Miner Years	Frequency
IBNR Fact  YEAR  2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL AVERAGE  BITUMINOUS CC IBNR Fact  YEAR 2007 2008	ror adjusted to reported 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Awarded	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 1 1 0 0 0 2	0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5427 0.4522 3.7225	Pending 0.2194 0.2054 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487 0.6222 3.7225	Award Ratio 0.027644 0.025906 0.029232 0.034461 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397 0.469035  0.126 Award Ratio 0.032596 0.025207	9,186,706 7,521,400 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,554,806 9,784,031 87,824,840	Ultimate <u>Awarded</u> 0.027644 0.025906 0.02932 0.034441 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397 0.469035 Expected Ultimate <u>Awarded</u> 0.032596 0.029207	Average Weekly Wage  779 807 836 845 858 888 917 932 951 978  Statewide Average Weekly Wage 779 807	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner Years 214.8 169.7 164.1 171.5 233.1 191.0 151.5 163.4 183.0 182.2 1.824.3 Estimated Miner Years 253.2 191.4	Claims per 100  Miner Years 0.012870 0.015266 0.017814 0.020094 0.022843 0.026275 0.030165 0.033736 0.037779 0.043028 0.259870 0.025987  Frequency Claims per 100 Miner Years 0.012874 0.015260	Frequency
IBNR Fact  YEAR  2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL AVERAGE  BITUMINOUS CO IBNR Fact  YEAR 2007 2008 2007	Reported	Awarded 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 1 1 0 0 0 2	0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487 0.6222 3.7225	Pending 0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4575 0.5487 0.6222 3.7225  IBNR + Pending 0.2587 0.2318 0.2422	Award Ratio 0.027644 0.025906 0.029232 0.034441 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397 0.469035	9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,784,031 87,824,840  Payroll 10,829,140 8,481,888 7,866,413	Ultimate <u>Awarded</u> 0.027644 0.025906 0.029232 0.034461 0.053248 0.053125 0.055125 0.057125 0.069136 0.078397 0.469035	Average Weekly Wage 779 807 836 845 858 888 917 932 951 978  Statewide Average Weekly Wage Weekly Wage 836	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner Years 214.8 169.7 164.1 171.5 233.1 191.0 151.5 163.4 183.0 182.2 1.824.3 Estimated Miner Years 253.2 191.4 171.4	Claims per 100  Miner Years	Frequency
IBNR Fact  YEAR  2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL AVERAGE  BITUMINOUS CC IBNR Fact  YEAR 2007 2008	ror adjusted to reported 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Awarded	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 1 1 0 0 0 2	0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5427 0.4522 3.7225	Pending 0.2194 0.2054 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487 0.6222 3.7225	Award Ratio 0.027644 0.025906 0.029232 0.034461 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397 0.469035  0.126 Award Ratio 0.032596 0.025207	9,186,706 7,521,400 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,554,806 9,784,031 87,824,840	Ultimate <u>Awarded</u> 0.027644 0.025906 0.02932 0.034441 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397 0.469035 Expected Ultimate <u>Awarded</u> 0.032596 0.029207	Average Weekly Wage  779 807 836 845 858 888 917 932 951 978  Statewide Average Weekly Wage 779 807	Factor 1.056	Miner Years 214.8 169.7 164.1 171.5 233.1 191.0 151.5 163.4 183.0 182.2 1.824.3 Estimated Miner Years 253.2 191.4	Claims per 100  Miner Years 0.012870 0.015266 0.017814 0.020094 0.022843 0.026275 0.030165 0.033736 0.037779 0.043028 0.259870 0.025987  Frequency Claims per 100 Miner Years 0.012874 0.015260	Frequency
IBNR Fact  YEAR  2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL AVERAGE  BITUMINOUS CO IBNR Fact  YEAR 2007 2008 2009 2010 2011 2012	Reported	0 0.5000  Awarded 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 1 1 0 0 0 2 2	0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487 0.6222 3.7225 BNR 0.2587 0.2587 0.2387 0.2363 0.2422 0.3001 0.3503	Pending 0.2194 0.2054 0.2320 0.2320 0.2735 0.4226 0.3983 0.3627 0.5487 0.6222 3.7225  IBNR + Pending 0.2587 0.2587 0.2318 0.4242 0.3001 0.3533	Award Redio 0.027644 0.025906 0.029232 0.034441 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397 0.469035  0.126 Award Ratio 0.032596 0.029207 0.030517 0.037813 0.044138 0.048762	9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,784,031 87,824,840  Payroll 10,829,140 8,481,888 8,7866,413 8,732,701 9,102,411 9,047,745	Ultimate <u>Awarded</u> 0.027644 0.025906 0.029232 0.034461 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397 0.469035 Expected Ultimate <u>Awarded</u> 0.032596 0.032596 0.032597 0.030517 0.037813 0.044138 0.048762	Average Weekly Wage 779 807 836 845 858 858 917 972 951 978  Statewide Average Weekly Wage 779 807 836 845 858 888	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner Years 214.8 169.7 164.1 171.5 233.1 191.0 151.5 163.4 183.0 182.2 1.824.3 Estimated Miner Years 253.2 191.4 171.4 188.2 193.2 185.5	Claims per 100  Miner Years	Frequency
IBNR Fact   YEAR   2007   2008   2010   2011   2012   2013   2014   2015   2016   TOTAL   AVERAGE   SITUMINOUS CC   IBNR Fact   YEAR   2007   2008   2009   2010   2011   2012   2013   2013   2012   2013   2013   2013   2013   2013   2013   2013   2013   2014   2015   2015   2007   2008   2009   2010   2011   2012   2013   2015   2015   2015   2007   2008   2009   2010   2011   2012   2013   2015   2015   2015   2015   2007   2007   2016   2017   2017   2017   2017   2017   2018   2017   2017   2018   2018   2018   2019   2010   2010   2011   2012   2013   2010   2010   2011   2012   2013   2010	Reported	0 0.5000  Awarded 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 1 1 0 0 2 2	0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.6222 3.7225 IBNR 0.2587 0.2318 0.2422 0.3001 0.3503 0.3870 0.4922	Pending 0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487 0.6222 3.7225  IBNR + Pending 0.2587 0.2318 0.2422 0.3001 0.3503 0.3870 0.4972	Award Ratio 0.027644 0.025906 0.029232 0.034461 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397 0.469035  0.126 Award Ratio 0.032596 0.092907 0.030517 0.037813 0.044138 0.048762 0.062017	9,186,706 7,521,400 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,784,031 87,824,840  Payroll 10,829,140 8,481,888 7,866,413 8,782,701 9,102,411 9,102,4115 10,355,884	Ultimate <u>Awarded</u> 0.027644 0.025906 0.029264 0.032484 0.050186 0.045700 0.055125 0.069136 0.048700 0.055125 0.069136 0.032596 0.029207 0.030517 0.032596 0.029207 0.030517 0.034138 0.048762 0.048762 0.048762 0.048762	Average Weekly Wage 779 807 836 845 858 888 917 932 951 978  Statewide Average Weekly Wage 779 807 836 845 858 888 917	Factor 1.056	Miner Years 214.8 169.7 164.1 171.5 233.1 191.0 151.5 163.4 183.0 182.2 1.824.3 Estimated Miner Years 253.2 191.4 171.4 188.2 193.2 185.5 205.7	Claims per 100  Miner Years 0.012870 0.012866 0.017814 0.020094 0.022843 0.026275 0.030165 0.033736 0.037779 0.043028 0.259870 0.025987  Frequency Claims per 100 Miner Years 0.012874 0.012864 0.017805 0.020092 0.022846 0.022846 0.022887 0.030149	Frequency
IBNR Fact  YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL AVERAGE  BITUMINOUS CC IBNR Fact YEAR 2007 2008 2009 2010 2011 2012 2013	Reported	Awarded 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 1 1 1 0 0 2 2	0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487 0.6222 3.7225 BNR 0.2287 0.2318 0.2422 0.3001 0.3503 0.3870 0.4923 0.4923 0.4923	Pending 0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4575 0.5487 0.6222 3.7225  IBNR + Pending 0.2587 0.2318 0.2422 0.3001 0.3503 0.3870 0.4923	Award Ratio 0.027644 0.025906 0.029232 0.034461 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397 0.469035  0.126 Award Ratio 0.032596 0.029207 0.030517 0.037813 0.044138 0.048762 0.062017 0.077276	9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,554,806 9,784,031 87,824,840  Payroll 10,829,140 8,481,888 7,866,413 8,732,701 9,102,411 9,047,745 11,721,184	Ultimate <u>Awarded</u> 0.027644 0.025906 0.02932 0.034441 0.053248 0.053125 0.045700 0.055125 0.069136 0.078397 0.469035 Expected Ultimate Awarded 0.032596 0.029207 0.030517 0.034138 0.044138 0.044138 0.048742 0.042070 0.072776	Average Weekly Wage  779 807 836 845 858 888 917 932 951 978  Statewide Average Weekly Wage 779 807 836 845 858 888 917 932	Factor 1.056	Miner Years 214.8 169.7 164.1 171.5 233.1 191.0 151.5 163.4 183.0 182.2 1.824.3 Estimated Miner Years 253.2 191.4 171.4 188.2 193.2 185.5 205.7 229.0	Claims per 100  Miner Years	Frequency
IBNR Fact   YEAR   2007   2008   2010   2011   2012   2013   2014   2015   2016   TOTAL   AVERAGE   SITUMINOUS CC   IBNR Fact   YEAR   2007   2008   2009   2010   2011   2012   2013   2013   2012   2013   2013   2013   2013   2013   2013   2013   2013   2014   2015   2015   2007   2008   2009   2010   2011   2012   2013   2015   2015   2015   2007   2008   2009   2010   2011   2012   2013   2015   2015   2015   2015   2007   2007   2016   2017   2017   2017   2017   2017   2018   2017   2017   2018   2018   2018   2019   2010   2010   2011   2012   2013   2010   2010   2011   2012   2013   2010	Reported	0 0.5000  Awarded 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 1 1 0 0 2 2	0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.6222 3.7225 IBNR 0.2587 0.2318 0.2422 0.3001 0.3503 0.3870 0.4922	Pending 0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487 0.6222 3.7225  IBNR + Pending 0.2587 0.2318 0.2422 0.3001 0.3503 0.3870 0.4972	Award Ratio 0.027644 0.025906 0.029232 0.034461 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397 0.469035  0.126 Award Ratio 0.032596 0.092907 0.030517 0.037813 0.044138 0.048762 0.062017	9,186,706 7,521,400 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,784,031 87,824,840  Payroll 10,829,140 8,481,888 7,866,413 8,782,701 9,102,411 9,102,4115 10,355,884	Ultimate <u>Awarded</u> 0.027644 0.025906 0.029264 0.032484 0.050186 0.045700 0.055125 0.069136 0.048700 0.055125 0.069136 0.032596 0.029207 0.030517 0.032596 0.029207 0.030517 0.034138 0.048762 0.048762 0.048762 0.048762	Average Weekly Wage 779 807 836 845 858 888 917 932 951 978  Statewide Average Weekly Wage 779 807 836 845 858 888 917	Factor 1.056	Miner Years 214.8 169.7 164.1 171.5 233.1 191.0 151.5 163.4 183.0 182.2 1.824.3 Estimated Miner Years 253.2 191.4 171.4 188.2 193.2 185.5 205.7	Claims per 100  Miner Years 0.012870 0.012866 0.017814 0.020094 0.022843 0.026275 0.030165 0.033736 0.037779 0.043028 0.259870 0.025987  Frequency Claims per 100 Miner Years 0.012874 0.012864 0.017805 0.020092 0.022846 0.022846 0.022887 0.030149	Frequency
IBNR Fact  YEAR  2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL AVERAGE  BITUMINOUS CO IBNR Fact  YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015	Reported	Awarded 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Denied  Denied  0 0 0 0 1 1 0 0 2	0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.4375 0.5487 0.6222 3.7225 BNR 0.2587 0.2587 0.2387 0.23001 0.3503 0.3870 0.4922 0.4013 0.4922 0.4013 0.4922	Pending 0.2194 0.2056 0.2320 0.2735 0.4226 0.3983 0.3627 0.5487 0.6222 3.7225  IBNR + Pending 0.2587 0.2518 0.2422 0.3001 0.3503 0.3870 0.4922 0.6133 0.6746	Award Ratio 0.027644 0.025906 0.029232 0.034441 0.053248 0.050186 0.045700 0.055125 0.069136 0.078397 0.469035  0.126 Award Ratio 0.032596 0.029207 0.030517 0.037813 0.044138 0.048762 0.062017 0.077276 0.085000	9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,754,806 9,784,031 87,824,840  Payroll 10,829,140 8,481,888 1,866,413 8,732,701 9,102,411 9,047,745 10,355,884 11,748,205	Ultimate <u>Awarded</u> 0.027644 0.025906 0.029232 0.034461 0.053248 0.045700 0.055125 0.069136 0.078397 0.469035 Expected Ultimate <u>Awarded</u> 0.032596 0.029207 0.030517 0.037813 0.044138 0.048762 0.042017 0.077276 0.065000	Average Weekly Wage 779 807 836 845 858 888 917 978 Statewide Average Weekly Wage 779 807 836 845 858 888 917 732 907 907 907 907 907 907 907 907 907 907	Factor 1.056	Miner Years 214.8 169.7 164.1 171.5 233.1 191.0 151.5 163.4 183.0 182.2 1.824.3 Estimated Miner Years 253.2 191.4 171.4 188.2 193.2 185.5 205.7 229.0 225.0	Claims per 100  Miner Years	Frequency

Source: Claim counts - CMCRB OD Database as of 4/30/2017 IBNR: Exhibit VIII-C

IBNR: Exhibit VIII-C
Payroll- Exhibit X-A-1
The Award Ratio is equal to Awarded ÷ (Awarded plus Denied). Other Classes use the Total Award Ratio: 0.126=11 / [11 + 76]
The Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G
Estimated Miner Years = Payroll / (SAWW x Adj. Factor x 52)
Frequency per 100 Miner Years = (Expected Ult. Awarded / Est. Miner Years) x 100
File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-08-B-2.xlsm]\VIII-B-2
Run Date: October 11, 2017 - 03:20:04 PM

#### COAL MINE COMPENSATION RATING BUREAU

#### FEDERAL BASIC OCCUPATIONAL DISEASE

Bink   Property   Pr	ANTHRACITE PRI	EP PLANT (01	83)												10-Year
TOTAL   Color   Colo	Year 2007 2008 2009 2010 2011 2012 2013 2014 2015	Reported 0 0 0 0 0 0 0 0 0 0 1 1 0 0 0 0 0 0 0	Awarded 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 1 1	0 0 0 0 0 0 0	0.2779 0.3134 0.3858 0.3352 0.4712 0.6475 0.6725 0.6825 0.7117	Pending 0.2779 0.3134 0.3858 0.3352 0.4712 0.6475 1.6725 1.6825 0.7117	Award Ratio 0.035015 0.039488 0.048611 0.042235 0.059371 0.081585 0.210735 0.211995 0.089674	5,817,291 5,733,543 6,264,606 4,876,927 6,123,259 7,569,023 7,074,886 6,521,541 6,196,596	Ultimate <u>Awarded</u> 0.035015 0.039488 0.048611 0.042235 0.059371 0.081585 0.210735 0.211795 0.089674	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932 951	Factor 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056 1.056	Miner <u>Years</u> 136.0 129.4 136.5 105.1 130.0 155.2 140.5 127.4 118.7	Claims per 100  Miner Years 0.025747 0.030517 0.030517 0.035612 0.040186 0.045670 0.052568 0.149989 0.166401 0.075547	Payroll Weighted <u>Frequency</u>
STUMMNOUS FREP FLANT (GIBN)   SAME PLANT (GI											978	1.056			
Separate   American   Bending   Bending   Bending   Bending   Bending   Bending   Series   Psychology   Psy	BITUMINOUS PR						IBNR +					Adjustment		Frequency	Weighted
YEAR   Reported   Awarded   Pending   Denied   BNR   Heading   BNR   Awarded   Roting   Pending   P	2007 2008 2009 2010 2011 2012 2013 2014 2015 2016	0 0 1 0 1 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 1 0 1 0 0 0	0.4513 0.5808 0.6105 0.9044 1.3528 1.4634 1.5987 1.6668 1.3966	0.4513 0.5808 0.6105 0.9044 1.3528 1.4634 1.5987 1.6668 1.3966	0.056864 0.073181 0.076923 0.113954 0.170453 0.184388 0.201436 0.210017 0.175972 0.148315	18,895,192 21,250,256 19,828,012 26,313,130 35,155,068 34,211,729 33,639,969 31,854,431 24,320,608 18,510,111	0.056864 0.073181 0.076923 0.113954 0.170453 0.184388 0.201436 0.210017 0.175972 0.148315	779 807 836 845 858 888 917 932 951	1.505 1.505 1.505 1.505 1.505 1.505 1.505 1.505 1.505	309.9 336.5 303.1 397.9 523.6 492.3 468.8 436.7 326.8 241.8	0.018349 0.021748 0.025379 0.028639 0.032554 0.037454 0.042968 0.048092 0.053847 0.061338 0.370368	Frequency
YEAR   Reported   Awarded   Pending   Denied   BNR   Pending   Rafio   Pending   Sp.51   Awarded   Weekly Wage   Factor   Years   Miner Years   Frequency   Claims per 100   1   1.3593   1.35															
YEAR         Reported         Awarded         Pending         Denied         IBNR + Pending         Ratio         Payroll         Awarded         Weekly Wage         Factor         Years         Miner reast         Miner rea	TOTAL OTHER CL	LASSES						0.126		Expected	Statewide		Estimated	Frequency	
YEAR         Reported         Awarded         Pending         Denied         IBNR         Pending         Ratio         Payroll         Awarded         Weekly Wage         Factor         Years         Miner Years         Fr           2007         12         3         2         7         8.8843         10.8843         13.7147         220,760.862         4,023573         779         4,471.8         0.089977         2008         7         2         1         4         12.2824         13.2824         1.673580         249.567,143         3.534974         807         4,806.4         0.073547           2009         9         1         0         8         13.4019         13.4019         1.688637         229.498,510         2.389159         836         4,211.8         0.056725         0.056725         0.056725         0.010         7         0         2         5         17.8426         1,260166         286,411,486         1.848750         845         4,809,1         0.038443         0.056725         0.056725         0.056725         0.056725         0.056725         0.056725         0.056725         0.056725         0.056725         0.056725         0.056725         0.056725         0.056725         0.056725         0.056725         <	YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL	Reported 1 0 1 1 1 1 1 1 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 1 0 0 1 1 0	1 0 1 0 1 1 1 0 0	1.3593 1.4931 1.5575 1.9107 2.6885 3.0221 3.2570 3.5296 3.4614 3.2965	Pending 1.3593 1.4931 1.5575 2.9107 2.6885 3.0221 4.2570 4.5296 3.4614 3.2965	Award Ratio 0.171272 0.188131 0.196245 0.366748 0.338751 0.380785 0.536382 0.570730 0.436136 0.415359	59,519,410 55,254,991 47,614,281 54,143,960 66,137,721 66,886,622 64,540,358 63,784,042 56,815,357 47,845,751	Ultimate <u>Awarded</u> 0.171272 0.188131 0.196245 0.366748 0.338751 0.380785 0.530382 0.570730 0.436136 0.415359	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932 951		Miner <u>Years</u> 1,259.7 1,103.9 908.4 997.6 1,181.3 1,158.3 1,082.5 1,060.5 949.1 788.0	Claims per 100  Miner Years 0.013596 0.017042 0.021603 0.036763 0.028676 0.032874 0.049550 0.053817 0.045953 0.052711 0.352585	Weighted Frequency
2016 7 0 6 1 33.3521 39.3521 4.958362 215.695.024 3.765134 978 3.253.0 0.115743  TOTAL 111 11 24 76 237.9283 261.9283 33.002970 2.708,148,063 36.578264 46,616.5 0.804684  Average 0.080468	YEAR 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 TOTAL Average	Reported 1 0 1 1 1 1 1 1 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 1 0 0 1 1 0	1 0 1 0 1 1 1 0 0	1.3593 1.4931 1.5575 1.9107 2.6885 3.0221 3.2570 3.5296 3.4614 3.2965	Pending 1.3593 1.4931 1.5575 2.9107 2.6885 3.0221 4.2570 4.5296 3.4614 3.2965 28.5757	Award Ratio 0.171272 0.188131 0.196245 0.366748 0.386751 0.380785 0.536382 0.570730 0.436136 0.415359 3.600538	59,519,410 55,254,991 47,614,281 54,143,960 66,137,721 66,886,622 64,540,358 63,784,042 56,815,357 47,845,751	Ultimate <u>Awarded</u> 0.171272 0.188131 0.196245 0.366748 0.338751 0.380785 0.556382 0.570730 0.436136 0.415359 3.600538	Average <u>Weekly Wage</u> 779 807 836 845 858 888 917 932 951 978	<u>Factor</u>	Miner Years 1,259.7 1,103.9 908.4 997.6 1,181.3 1,158.3 1,082.5 1,060.5 949.1 788.0 10,489.3	Claims per 100 Miner Years	Frequency

Source: Claim counts - CMCRB OD Database as of 4/30/2017 IBNR: Exhibit VIII-C

IBNR: Exhibit VIII-C
Payroll- Exhibit X-A-1
The Award Ratio is equal to Awarded ÷ (Awarded plus Denied). Other Classes use the Total Award Ratio: 0.126=11 / [11 + 76]
The Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G
Estimated Miner Years = Payroll / (SAWW x Adj. Factor x 52)
Frequency per 100 Miner Years = (Expected Ult. Awarded / Est. Miner Years) x 100
File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-08-B-2.xlsm]\VIII-B-3
Run Date: October 11, 2017 - 03:20:04 PM

COAL MINE COMPENSATION RATING BUREAU FEDERAL OCCUPATIONAL DISEASE ANTHRACITE UNDERGROUND (0160)

Claims with File Dates on or before 12-31-2016, Valued as of 4-30-2017

	_												Incre		quency and	BNR								Claims wit	h File Dates	on or befor	∋ 12-31-201	6, Valued as	of 4-30-2017
Reported Cla Months  12 24 36 48 60 72 84 96 108 120 132 144 156 168 180 192 204 216 228 240	1990 4 5 7 9 9 10 13 14 14 14 14 14 14 14 14 15 15	1991 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1992 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2	1993 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1994 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1995 0 0 0 0 1 1 1 1 1 2 2 2 2 2 2 2	1996 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1997 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1998 0 0 0 0 0 0 0 0 0 0 0 0 0	1999 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2000	2001 0 0 2 2 2 2 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4	2002 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Yev 2003	2004 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2005 0 0 0 0 0 0 0 0 0 0	2006 0 1 1 1 1 1 1 1 1 1 1	2007 0 0 0 0 0 0 0 0	2008 0 0 0 0 0 1 1 1	2009	2010 0 0 0 0 0 0	2011 0 0 1 2 2 2 2	2012 0 0 0 0	2013 1 1 1 1	2014 0 0 0	2015 0 0	2016 0		
Incremental 1 12-24 24-36 36-48 48-60 60-72 72-84 84-96 96-108 108-120 120-132 132-144 144-156 156-168 180-192 192-204 204-216 216-228 228-240	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 0 0 1 1 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 1 1 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 1 1 0 0 0	0 0 0 0	0 0 0	0 0	0			
180-192 192-204 204-216 216-228	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 1.39247 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	1995 1.49352 0.00000 0.00000 0.00000 0.66956 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	1997 1.57161  0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	1998 1.76229 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	1999 1.81416 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.55122 0.00000 0.55122 0.00000 0.05100000 0.00000	2000 1.37016 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2001 1.63652 0.00000 0.00000 0.61105 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2002 1.38655 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.72121 0.72121 0.00000	2003 1.35427 0.00000 0.00000 0.00000 0.00000 0.00000 0.73841 0.00000 0.00000 0.00000 0.00000 0.00000	2004 1.34532 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2005 1.41757 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2006 1.44252 0.69323 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2007 1.66254 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2008 2.13671 0.00000 0.00000 0.00000 0.00000 0.46801 0.00000 0.00000 0.00000	2009 1.33587 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2010 1.29959 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2011 1.25794 0.00000 0.79495 0.79495 0.00000 0.00000	2012 1.02926 0.00000 0.00000 0.00000 0.00000	2013 0.38188 0.00000 0.00000 0.00000	2014 0.25881 0.00000 0.00000	2015 0.25434 0.00000	2016 0.16376 Total=	Average 0.05333 0.06115 0.06115 0.06105 0.00000 0.08300 0.00000 0.00000 0.00000 0.00000 0.14738 0.05548 0.000000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.000000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.000000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.000000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.000000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.000000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.0000	Smoothed 0.22654 0.14938 0.08605 0.08300 0.06115 0.05680 0.05674 0.05533 0.4700 0.00000
IBNR Claims Cumulative F times Payroll	actor									0.00000										0.21255 0.28394							0.93662 0.15338		

Source: Coal Mine Compensation Rating Bureau Database as of 4-30-2017 Poyrolls: Exhibit X-A-1 & X-A-2 File: C:\Clients\Coal Mine\2017 Rate Filing\XL\\2017-08-C.xlsm\VIII-C-1 Run Date: October 10, 2017 - 01:06:01 PM

COAL MINE COMPENSATION RATING BUREAU FEDERAL OCCUPATIONAL DISEASE BITUMINOUS UNDERGROUND (0158)

													BIIUW	INOUS UND	ERGROUND	(0136)								Claims wit	th File Dates	on or before	e 12-31-201	6, Valued as	of 4-30-2017
Reported C Months 12 24 36 48 60 72 84 96 108 120 132 144 156 168 180 192 204 216 228 240	1990 3 3 7 8 9 10 12 12 13 14 14 14 16 16 17 17 17	1991 2 6 7 9 9 9 10 10 11 12 12 13 14 14 14 15 19 19	1992 2 4 5 9 111 14 15 19 19 19 20 20 21 21 21 23 3 25	1993 1 1 2 3 4 4 4 5 5 5 5 6 6 6 6 7 7 7 8 8 8 9 9	1994 4 4 7 8 9 9 9 9 11 11 11 11 11 11 12 13 13 14 15	1995 3 3 5 6 7 8 8 8 8 8 8 8 9 9 9 9 10 10	1996 0 2 2 2 2 3 4 4 5 5 5 5 5 5 5 5 6 8 8 8	1997 0 1 4 5 6 7 7 7 7 7 7 7 8 9 9 9 9 9 9 9	1998 1 2 2 5 5 5 5 5 5 5 5 5 5 5 5 5 6 6 7 7	1999 2 4 6 7 7 7 7 8 9 10 0 11 15 16 17 18 19 19	2000 2 4 4 4 4 6 6 6 6 8 11 11 11 12 33 36	2001 1 1 2 2 2 3 4 4 4 6 6 6 7 7 7 7	2002 1 2 4 5 6 6 6 7 7 7 11 11 13 15 16 17	Prenental Fre Yeac 2003		2005 0 0 0 0 0 0 0 1 1 1 1	2006 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2007 0 0 2 2 2 3 3 3 3 4 4 4	2008 0 0 0 0 0 0 0 0	2009 0 1 1 4 4 5 5 5	2010 0 2 2 2 2 2 3 4	2011 2 2 2 2 2 4 4	2012 1 3 4 4 4	2013 2 3 6 6	6	2015 7 12	2016 6		
Incrementa 12-24 24-36 36-48 48-60 60-72 72-84 84-96 96-108 108-120 120-132 132-144 144-156 156-168 168-180 180-192 192-204 204-216 216-228 228-240	0 1 0 0 0 0	1 0 0 1 4 0 0	0 0 1 0 1 0 0 2 2	0 1 0 0 1 0 1	0 0 0 0 0 1 1 0 1 1 2	0 0 0 0 0 1 0 0	1 0 0 0 0 0 0 0 0 0	0 0 0 0 1 1 0 0 0 0	0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0	0 0 0 1 1 1 1 4 4 1 1 1 0	0 0 0 2 0 0 0 2 3 3 0 0 3 7 13 2	1 0 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 2 1 1 0 0 0 0 1 1 0 0 0 4 4 0 0 2 2 2 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 1 0 0 0 0 0 0 0 0	0 0 0 0 0 1 1 0 0 0	0 0 1 0 0 0 0 0	0 2 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0		1 0 3 0 0 1 0	2 0 0 0 0 1 1	0 0 0 2 0	2 1 0 0	1 3 0		5			
204-216 216-228	0.01580	0.00000 0.00000 0.01715 0.06859 0.00000	0.00000 0.11577 0.00000 0.11577	0.01895 0.00000 0.00000 0.01895 0.00000 0.01895 0.00000 0.01895	0.00000 0.00000 0.00000 0.00000 0.01650 0.01650 0.01650	0.00000 0.00000 0.00000 0.00000 0.01532 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.01329 0.02659 0.00000	0.00000 0.00000 0.00000 0.01421 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.04911	0.00000 0.00000 0.01704 0.01704 0.01704 0.01704 0.06816 0.01704 0.00000 0.01704 0.01704 0.01704	0.00000 0.00000 0.04209 0.00000 0.00000 0.00000 0.04209 0.06313 0.00000 0.06313 0.14730	0.00000 0.02061 0.02061 0.00000 0.00000 0.04122 0.00000 0.02061 0.00000 0.00000	2002 40.83800 0.04897 0.02449 0.02000 0.00000 0.00000 0.00000 0.00000 0.09449 0.00000 0.04897 0.04897 0.02449	2003 36.49841 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.02740 0.00000 0.00000 0.00000 0.00000	2004 46.07390 0.00000 0.02170 0.02170 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2005 66.27576 0.00000 0.00000 0.00000 0.00000 0.01509 0.00000 0.00000 0.00000 0.00000 0.00000		0.00000 0.02503 0.00000 0.01251 0.00000 0.00000 0.01251 0.00000	0.00000	2009 101.34814 0.00987 0.00000 0.02960 0.00000 0.00987 0.00000 0.00000	2010 125.39358 0.01595 0.00000 0.00000 0.00000 0.00797	2011 148.48571 0.00000 0.00000 0.00000 0.01347 0.00000	2012 153.61891 0.01302 0.00651 0.00000 0.00000	2013 145.14625 0.00689 0.02067 0.00000	183.43195	2015 140.57028 0.03557	2016 118.88330 Total=	Average 0.00751 0.01155 0.00692 0.00547 0.00296 0.00501 0.00416 0.00659 0.00885 0.00723 0.01642 0.00675 0.01039 0.011593 0.011593 0.011644 0.02970 0.01593 0.011644 0.02970 0.01593 0.011644 0.02970 0.01593 0.011644 0.02970 0.01593 0.011644 0.02970 0.01593 0.011644 0.01593 0.011644 0.01593 0.011644 0.01593 0.011644 0.01593 0.011644 0.01593 0.011644 0.01593 0.011644 0.01593 0.011644 0.01593 0.011644 0.01593 0.011644 0.01593 0.011644 0.01593 0.011644 0.01593 0.011644 0.01593 0.011644 0.01593 0.011644 0.01593 0.011644 0.01693 0.01694 0.01693	Smoothed 0.02970 0.01847 0.01642 0.01593 0.01155 0.01064 0.01039 0.00902 0.00885 0.00751 0.00723 0.00679 0.00679 0.00659 0.00501 0.00501 0.00501 0.00416 0.00296 0.19342
IBNR Claims Cumulative times Payro	Factor																					0.10135 15.04903							

Source: Coal Mine Compensation Rating Bureau Database as of 4-30-2017 Poyrolls: Exhibit X-A-1 & X-A-2 File: C:\Clients\Coal Mine\2017 Rate Filing\XL\\2017-08-C.xlsm\VIII-C-2 Run Date: October 10, 2017 - 01:06:01 PM

COAL MINE COMPENSATION RATING BUREAU FEDERAL OCCUPATIONAL DISEASE ANTHRACITE SURFACE (0153)

Claims with File Dates on or before 12-31-2016, Valued as of 4-30-2017

												Incre	emental Fre	auency an	d IBNR								Claims wit	h File Dates	on or befor	e 12-31-201	6, Valued as	of 4-30-2017
Reported Claims         1990           Months         1990           12         5           24         15           36         17           48         20           60         22           72         23           84         24           96         26           108         26           120         26           132         26           144         26           156         26           168         27           180         28           192         28           204         28           216         28           228         28           240         29	111 16 16 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	1992 5 10 11 13 14 14 14 14 14 14 14 14 14 14 14 14 14	1993 100 14 16 21 21 22 23 24 24 24 24 24 25 25 25 25 25	1994 111 14 17 19 21 21 21 21 22 23 23 23 24 24 24 24 24 24 25	1995 2 6 10 12 13 13 15 16 19 21 21 21 21 22 24 24 24 24 24	1996 6 6 6 6 8 8 8 9 9 9 9 9 9 9 9 10 10 11 11 11	1997 4 7 7 8 8 8 8 8 8 8 8 9 9 9 9 9 9	1998 4 6 6 7 7 8 8 8 8 8 9 9 9 9 9	1999 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1	2000 1 4 4 5 5 5 5 7 7 7 7 7 7 7 7 7	2001 2 2 2 4 5 5 5 5 6 6 7 7 7 7	2002 3 3 4 5 5 6 6 6 6 6 6 6 6 6	Yec 2003 0 0 1 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		2005 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2006 0 0 0 1 1 1 1 1 1 1	2007 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2008 0 1 1 1 1 1 1 1	2009 0 0 1 1 1 2 2 2	2010 0 0 0 0 0 0	2011 0 1 1 1 1 1 1	2012 0 0 1 1 1 1	2013	2014	2015 0 1	2016		
Incremental Changes 12-24 24-36 36-48 48-60 60-72 72-84 84-96 96-108 108-120 120-132 132-144 144-156 156-168 1 180-192 192-204 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0	0 0 0 1 0 0 0	1 1 0 0 1 0 0 0 0	3 2 0 0 0 0 2 1 1 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 1 1 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 2 1 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0	0 1 1 0 0 0 0 0 0 0	1 2 2 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0	1 0 0 0 1 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 0 0 0	0 0 1 0 0 0 0 0	0 0 0 0 0 0 0 0	1 0 0 0 0 0 0	0 1 0 0 1 0 0	0 0 0 0 0 0 0	1 0 0 0	0 1 0 0	0 0 0	0 0	1			
Payroll 1990 (\$Millions) 32.39289 12-24 24-36 36-48 48-60 60-72 72-84 84-96 96-108 108-120 120-132 132-144 144-156 156-168 188-180 0.03087 180-192 0.00000 216-228 0.00000 228-240 0.03087	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.03393	0.00000 0.00000 0.03322 0.00000 0.00000 0.00000	0.03310 0.00000 0.00000 0.03310 0.00000 0.00000 0.00000 0.00000	0.09858 0.00000 0.00000 0.00000 0.09858 0.04929 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.06176 0.00000 0.06176	0.00000 0.00000 0.00000 0.00000 0.00000 0.05623 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.05755 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.05423 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.11899 0.00000 0.00000 0.00000 0.00000	0.15475 0.07738 0.00000 0.00000 0.00000 0.07738 0.00000 0.00000 0.00000 0.00000	2002 11.04657 0.09053 0.09053 0.00000 0.09000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2003 11.92821 0.08383 0.16767 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2004 12.35973 0.08091 0.00000 0.00000 0.08091 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000	2006 12.06532 0.00000 0.00000 0.08288 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2007 14.86656 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2008 16.22023 0.06165 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2009 15.89353 0.00000 0.6292 0.00000 0.00000 0.05292 0.00000 0.00000	2010 13.31919 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2011 19.50743 0.05126 0.00000 0.00000 0.00000 0.00000	2012 24.73471 0.00000 0.44043 0.00000 0.00000	2013 20.72001 0.00000 0.00000 0.00000	2014 18.91134 0.00000 0.00000	2015 22:23435 0.04498	2016 19.04333	Average 0.03115 0.02781 0.02524 0.01218 0.01180 0.00645 0.00000 0.00595 0.02091 0.00850 0.02043 0.00433 0.01026 0.01026 0.01026 0.01026 0.01043 0.010377 0.00800 0.0377 0.00800 0.01055	Smoothed 0.03115 0.02781 0.02524 0.02091 0.01643 0.01218 0.01180 0.01092 0.00850 0.00850 0.00855 0.00433 0.00433 0.00377 0.00000 0.000000 0.000000 0.000000 0.000000
IBNR Claims Cumulative Factor times Payroll																			0.06415 1.01957									

Source: Coal Mine Compensation Rating Bureau Database as of 4-30-2017 Poyrolls: Exhibit X-A-1 & X-A-2 File: C:\Clients\Coal Mine\2017 Rate Filing\XL\\2017-08-C.xlsm\VIII-C-3 Run Date: October 10, 2017 - 01:06:01 PM

COAL MINE COMPENSATION RATING BUREAU FEDERAL OCCUPATIONAL DISEASE

BITUMINOUS SURFACE (0156) Claims with File Dates on or before 12-31-2016, Valued as of 4-30-2017

												Incre	emental Fre	quency an	H IRNR								Claims wi	th File Dates	on or befor	e 12-31-201	6, Valued as	of 4-30-2017
Reported Claims         Months         1990           24         18         36         19           48         22         60         22         72         23         84         26         60         28         108         28         108         28         120         29         144         30         156         31         156         31         168         33         180         33         180         33         192         34         204         36         216         36         228         36         240         37	5 5 11 1 2 1 19 2 2 19 2 2 20 20 20 20 3 3 22 24 3 3 22 4 3 32 3 3 3 3 3 3 3 3	1992 6 13 17 7 19 19 20 20 20 22 23 23 23 24 24 24 25 26 27	1993 1 3 5 6 8 8 9 9 9 100 10 10 10 10 11 11 13 13 13	1994 1 5 6 7 8 9 10 11 11 12 13 13 13 13 14 14 14 15 15 15	1995 5 7 8 100 111 13 144 15 18 21 21 21 21 22 22 22 22 24 24 24	1996 4 5 5 6 7 7 8 8 9 10 10 10 11 11 11 11 12 13 13 13 14 14 15	1997 2 3 3 5 5 7 7 7 8 8 8 8 9 10 10 10	1998 0 2 2 2 2 2 3 3 3 4 4 5 5 5 6 6 6 6 6 6 6 6 6 6 6 7 7 8 8 9	1999 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2000 3 3 3 5 6 7 7 7 7 7 7 7 7 7 8 8	2001 0 1 1 1 1 2 2 2 2 3 3 3 3 4 5 7	2002 1 2 2 2 2 2 2 2 2 2 2 2 2 3 3 4 4 4 4 4	Yec 2003 0 0 0 1 1 1 1 1 1 2 2 3 3 4 4 5 5 5		2005 0 0 1 1 1 1 1 1 1 1 1	2006 0 1 1 2 2 2 4 4 4 4 4	2007 2 2 2 3 3 4 4 4 5	2008 0 1 1 1 1 4 5 5 5	2009	2010 1 1 1 1 1 2 2	2011 0 1 1 2 2 3 3	2012 3 8 8 8 8	2013 2 3 3 4	2014 0 1 1	2015	2016 0		
Incremental Changes 12-24 24-36 36-48 48-60 60-72 72-84 84-96 96-108 108-120 120-132 132-144 144-156 156-168 188-180 00 180-192 172-204 204-216 216-228 228-240 1	1 1 2 0 0 0 0 2 1 1 0 0 0 0 0 0 0 0 0 0	0 0 1 0 0 1 1 0	0 0 0 0 0 1 1 0 2 0 0	1 0 0 0 1 0 0 1 0 0	3 3 0 0 0 1 0 0 0 0 0	1 0 0 0 1 1 0 0 0 1 1 0 0 1 1 0 0 1 1	2 0 0 1 0 0 0 0 0 0	1 0 1 1 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 1 1	2 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 1 1 0 0 0 1 1 0 0 1 1 2 2	1 0 0 0 0 0 0 0 0 0 1 1 1 0 0 0	0 1 0 0 0 0 0 0 1 1 1 0	0 0 0 0 0 0 0 0 0 0 0	0 1 0 0 0 0 0 0 0	1 0 1 0 0 0 2 2 0 0 0	0 0 1 1 0 0 0 0	1 0 0 0 3 1 1 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 1 0	1 0 1 1 0	5 0 0	1 0 1	1 0	2			
Payroll 1990 (\$Millions) 124.18907  12-24 24-36 36-48 48-60 60-72 72-84 84-96 96-108 108-120 120-132 132-144 144-156 156-168 188-180 0.00000 180-192 0.00805 192-204 0.00000 216-228 0.00000 0.00805	0.00000 0 0.01912 5 0.00000 0 0.00956 0 0.00000 0 0.00000	0.00000 0.00990 0.00000 0.00000 0.00990 0.00990	0.00000 0.00000 0.00000 0.01058 0.00000 0.02115 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.03809 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.02540 0.02540	0.00000 0.00000 0.01285 0.00000 0.01285 0.01285 0.00000 0.00000 0.01285	0.00000 0.00000 0.01473 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.01473	0.00000 0.01571 0.01571 0.00000 0.00000 0.01571 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.02003 0.02003 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	0.00000 0.00000 0.00000 0.01720 0.00000 0.00000 0.01720 0.00000 0.01720 0.01720	2002 53.50209 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.01869 0.01869 0.00000 0.00000 0.00000	2003 47.87374 0.00000 0.02089 0.00000 0.00000 0.00000 0.00000 0.02089 0.02089 0.02089 0.02089 0.02089 0.02089 0.02089	2004 56.21730 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.01779 0.00000 0.00000	2005 64.87156 0.00000 0.01542 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2006 63.79850 0.01567 0.00000 0.01567 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2007 64.80809 0.00000 0.01543 0.00000 0.01543 0.00000 0.00000 0.00000 0.00000 0.01543	2008 74.60123 0.01340 0.0000 0.0000 0.0000 0.0000 0.04021 0.01340 0.00000 0.00000	2009 63.30670 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	2010 74.25518 0.00000 0.00000 0.00000 0.00000 0.01347 0.00000	2011 87.73051 0.01140 0.00000 0.01140 0.00000	2012 77.89050 0.04419 0.00000 0.00000 0.00000	2013 62.71806 0.01594 0.00000 0.01594	2014 55.36862 0.01806 0.00000	2015 42.00009 0.04762	2016 29.75889	Average 0.01433 0.00279 0.002450 0.00242 0.00686 0.00477 0.00121 0.00282 0.00375 0.00282 0.00161 0.00488 0.00460 0.00643 0.00691 0.00891 0.00891 0.00890 0.009739	Smoothed 0.01433 0.00966 0.00881 0.00882 0.00686 0.00643 0.00505 0.00488 0.00477 0.00460 0.00450 0.00375 0.00282 0.00282 0.00279 0.00242 0.00175 0.00161 0.00173
IBNR Claims Cumulative Factor times Payroll																			0.03792 2.40059							0.09739 2.89822		

Source: Coal Mine Compensation Rating Bureau Database as of 4-30-2017 Poyrolls: Exhibit X-A-1 & X-A-2 File: C:\Clients\Coal Mine\2017 Rate Filing\XL\\2017-08-C.xlsm\VIII-C-4 Run Date: October 10, 2017 - 01:06:01 PM

COAL MINE COMPENSATION RATING BUREAU FEDERAL OCCUPATIONAL DISEASE OTHER CLASSIFICATIONS - FEDERAL

Claims with File Dates on or before 12-31-2016, Valued as of 4-30-2017

													Incre	nental Freq	vency and I	BNR											
Reported Cla	ims													Year													
Months	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
12	0	0	0	1	0	0	0	1	1	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0
24	0	0	1	1	0	0	0	2	2	1	0	0	1	0	1	1	0	0	0	0	0	0	0	1	1	0	
36	0	0	1	1	0	0	0	4	2	3	1	0	1	0	1	1	0	0	0	0	0	1	0	1	1		
48	0	0	1	1	0	0	0	4	2	3	1	0	1	0	1	1	0	0	0	0	0	1	1	2			
60	0	0	2	1	0	0	0	5	2	4	1	0	1	0	1	1	0	0	0	0	0	1	1				
72	0	0	2	1	0	0	0	6	2	4	1	0	2	0	1	1	0	0	0	1	0	1					
84	0	0	2	1	0	0	0	6	3	4	1	0	2	1	1	1	0	0	0	1	1						
96	0	0	2	1	0	0	0	6	3	4	1	0	2	1	1	2	0	0	0	1							
108	0	0	2	1	0	0	0	6	3	4	1	0	2	1	1	2	1	1	0								
120	0	0	2	1	0	0	0	6	3	4	1	0	2	1	1	2	2	1									
132	0	0	2	1	0	0	0	6	3	4	1	0	2	1	1	2	2										
144	0	0	2	1	0	0	0	6	3	5	1	0	2	1	1	2											
156	0	0	2	1	0	0	0	6	3	5	1	0	2	1	1												
168	0	0	2	1	0	0	0	6	3	5	1	0	2	1													
180	0	0	2	1	0	0	0	7	3	5	1	0	2														
192	0	0	2	1	0	0	0	7	3	5	1	1															
204	0	0	2	1	0	0	0	7	3	5	1																
216	0	0	2	1	0	0	0	7	3	5																	
228	0	0	2	1	0	0	0	7	3																		
240	0	0	2	1	0	0	0	8																			

Payroll 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 1998 1999 1995 1996 1997 1998 1999 2000 2011 2012 2013 2014 2015 2016 (§Millions) 64.28048 55.2629 47.49607 58.7479 60.28848 60.34187 62.8346 47.362183 31.35678 30.45185 29.53868 30.45185

Exhibit VIII-C-5

COAL MINE COMPENSATION RATING BUREAU FEDERAL OCCUPATIONAL DISEASE

ALL CLASSIFICATIONS Claims with File Dates on or before 12-31-2016, Valued as of 4-30-2017

	ALL CLASSIFICATIONS	Claims with File Dates on or before 12-31-2016, Valued as of 4-30-2017
Reported Claims           Months         1990         1991         1992         1993         1994         1995         1996         1997           12         22         19         14         13         17         10         9         7           24         41         34         29         21         24         16         13         13           36         50         41         35         26         31         23         13         18           48         59         49         43         33         35         28         14         22           60         62         52         48         36         39         31         16         24           72         66         56         52         38         40         35         20         26           84         75         60         52         39         41         38         21         28           96         80         62         52         41         42         40         24         28           108         81         63         55         42         45         46         24	15     11     13     7     11     4     6     4     3     6     2     3     3       16     12     16     9     13     4     7     4     6     7     2     6     3       18     14     18     13     16     4     8     4     6     9     6     9     5       19     14     20     15     16     6     8     5     8     9     7     9     7       20     15     20     15     17     7     8     6     8     10     7     9       21     16     20     18     17     9     8     6     9     11     7       21     18     22     10     9     6     10     12       21     19     24     21     23     10     9     6     10       23     24     27     21     28     12     10       24     26     30     22     30     12       25     28     37     23     31       26     29     51     26       27     30     55       32	2011 2012 2013 2014 2015 2016 2
Incremental Changes  12-24 24-36 33-48 48-60 60-72 77-84 84-96 96-108 00-108-120 2 5 0 1 120-132 0 1 0 1 0 1 1 132-144 0 1 1 0 0 0 1 1 132-144 0 0 1 0 0 0 1 144-156 3 0 2 1 2 4 1 156-168 3 0 2 1 2 4 1 168-180 2 2 0 2 1 1 2 4 1 180-192 1 1 1 0 0 1 192-204 2 5 1 3 1 1 2 1 204-216 0 0 1 2 2 204-216 0 0 1 2 1 216-228 1 1 3 1 1 0 0 1 228-240 2 1 3 0 3 0 1 2	2 1 1 1 1 0 2 0 2 1 2 1 0 0 0 0 1 0 0 0 0	2 7 3 5 8 2 2 3 5 2 1 2 3 0
12-24 24-36 36-48 48-60 60-72 72-84 84-96 96-108 108-120 120-132 120-132 120-132 130-144 14-156 0.00000 0.00000 0.00000 168-180 0.00000	175,23425   163,55466   145,17101   152,19366   138,87132   133,95628   160,69703   196,69173   201,34946   220,76087   249,56714   229,49852   268,41150   323,00000   200,	2011 2012 2013 2014 2015 2016 3.11931 323,96000 293,50656 321,75476 261.87442 215,69503  0.00619 0.02161 0.01022 0.01554 0.03055 0.01020 0.01023 0.00619 0.00617 0.01022 0.01554 0.03055 0.00633 0.00960 0.00619 0.00681 0.00681 0.00633 0.00960 0.000928 0.00000 0.00681 0.00681 0.00634 0.006950 0.00028 0.00000 0.00681 0.00681 0.00682 0.00569 0.00682 0.000649 0.00681 0.00681 0.00689 0.00689 0.00689 0.00689 0.00683 0.009681 0.00683 0.00716 0.00689 0.00689 0.00683 0.009681 0.00689 0.00689 0.00683 0.009681 0.00687 0.00689 0.00683 0.00681 0.00683 0.00681 0.00683 0.00681 0.00683 0.00643 0.00683 0.00683 0.00683 0.00683 0.00624 0.00624 0.00627 0.00278 0.00627 0.00278 0.00278 0.00278 0.00278 0.00278 0.00278 0.00278 0.00278 0.00278 0.00278 0.02278 0.02278 0.02278 0.02278 0.00683 0.00278 0.02278 0.00627
IBNR Claims Cumulative Factor times Payroll	0.00278	

Source: Counts and Payrolls: Sum of Exhibits VIII-C-1 thru VIII-C-5

# COAL MINE COMPENSATION RATING BUREAU FEDERAL OCCUPATIONAL DISEASE ALL CLASSIFICATIONS

#### **IBNR By Class**

#### CLASSIFICATION

			Anthracita	Rituminaus	Anthracite	Bituminous
A. IBNR Factor	Coke	Auger	Co-Gen		Prep Plant	Prep Plant
Year	0154	0157	0181	0182	0183	0184
2007	0.0478	0.0478	0.0478	0.0478	0.0478	0.0478
2008	0.0547	0.0547	0.0547	0.0547	0.0547	0.0547
2009	0.0616	0.0616	0.0616	0.0616	0.0616	0.0616
2010	0.0687	0.0687	0.0687	0.0687	0.0687	0.0687
2011	0.0770	0.0770	0.0770	0.0770	0.0770	0.0770
2012	0.0856	0.0856	0.0856	0.0856	0.0856	0.0856
2013	0.0951	0.0951	0.0951	0.0951	0.0951	0.0951
2014	0.1047	0.1047	0.1047	0.1047	0.1047	0.1047
2015	0.1149	0.1149	0.1149	0.1149	0.1149	0.1149
2016	0.1272	0.1272	0.1272	0.1272	0.1272	0.1272
B. Adjustment Factor	0.2000	0.4000	0.5000	0.5000	1.0000	0.5000
C. Payroll Per \$1M						
2007	13.66993	1.12116	9.18671	10.82914	5.81729	18.89519
2008	9.76115	2.50676	7.52140	8.48189	5.73354	21.25026
2009	5.17355	0.94696	7.53474	7.86641	6.26461	19.82801
2010	5.43566	0.82750	7.95805	8.73270	4.87693	26.31313
2011	3.59909	1.17626	10.98164	9.10241	6.12326	35.15507
2012	5.73811	0.80821	9.31181	9.04775	7.56902	34.21173
2013	4.79191	1.04695	7.63076	10.35588	7.07489	33.63997
2014	4.46440	0.86159	8.36090	11.72118	6.52154	31.85443
2015	4.34038	0.65477	9.55481	11.74821	6.19660	24.32061
2016	2.31372	0.39278	9.78403	11.38684	5.45827	18.51011
D. IBNR						
2007	0.1306	0.0214	0.2194	0.2587	0.2779	0.4513
2008	0.1067	0.0548	0.2056	0.2318	0.2777	0.5808
2009	0.0637	0.0233	0.2320	0.2422	0.3858	0.6105
2010	0.0747	0.0238	0.2735	0.3001	0.3352	0.9044
2011	0.0554	0.0220	0.4226	0.3503	0.4712	1.3528
2012	0.0982	0.0302	0.3983	0.3870	0.6475	1.4634
2013	0.0911	0.0398	0.3627	0.4922	0.6725	1.5987
2014	0.0934	0.0361	0.4375	0.6133	0.6825	1.6668
2015	0.0997	0.0301	0.5487	0.6746	0.7117	1.3966
2016	0.0589	0.0200	0.6222	0.7241	0.6942	1.1771
2010	0.0007	0.0200	0.0222	J., _ 11	3.07 IZ	

Source: IBNR Factor - Exhibit VIII-C-6 Adjustment Factor - Judgement

Payroll = Exhibit X-A IBNR = A times B times C

File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-08-C.xlsm]VIII-C-7

Run Date: October 10, 2017 - 01:06:01 PM

# COAL MINE COMPENSATION RATING BUREAU FEDERAL OCCUPATIONAL DISEASE ALL CLASSIFICATIONS

#### **IBNR By Class**

#### CLASSIFICATION

			A 11 11	Diti.	A 11 11	D:1
A. IBNR Factor	Coke	Auger	Co-Gen	Bituminous	Prep Plant	Bituminous Prep Plant
Year	0154	01 <i>57</i>	0181	0182	0183	0184
1997	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1998	0.0000	0.0000	0.0008	0.0008	0.0008	0.0000
1999	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028
2000	0.0064	0.0064	0.0064	0.0064	0.0064	0.0064
2001	0.0150	0.0107	0.0107	0.0107	0.0107	0.0107
2001	0.0130	0.0130	0.0130	0.0130	0.0130	0.0130
2002	0.0173	0.0173	0.0173	0.0173	0.0173	0.0173
2004	0.0296	0.0237	0.0237	0.0237	0.0237	0.0237
2004	0.0354	0.0276	0.0270	0.0276	0.0270	0.0276
2006	0.0334	0.0334	0.0334	0.0334	0.0334	0.0334
2006	0.0414	0.0414	0.0414	0.0414	0.0414	0.0414
B. Adjustment Factor	0.2000	0.4000	0.5000	0.5000	1.0000	0.5000
C. Payroll Per \$1M						
1997	53.11908	1.19349	3.52016	0.85605	1.14940	13.78365
1998	13.35390	1.23790	3.45878	1.16120	1.03290	11.11210
1999	12.29348	1.13689	3.60431	1.49428	1.23112	10.69178
2000	12.09257	1.20588	4.47346	1.87072	1.31947	8.57476
2001	10.37583	1.42913	4.66181	2.12133	2.21630	10.15503
2002	10.48501	1.15084	5.65877	2.38612	2.32282	10.09455
2003	11.53408	1.10222	7.00962	3.05252	3.40800	10.19521
2004	12.04913	1.05880	7.35151	6.37448	4.40665	13.46020
2005	12.86098	1.02654	7.85529	8.52475	5.17007	16.54831
2006	12.73739	1.06683	8.41253	9.42358	4.88588	17.05097
D. IBNR						
1997	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1998	0.0074	0.0014	0.0048	0.0016	0.0029	0.0154
1999	0.0158	0.0029	0.0116	0.0048	0.0079	0.0343
2000	0.0258	0.0051	0.0238	0.0100	0.0141	0.0457
2001	0.0310	0.0086	0.0349	0.0159	0.0332	0.0760
2002	0.0405	0.0089	0.0546	0.0230	0.0448	0.0974
2003	0.0551	0.0105	0.0837	0.0364	0.0813	0.1217
2004	0.0712	0.0125	0.1087	0.0942	0.1303	0.1989
2005	0.0910	0.0145	0.1389	0.1508	0.1829	0.2927
2006	0.1056	0.0177	0.1743	0.1953	0.2025	0.3533

Source: IBNR Factor - Exhibit VIII-C-6 Adjustment Factor - Judgement Payrolls: Exhibit X-A pages 1 & 2

IBNR = A times B times C

File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-08-C.xlsm]VIII-C-8

Run Date: October 10, 2017 - 01:06:01 PM

Yearly

#### Occupational Disease Federal Benefits

#### TABLE OF MONTHLY BLACK LUNG BENEFIT RATES

							Yearly
	T D-				Claimant	Dependent	Percentage
10/1/1981	Time Pe	9/30/198	20		Benefit 293.20	<u>Benefit</u> 146.60	<u>Increase</u>
10/1/1982	to	12/31/198			304.90	152.50	4.0%
1/1/1984	to	12/31/198			317.10	158.60	4.0%
1/1/1985	to	12/31/198	35		328.20	164.10	3.5%
1/1/1986	to	12/31/198	36		328.20	164.10	0.0%
1/1/1987	to	12/31/198	37		338.00	169.00	3.0%
1/1/1988	to	12/31/198			344.80	172.40	2.0%
1/1/1989	to	12/31/198			358.90	179.50	4.1%
1/1/1990	to	12/31/199	0		371.80	185.90	3.6%
1/1/1991	to	12/31/199			387.10	193.60	4.1%
1/1/1992 1/1/1993	to to	12/31/199 12/31/199			403.30 418.20	201.70 209.10	4.2% 3.7%
1/1/1994 1/1/1995	to to	12/31/199			427.40 427.40	213.70 213.70	2.2% 0.0%
1/1/1996	to	12/31/199			435.10	217.60	1.8%
1/1/1997 1/1/1998	to to	12/31/199			445.10 455.10	222.60 227.60	2.3% 2.2%
1/1/1999	to	12/31/199			469.50	234.80	3.2%
1/1/2000	to	12/31/200			487.40	243.60	3.8%
1/1/2001	to	12/31/200			500.50	250.30	2.7%
1/1/2002	to	12/31/200			518.50	259.30	3.6%
1/1/2003	to	12/31/200	)3		534.60	267.30	3.1%
1/1/2004	to	12/31/200	)4		549.00	274.50	2.7%
1/1/2005	to	12/31/200	)5		562.80	281.30	2.5%
1/1/2006	to	12/31/200	)6		574.60	287.20	2.1%
1/1/2007	to	12/31/200	)7		584.40	292.20	1.7%
1/1/2008	to	12/31/200	08		599.00	299.00	2.5%
1/1/2009	to	12/31/200	)9		616.30	308.20	2.9%
1/1/2010	to	12/31/201			625.60	312.80	1.5%
1/1/2011	to	12/31/201	1		625.60	312.80	0.0%
1/1/2012	to	12/31/201			625.60	312.80	0.0%
1/1/2013	to	12/31/201			625.60	312.80	0.0%
1/1/2014	to	12/31/201	4		631.80	315.90	1.0%
1/1/2015	to	12/31/201			638.10	319.10	1.0%
1/1/2016	to	12/31/201			644.50	322.30	1.0%
1/1/2017	to	12/31/201	/		651.00	325.40	1.0%
		All Years	Average				2.3%
		Last 10 Yrs	Average				1.1%
		Last 5 Yrs	Average				0.8%
		Last 3 Yrs	Average				1.0%
C-I+I D	61 01		0017	4-	0010		1 0007
Selected Ber Selected Ber		-	2017 2018	to to	2018 2019		1.00% 1.50%
Selected Bei		-	2019	to	2020		2.50%
Selected Av	eraae /	Annual Benefit (	Chanae (Last	Year's Se	election; 2.5%)		2.50%
			J : ( ===		ojected Benefit-		
				110	<u>Claimant</u>	<u>Dependant</u>	Weight
1/1/2018	to	12/31/201	8		657.50 a	328.80	28.125%
1/1/2019	to	12/31/201			667.40 a	333.70	68.750%
1/1/2020	to	12/31/202	±U		684.10 a	342.10	3.125%
Average Mo Period Begin	,	enefit During the	e Policy		665.10 b	332.60	
i enou begin	ı III IŞ U4	701/2010			003.10 D	332.0U	
		nefit During the	Policy		150 50	7/00	
Period Begin Annual (Wee	_				153.50 c 7,982.00	76.80 3,991.00	
Annual Mine					7,702.00	3,991.00	

- a Previous year's benefit times selected benefit change
   b Weighted average of projected benefit levels from 01-01-18 to 12-31-20
   c Monthly Benefit times 12 months divided by 52 weeks

Sources: US Department of Labor

Annual Miner and Spouse

Employment Standards Administration Office of Workers' Compensation Programs Division of Coal Mine Workers' Compensation 11,973.00

## Anthracite Underground (0160)

Reported   Reported			Co	ounts				
Pear		(1)			(4)			
	Year	Reported	Awarded	Pending	Denied		Reopened	Awarded
2000		# O	# 0	# O	# 0		# 0.00	# 0.00
Part		1	-	-	1	-		0.05
2012   2		1	-	-	1	-	0.05	0.05
2013   1   -   -   -   -   -   -   -   -   -		-	-	-	-	-	-	-
2013		2	-	1	1	0.30	0.05	0.05
2015		-	-	-	-	-	-	-
2015		I	-	-	I	-	0.05	0.05
Company		-	-	-	-	-	-	-
Total   S		-	-	_	_	_	-	- -
Ullimate		5		1	4	0.30	0.20	0.20
Ullimate   Ullimate   Nemical   Senior   Senio		(8)	(9)	(10)	(11)	(12)	(13)	(14)
Year         [2]+(5)+(7)         (1]-(8)         (10)xAward Ratio         (8)+(11)         Payroll         (12)/(13) x 1000000           2007         # 0.00         # 0.00         # 0.1668         # 0.0331         # 0.0331         \$1.662.537         0.0199           2008         0.05         0.95         0.3329         0.0660         0.1160         2.136.713         0.0543           2009         0.05         0.95         0.2839         0.0563         0.1063         1.335.866         0.0796           2010         -         -         0.3500         0.0694         0.0694         1.297.588         0.0534           2011         0.35         1.65         0.4158         0.0824         0.4324         1.257.944         0.3437           2012         -         -         0.4031         0.0779         0.0799         1.029.260         0.0776           2013         0.05         0.95         0.1813         0.0359         0.0859         381,876         0.2250           2014         -         -         0.1806         0.0338         0.0388         258.809         0.1111           2015         1.5         (16)         (17)         (18)         Frequency <t< td=""><td></td><td></td><td>Ultimate</td><td></td><td>IBNR</td><td></td><td></td><td></td></t<>			Ultimate		IBNR			
2007         # 0.00         # 0.00         # 0.1668         # 0.0331         \$ 1,662,537         0.0199           2008         0.05         0.95         0.3329         0.0660         0.1160         2,136,713         0.0543           2009         0.05         0.95         0.2839         0.0563         0.1063         1,335,866         0.0796           2010         -         -         0.3500         0.0694         0.0694         1,297,858         0.0534           2011         0.35         1.65         0.4158         0.0824         0.4324         1,257,944         0.3437           2012         -         -         0.4031         0.0799         0.0799         1,029,260         0.0776           2013         0.05         0.95         0.1813         0.0359         0.0859         381,876         0.2250           2014         -         -         0.1451         0.0288         0.0288         258,809         0.1111           2015         -         0.1854         0.0358         0.0358         0.0358         254,336         0.1407           2016         -         -         0.1534         0.0304         0.0304         1.037         0.034         0.034				IBNR				
2008         0.05         0.95         0.3329         0.0660         0.1160         2,136,713         0.0543           2009         0.05         0.95         0.2839         0.0563         0.1063         1,335,866         0.0796           2010         -         -         0.3500         0.0694         0.0694         1,297,588         0.0534           2011         0.35         1.65         0.4158         0.0824         0.4324         1,257,944         0.3437           2012         -         -         0.4031         0.0799         0.0799         1,029,260         0.0776           2013         0.05         0.95         0.1813         0.0359         0.0859         381,876         0.2250           2014         -         -         0.1451         0.0288         0.0288         258,809         0.1111           2015         -         -         0.1806         0.0358         0.0358         254,336         0.1407           2016         -         -         0.1534         0.0304         0.0304         163,760         0.1856           Total         0.50         4.50         2.6129         0.5179         1.0179         \$9,780,689         0.1041								
2009         0.05         0.95         0.2839         0.0563         0.1063         1,335,866         0.0796           2010         -         -         0.3500         0.0694         0.0694         1,299,588         0.0534           2011         0.35         1.65         0.4158         0.0824         0.4324         1,257,944         0.3437           2012         -         -         0.4031         0.0799         0.0799         1,029,260         0.0776           2013         0.05         0.95         0.1813         0.0359         0.0859         381,876         0.2250           2014         -         -         0.1451         0.0288         0.0288         258,809         0.1111           2015         -         -         0.1854         0.0358         0.0358         254,336         0.1407           2016         -         -         0.1534         0.0304         0.0304         163,760         0.1856           Total         0.50         4.50         2.6129         0.5179         1.0179         \$9,780,689         0.1041           Year         Weekly Wage         Factor         Years         Years         Miner Years           2007								
2010								
2011         0.35         1.65         0.4158         0.0824         0.4324         1,257,944         0.3437           2012         -         -         0.4031         0.0779         0.0799         1,029,260         0.0776           2013         0.05         0.95         0.1813         0.0359         0.0859         381,876         0.2250           2014         -         -         0.1451         0.0288         0.0288         258,809         0.1111           2015         -         -         0.1806         0.0358         0.0358         254,336         0.1407           2016         -         -         0.1534         0.0304         0.0304         163,760         0.1856           Total         0.50         4.50         2.6129         0.5179         1.0179         \$9,780,689         0.1041           Year         Meekly Wage         Factor         Years         Miner Years           2007         7.79         1.0560         38.9         0.0850           2008         807         1.0560         48.2         0.2406           2009         836         1.0560         28.0         0.2478           2011         858 <td< td=""><td></td><td>0.05</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		0.05						
2012		- 0.25						
2013         0.05         0.95         0.1813         0.0359         0.0859         381,876         0.2250           2014         -         -         0.1451         0.0288         0.0288         258,809         0.1111           2015         -         -         0.1806         0.0358         0.0358         254,336         0.1407           2016         -         -         0.1534         0.0304         0.0304         163,760         0.1856           Total         0.50         4.50         2.6129         0.5179         1.0179         \$9,780,689         0.1041           Year         Weekly Wage         Factor         Years         Miner Years         Miner Years         Miner Years         Miner Years         0.0850         2008         807         1.0560         48.2         0.2406         2009         836         1.0560         29.1         0.3652         2010         845         1.0560         28.0         0.2478         2011         858         1.0560         26.7         1.6195         2012         888         1.0560         21.1         0.3787         2013         917         1.0560         5.1         0.5639         2014         932         1.0560         5.1		0.33	1.65					
2014         -         -         0.1451         0.0288         258,809         0.1111           2015         -         -         0.1806         0.0358         0.0358         254,336         0.1407           2016         -         -         0.1534         0.0304         0.0304         163,760         0.1856           Total         0.50         4.50         2.6129         0.5179         1.0179         \$ 9,780,689         0.1041           Year Meekly Wage         Factor         Fistimated Stimated Miner Years         Frequency Claims per 100         Miner Years         Miner Years         0.0850         0.2476         0.2406         0.2406         0.2476         0.2476         0.2476         0.2478         0.0478 <td></td> <td>0.05</td> <td>0.95</td> <td></td> <td></td> <td></td> <td></td> <td></td>		0.05	0.95					
2015         -         -         0.1806         0.0358         0.0358         254,336         0.1407           2016         -         -         0.1534         0.0304         0.0304         163,760         0.1856           Total         0.50         4.50         2.6129         0.5179         1.0179         \$ 9,780,689         0.1041           Year Statewide Average Adjustment Average Pactor Statewide Average Pactor Statewide Average Statewide Statewid		-						
2016 Total         -         -         0.1534 0.0304 0.0304 163,760 0.1856           Total         0.50         4.50         2.6129         0.5179         1.0179         \$9,780,689         0.1041           Year Weekly Wage 2007         (16) Fstimated Estimated Adjustment Aminer Prequency Claims per 100         Frequency Claims per 100         1.0560         38.9         0.0850         0.0850         0.2406         0.2406         0.2406         0.2406         0.2406         0.2478         0.2406         0.2478         0.02478         0.02478         0.02478         0.02478         0.02478         0.011         858         1.0560         26.7         1.6195         0.0747         0.0367         0.03787         0.001         0.		-	-					
Total         0.50         4.50         2.6129         0.5179         1.0179         \$ 9,780,689         0.1041           (15) Statewide Average Adjustment Average Adjustment Weekly Wage Pactor Years 2007         Miner Years 779         Miner Years 1.0560         Miner Years 38.9         Miner Years 2008         Miner Years 38.9         Miner Years 38.9 <th< td=""><td></td><td>-</td><td>-</td><td></td><td></td><td></td><td></td><td></td></th<>		-	-					
Statewide Average         Estimated Miner         Frequency Claims per 100           Year         Weekly Wage 2007         Factor 779         Years 38.9         Miner Years 0.0850           2008         807         1.0560         48.2         0.2406           2009         836         1.0560         29.1         0.3652           2010         845         1.0560         28.0         0.2478           2011         858         1.0560         26.7         1.6195           2012         888         1.0560         21.1         0.3787           2013         917         1.0560         7.6         1.1306           2014         932         1.0560         5.1         0.5639           2015         951         1.0560         4.9         0.7305           2016         978         1.0560         3.0         1.0133		0.50	4.50			1.0179		
Average         Adjustment         Miner         Claims per 100           Year         Weekly Wage         Factor         Years         Miner Years           2007         779         1.0560         38.9         0.0850           2008         807         1.0560         48.2         0.2406           2009         836         1.0560         29.1         0.3652           2010         845         1.0560         28.0         0.2478           2011         858         1.0560         26.7         1.6195           2012         888         1.0560         21.1         0.3787           2013         917         1.0560         7.6         1.1306           2014         932         1.0560         5.1         0.5639           2015         951         1.0560         4.9         0.7305           2016         978         1.0560         3.0         1.0133			(16)		(18)			
Year         Weekly Wage         Factor         Years         Miner Years           2007         779         1.0560         38.9         0.0850           2008         807         1.0560         48.2         0.2406           2009         836         1.0560         29.1         0.3652           2010         845         1.0560         28.0         0.2478           2011         858         1.0560         26.7         1.6195           2012         888         1.0560         21.1         0.3787           2013         917         1.0560         7.6         1.1306           2014         932         1.0560         5.1         0.5639           2015         951         1.0560         4.9         0.7305           2016         978         1.0560         3.0         1.0133								
2007       779       1.0560       38.9       0.0850         2008       807       1.0560       48.2       0.2406         2009       836       1.0560       29.1       0.3652         2010       845       1.0560       28.0       0.2478         2011       858       1.0560       26.7       1.6195         2012       888       1.0560       21.1       0.3787         2013       917       1.0560       7.6       1.1306         2014       932       1.0560       5.1       0.5639         2015       951       1.0560       4.9       0.7305         2016       978       1.0560       3.0       1.0133								
2008       807       1.0560       48.2       0.2406         2009       836       1.0560       29.1       0.3652         2010       845       1.0560       28.0       0.2478         2011       858       1.0560       26.7       1.6195         2012       888       1.0560       21.1       0.3787         2013       917       1.0560       7.6       1.1306         2014       932       1.0560       5.1       0.5639         2015       951       1.0560       4.9       0.7305         2016       978       1.0560       3.0       1.0133								
2009       836       1.0560       29.1       0.3652         2010       845       1.0560       28.0       0.2478         2011       858       1.0560       26.7       1.6195         2012       888       1.0560       21.1       0.3787         2013       917       1.0560       7.6       1.1306         2014       932       1.0560       5.1       0.5639         2015       951       1.0560       4.9       0.7305         2016       978       1.0560       3.0       1.0133								
2010       845       1.0560       28.0       0.2478         2011       858       1.0560       26.7       1.6195         2012       888       1.0560       21.1       0.3787         2013       917       1.0560       7.6       1.1306         2014       932       1.0560       5.1       0.5639         2015       951       1.0560       4.9       0.7305         2016       978       1.0560       3.0       1.0133								
2011       858       1.0560       26.7       1.6195         2012       888       1.0560       21.1       0.3787         2013       917       1.0560       7.6       1.1306         2014       932       1.0560       5.1       0.5639         2015       951       1.0560       4.9       0.7305         2016       978       1.0560       3.0       1.0133								
2012       888       1.0560       21.1       0.3787         2013       917       1.0560       7.6       1.1306         2014       932       1.0560       5.1       0.5639         2015       951       1.0560       4.9       0.7305         2016       978       1.0560       3.0       1.0133								
2013       917       1.0560       7.6       1.1306         2014       932       1.0560       5.1       0.5639         2015       951       1.0560       4.9       0.7305         2016       978       1.0560       3.0       1.0133								
2014       932       1.0560       5.1       0.5639         2015       951       1.0560       4.9       0.7305         2016       978       1.0560       3.0       1.0133								
<u>2016</u> 978 1.0560 <u>3.0</u> <u>1.0133</u>								
	2015	951	1.0560	4.9	0.7305			
Total 212.6 0.4788	2016	978	1.0560		1.0133			
	Total			212.6	0.4788			

Sources:

Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.05)xCol.(4) Col.(7): (1.00)xCol.(6)

Col.(10): Exh. VIII-C Col.(13): Exhibit X Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) /( (15) x (16) x 52 )

Col.(18): (12) / (17) x 100

IBNR Award Ratio: 0.1982

File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-08-F.xlsm]p 1

## Bituminous Underground (0158)

		Co	ounts				
	(1)	(2)	(3)	(4)	(5) Pending	(6) Denied	(7) Denied
Year	Reported	Awarded	Pending	Denied	Awarded (3) * 30%	Reopened	Awarded
2007	# 4	# O	# 2	# 2	# 0.60	# 0.10	# 0.10
2008	-	-	-	-	-	-	-
2009	5	-	-	5	-	0.25	0.25
2010	4	-	1	3	0.30	0.15	0.15
2011	4	-	-	4	-	0.20	0.20
2012	4	-	-	4	-	0.20	0.20
2013	6	I	1	4	0.30	0.20	0.20
2014	11	_	3	8	0.90	0.40	0.40
2015	12	-	3 5	9	0.90	0.45 0.05	0.45
<u>2016</u> Total	<u>6</u> 56		15	40	<u> </u>	2.00	<u>0.05</u> 2.00
TOTAL	36	ı	13	40	4.50	2.00	2.00
	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Ultimate	Ultimate		IBNR	Total		
	Awarded	Denied	IBNR	Awarded	Awarded		Frequency
Year	<u>(2)+(5)+(7)</u>	<u>(1)-(8)</u>		(10)xAward Ratio	<u>(8)+(11)</u>	<u>Payroll</u>	(12)/(13) x 1000000
2007	# 0.70	# 3.30	# 4.9101	# 0.9732	# 1.6732	\$ 79,904,266	0.0209
2008	-	<del>-</del>	7.1424	1.4156	1.4156	101,353,977	0.0140
2009	0.25	4.75	8.1403	1.6134	1.8634	101,348,140	0.0184
2010	0.45	3.55	11.3745	2.2544	2.7044	125,393,576	0.0216
2011	0.20	3.80	15.0490	2.9827	3.1827	148,485,709	0.0214
2012 2013	0.20 1.50	3.80 4.50	17.3436 18.6992	3.4375 3.7062	3.6375 5.2062	153,618,908 145,146,253	0.0237 0.0359
2013	1.30	9.70	26.6435	5.2807	6.5807	183,431,952	0.0359
2014	1.35	10.65	23.0142	4.5614	5.9114	140,570,275	0.0421
2016	1.55	4.45	22.9944	4.5575	6.1075	118,883,295	0.0514
Total	7.50	48.50	155.3111	30.7827	38.2827	\$1,298,136,351	0.0295
	(15)	(16)	(17)	(18)			
	(15) Statewide	(10)	(17) Estimated	Frequency			
	Average	Adjustment	Miner	Claims per 100			
Year	Weekly Wage		Years	Miner Years			
2007	779	1.5050	1,310.7	0.1277			
2008	807	1.5050	1,604.8	0.0882			
2009	836	1.5050	1,549.1	0.1203			
2010	845	1.5050	1,896.2	0.1426			
2011	858	1.5050	2,211.4	0.1439			
2012	888	1.5050	2,210.5	0.1646			
2013	917	1.5050	2,022.5	0.2574			
2014	932	1.5050	2,514.9	0.2617			
2015	951	1.5050	1,888.7	0.3130			
<u>2016</u>	978	1.5050	1,553.3	0.3932			
Total			18,762.1	0.2040			
2013 2014 2015 <u>2016</u>	917 932 951	1.5050 1.5050 1.5050	2,022.5 2,514.9 1,888.7 1,553.3	0.2574 0.2617 0.3130 0.3932			

Sources:

Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.05)xCol.(4) Col.(7): (1.00)xCol.(6) Col.(10): Exh. VIII-C

Col.(13): Exhibit X

Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) /( (15) x (16) x 52 )

Col.(18): (12) / (17) x 100

IBNR Award Ratio: 0.1982

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## Anthracite Surface (0153)

		С	ounts				
Year	(1) Reported	(2) Awarded	(3) Pending	(4) Denied	(5) Pending Awarded <u>(3) * 30%</u>	(6) Denied Reopened	(7) Denied Awarded
2007	# 2	# 2	# O	# O	# 0.00	# 0.00	# 0.00
2008	1	-	-	1	-	0.05	0.05
2009	2	1	-	1	-	0.05	0.05
2010	-	-	-	-	-	-	-
2011	1	-	-	1	-	0.05	0.05
2012	1	-	-	1	-	0.05	0.05
2013	1	1	-	-	-	-	-
2014	1	-	-	1	-	0.05	0.05
2015	1	-	-	1	-	0.05	0.05
2016	1		1		0.30	<del>_</del>	
Total	11	4	1	6	0.30	0.30	0.30
	(8) Ultimate	(9) Ultimate	(10)	(11) IBNR	(12) Total	(13)	(14)
	Awarded	Denied	IBNR	Awarded	Awarded		Frequency
Year	(2)+(5)+(7)	<u>(1)-(8)</u>		(10)xAward Ratio	<u>(8)+(11)</u>	<u>Payroll</u>	(12)/(13) x 1000000
2007	# 2.00	# 0.00	# 0.6159	# 0.1221	# 2.1221	\$ 14,866,556	0.1427
2008	0.05	0.95	0.8491	0.1683	0.2183	16,220,231	0.0135
2009	1.05	0.95	1.0196	0.2021	1.2521	15,893,528	0.0788
2010	-	-	1.0167	0.2015	0.2015	13,319,185	0.0151
2011	0.05	0.95	1.7364	0.3441	0.3941	19,507,428	0.0202
2012	0.05	0.95	2.6080	0.5169	0.5669	24,734,711	0.0229
2013	1.00	-	2.6180	0.5189	1.5189	20,720,014	0.0733
2014	0.05	0.95	2.8668	0.5682	0.6182	18,911,339	0.0327
2015	0.05	0.95	3.9888	0.7906	0.8406	22,234,350	0.0378
2016	0.30	0.70	4.0096	0.7947	1.0947	19,043,330	0.0575
Total	4.60	6.40	21.3288	4.2274	8.8274	\$ 185,450,672	0.0476
	(15)	(16)	(17)	(18)			
	Statewide		Estimated	Frequency			
	Average	Adjustment	Miner	Claims per 100			
Year	Weekly Wage		<u>Years</u>	Miner Years			
2007	779	1.0560	347.5	0.6107			
2008	807	1.0560	366.0	0.0596			
2009	836	1.0560	346.2	0.3617			
2010	845	1.0560	287.0	0.0702			
2011	858	1.0560	414.0	0.0952			
2012	888	1.0560	507.3	0.1118			
2013	917	1.0560	411.5	0.3691			
2014	932	1.0560	369.5	0.1673			
2015	951	1.0560	425.8	0.1974			
2016	978	1.0560	354.6	0.3087			
Total			3,829.4	0.2305			

Sources:

Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.05)xCol.(4) Col.(7): (1.00)xCol.(6)

Col.(10): Exh. VIII-C Col.(13): Exhibit X Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) /( (15) x (16) x 52 )

Col.(18): (12) / (17) x 100

IBNR Award Ratio: 0.1982

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# Bituminous Surface (0156)

		С	ounts				
	(1)	(2)	(3)	(4)	(5) Pending	(6) Denied	(7) Denied
Year	Reported	Awarded	Pending	Denied	Awarded (3) * 30%	Reopened	Awarded
2007	# 5	# 1	# 0	# 4	# 0.00	# 0.20	# 0.20
2008	5	2	1	2	0.30	0.10	0.10
2009	-	-	-	-	-	-	-
2010	2	-	-	2	-	0.10	0.10
2011	3	-	1	2	0.30	0.10	0.10
2012	8	2	-	6	-	0.30	0.30
2013	4	-	-	4	-	0.20	0.20
2014	1	-	1	-	0.30	-	-
2015	3	1	1	1	0.30	0.05	0.05
2016		<del></del>	<del></del>	<del>_</del>	<del></del>		
Total	31	6	4	21	1.20	1.05	1.05
	(8) Ultimate	(9) Ultimate	(10)	(11) IBNR	(12) Total	(13)	(14)
	Awarded	Denied	IBNR	Awarded	Awarded		Frequency
Year	<u>(2)+(5)+(7)</u>	<u>(1)-(8)</u>	151 111	(10)xAward Ratio	<u>(8)+(11)</u>	<u>Payroll</u>	(12)/(13) x 1000000
2007	# 1.20	# 3.80	# 1.8321	# 0.3631	# 1.5631	\$ 64,808,093	0.0241
2008	2.40	2.60	2.4648	0.4885	2.8885	74,601,231	0.0387
2009	-	_	2.4006	0.4758	0.4758	63,306,695	0.0075
2010	0.10	1.90	3.1908	0.6324	0.7324	74,255,177	0.0099
2011	0.40	2.60	4.3339	0.8590	1.2590	87,730,506	0.0144
2012	2.30	5.70	4.3821	0.8685	3.1685	77,890,500	0.0407
2013	0.20	3.80	4.0447	0.8017	1.0017	62,718,061	0.0160
2014	0.30	0.70	4.0641	0.8055	1.1055	55,368,615	0.0200
2015	1.35	1.65	3.4885	0.6914	2.0414	42,000,092	0.0486
2016			2.8982	0.5744	0.5744	29,758,888	0.0193
Total	8.25	22.75	33.0998	6.5604	14.8104	\$ 632,437,858	0.0234
	(15)	(16)	(17)	(18)			
	Statewide Average	Adjustment	Estimated Miner	Frequency Claims per 100			
Year	Weekly Wage		Years	Miner Years			
2007	779	1.0560	1,515.0	0.1032			
2008	807	1.0560	1,683.5	0.1716			
2009	836	1.0560	1,379.0	0.0345			
2010	845	1.0560	1,600.3	0.0458			
2011	858	1.0560	1,862.1	0.0676			
2012	888	1.0560	1,597.4	0.1984			
2013	917	1.0560	1,245.5	0.0804			
2014	932	1.0560	1,081.9	0.1022			
2015	951	1.0560	804.3	0.2538			
2016	978	1.0560	554.1	0.1037			
Total			13,323.1	0.1112			

Sources:

Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.05)xCol.(4) Col.(7): (1.00)xCol.(6) Col.(10): Exh. VIII-C

Col.(13): Exhibit X

Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) /( (15) x (16) x 52 )

Col.(18): (12) / (17) x 100

IBNR Award Ratio: 0.1982

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#### Four Standard Classes

		Co	ounts				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
					Pending	Denied	Denied
	Reported	Awarded	Pending	Denied	Awarded	Reopened	Awarded
Year					(3) * 30%		
2007	# 11	# 3	# 2	# 6	# 0.60	# 0.30	# 0.30
2008	7	2	1	4	0.30	0.20	0.20
2009	8	1	-	7	-	0.35	0.35
2010	6	_	1	5	0.30	0.25	0.25
2011	10	_	2	8	0.60	0.40	0.40
2012	13	2	-	11	-	0.55	0.55
2013	12	2	1	9	0.30	0.45	0.45
2014	13	_	4	9	1.20	0.45	0.45
2015	16	1	4	11	1.20	0.55	0.55
2016	7		6	1	1.80	0.05	0.05
Total	103	11	21	71	6.30	3.55	3.55
	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Ultimate	Ultimate		IBNR	Total		
	Awarded	Denied	IBNR	Awarded	Awarded		Frequency
Year	(2)+(5)+(7)	<u>(1)-(8)</u>		(10)xAward Ratio	<u>(8)+(11)</u>	<u>Payroll</u>	(12)/(13) x 1000000
2007	# 3.90	# 7.10	# 7.5250	# 1.4914	# 5.3914	\$ 161,241,452	0.0334
2008	2.50	4.50	10.7893	2.1384	4.6384	194,312,152	0.0239
2009	1.35	6.65	11.8444	2.3476	3.6976	181,884,229	0.0203
2010	0.55	5.45	15.9319	3.1577	3.7077	214,267,526	0.0173
2011	1.00	9.00	21.5350	4.2682	5.2682	256,981,587	0.0205
2012	2.55	10.45	24.7368	4.9028	7.4528	257,273,379	0.0290
2013	2.75	9.25	25.5431	5.0626	7.8126	228,966,204	0.0341
2014	1.65	11.35	33.7194	6.6832	8.3332	257,970,715	0.0323
2015	2.75	13.25	30.6721	6.0792	8.8292	205,059,053	0.0431
2016	1.85	5.15	30.0556	5.9570	7.8070	167,849,273	0.0465
Total	20.85	82.15	212.3526	42.0883	62.9383	\$ 2,125,805,570	0.0296
	(15)	(16)	(17)	(18)			
	Statewide		Estimated	Frequency			
	Average	Adjustment	Miner	Claims per 100			
Year	Weekly Wage	<u>Factor</u>	<u>Years</u>	Miner Years			
2007	779		3,212.1	0.1678			
2008	807		3,702.5	0.1253			
2009	836		3,303.4	0.1119			
2010	845		3,811.5	0.0973			
2011	858		4,514.2	0.1167			
2012	888		4,336.3	0.1719			
2013	917		3,687.1	0.2119			
2014	932		3,971.4	0.2098			
2015	951		3,123.7	0.2827			
2016	978		2,465.0	0.3167			
Total			36,127.2	0.1742			

Sources:

Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.05)xCol.(4) Col.(7): (1.00)xCol.(6) Col.(10): Exh. VIII-C

Col.(13): Sum of Pages 1 to 4

Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) /( (15) x (16) x 52 )

Col.(18): (12) / (17) x 100

IBNR Award Ratio: 0.1982

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## Coke (0154)

		Co	ounts				
Year	(1) Reported	(2) Awarded	(3) Pending	(4) Denied	(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded
2007	# O	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00
2008	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-
<u>2016</u>					<del>_</del>		
Total	-	-	-	-	-	-	-
	(8) Ultimate	(9) Ultimate	(10)	(11) IBNR	(12) Total	(13)	(14)
	Awarded	Denied	IBNR	Awarded	Awarded		Frequency
Year	(2)+(5)+(7)	(1)-(8)	IDINK	(10)xAward Ratio	(8)+(11)	Payroll	(12)/(13) x 1000000
2007	# 0.00	# 0.00	# 0.1306	# 0.0259	# 0.0259	\$ 13,669,925	0.0019
2008	-	-	0.1067	0.0211	0.0211	9,761,146	0.0022
2009	-	_	0.0637	0.0126	0.0126	5,173,552	0.0024
2010	-	-	0.0747	0.0148	0.0148	5,435,658	0.0027
2011	-	-	0.0554	0.0110	0.0110	3,599,086	0.0031
2012	-	-	0.0982	0.0195	0.0195	5,738,105	0.0034
2013	-	-	0.0911	0.0181	0.0181	4,791,910	0.0038
2014	-	-	0.0934	0.0185	0.0185	4,464,398	0.0041
2015	-	-	0.0997	0.0198	0.0198	4,340,376	0.0046
2016			0.0589	0.0117	0.0117	2,313,724	0.0050
Total	-	=	0.8724	0.1729	0.1729	\$ 59,287,880	0.0029
	(15)	(16)	(17)	(18)			
	Statewide		Estimated	Frequency			
V = ===	Average	Adjustment	Miner	Claims per 100			
Year	Weekly Wage		<u>Years</u>	Miner Years			
2007	779 807	1.0560	319.6	0.0081			
2008 2009	836	1.0560 1.0560	220.3 112.7	0.0096 0.0112			
2007	845	1.0560	117.1	0.0112			
2010	858	1.0560	76.4	0.0126			
2012	888	1.0560	117.7	0.0165			
2013	917	1.0560	95.2	0.0190			
2014	932	1.0560	87.2	0.0212			
2015	951	1.0560	83.1	0.0238			
2016	978	1.0560	43.1	0.0271			
Total			1,272.4	0.0136			

Sources:

Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.05)xCol.(4) Col.(7): (1.00)xCol.(6)

Col.(10): Exh. VIII-C Col.(13): Exhibit X Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) /( (15) x (16) x 52 )

Col.(18): (12) / (17) x 100

IBNR Award Ratio: 0.1982

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## Auger (0157)

		Co	ounts				
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied	(5) Pending Awarded	(6) Denied Reopened	(7) Denied Awarded
Year					<u>(3) * 30%</u>		
2007 2008	# O	# 0	# 0	# O	# 0.00	# 0.00	# 0.00
2008	_	_	_	-	- -	-	-
2010	1	_	1	_	0.30	_	_
2011	· -	_	· -	_	-	_	_
2012	-	_	_	_	=	_	_
2013	_	-	-	-	-	-	-
2014	-	_	-	-	_	-	-
2015	-	-	-	-	-	-	-
2016					<del>_</del>		
Total	1	-	1	-	0.30	-	-
	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Ultimate	Ultimate		IBNR	Total		
	Awarded	Denied	IBNR	Awarded	Awarded		Frequency
Year	<u>(2)+(5)+(7)</u>	<u>(1)-(8)</u>		(10)xAward Ratio	<u>(8)+(11)</u>	Payroll	(12)/(13) x 1000000
2007	# 0.00	# 0.00	# 0.0214	# 0.0042	# 0.0042	\$ 1,121,156	0.0038
2008	-	-	0.0548	0.0109	0.0109	2,506,758	0.0043
2009 2010	- 0.20	0.70	0.0233 0.0228	0.0046	0.0046	946,963	0.0049
2010	0.30	0.70	0.0226	0.0045 0.0072	0.3045 0.0072	827,496 1,176,255	0.3680 0.0061
2011	_	_	0.0382	0.0072	0.0072	808,208	0.0081
2012	_	_	0.0277	0.0033	0.0079	1,046,947	0.0075
2014	_	_	0.0361	0.0072	0.0072	861,590	0.0083
2015	_	_	0.0301	0.0060	0.0060	654,766	0.0091
2016	-	_	0.0200	0.0040	0.0040	392,776	0.0101
Total	0.30	0.70	0.3122	0.0619	0.3619	\$ 10,342,915	0.0350
	(15)	(16)	(17)	(18)			
	Statewide		Estimated	Frequency			
	Average	Adjustment	Miner	Claims per 100			
Year	Weekly Wage	<u>Factor</u>	<u>Years</u>	Miner Years			
2007	779	1.0560	26.2	0.0162			
2008	807	1.0560	56.6	0.0192			
2009	836	1.0560	20.6	0.0224			
2010	845	1.0560	17.8	1.7108			
2011	858	1.0560	25.0	0.0287			
2012	888	1.0560	16.6	0.0331			
2013	917	1.0560	20.8	0.0379			
2014	932	1.0560	16.8	0.0426			
2015	951	1.0560	12.5	0.0477			
<u>2016</u>	978	1.0560	7.3	0.0543			
Total			220.2	0.1643			

Sources:

Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.05)xCol.(4) Col.(7): (1.00)xCol.(6)

Col.(10): Exh. VIII-C Col.(13): Exhibit X Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) /( (15) x (16) x 52 )

Col.(18): (12) / (17) x 100

IBNR Award Ratio: 0.1982

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## Anthracite Co-Gen (181)

		Co	ounts				
Year	(1) Reported	(2) Awarded	(3) Pending	(4) Denied	(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded
2007	# O	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00
2008	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-
2012	1	-	-	1	-	0.05	0.05
2013	1	-	-	1	-	0.05	0.05
2014	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-
<u>2016</u>					<del>-</del>		
Total	2	-	-	2	-	0.10	0.10
	(8) Ultimate	(9) Ultimate	(10)	(11) IBNR	(12) Total	(13)	(14)
	Awarded	Denied	IBNR	Awarded	Awarded		Frequency
Year	(2)+(5)+(7)	<u>(1)-(8)</u>		(10)xAward Ratio	<u>(8)+(11)</u>	<u>Payroll</u>	(12)/(13) x 1000000
2007	# 0.00	# 0.00	# 0.2194	# 0.0435	# 0.0435	\$ 9,186,706	0.0047
2008	-	-	0.2056	0.0407	0.0407	7,521,400	0.0054
2009	-	-	0.2320	0.0460	0.0460	7,534,735	0.0061
2010	-	-	0.2735	0.0542	0.0542	7,958,048	0.0068
2011	-	-	0.4226	0.0838	0.0838	10,981,642	0.0076
2012	0.05	0.95	0.3983 0.3627	0.0789 0.0719	0.1289 0.1219	9,311,812	0.0138
2013 2014	0.05	0.95	0.3627	0.0867	0.1219	7,630,762 8,360,898	0.0160 0.0104
2014	_	_	0.4373	0.1088	0.1088	9,554,806	0.0104
2016	_	_	0.6222	0.1233	0.1233	9,784,031	0.0126
Total	0.10	1.90	3.7225	0.7378	0.8378	\$ 87,824,840	0.0095
	(15)	(16)	(17)	(18)			
	Statewide	,	Estimated	Frequency			
	Average	Adjustment	Miner	Claims per 100			
Year	Weekly Wage	Factor	<u>Years</u>	Miner Years			
2007	779	1.0560	214.8	0.0202			
2008	807	1.0560	169.7	0.0240			
2009	836	1.0560	164.1	0.0280			
2010	845	1.0560	171.5	0.0316			
2011	858	1.0560	233.1	0.0359			
2012	888	1.0560	191.0	0.0675			
2013	917	1.0560	151.5	0.0805			
2014	932	1.0560	163.4	0.0531			
2015	951 978	1.0560 1.0560	183.0	0.0594			
2016	7/8	1.0560	182.2	0.0677			
Total			1,824.3	0.0459			

Sources:

Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.05)xCol.(4) Col.(7): (1.00)xCol.(6)

Col.(10): Exh. VIII-C Col.(13): Exhibit X Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) /( (15) x (16) x 52 )

Col.(18): (12) / (17) x 100

IBNR Award Ratio: 0.1982

File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-08-F.xlsm]p8

## Bituminous Co-Gen (182)

			ounts				
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied	(5) Pending Awarded	(6) Denied Reopened	(7) Denied Awarded
Year 2007	<del></del>	# 0	# 0	# 1	<u>(3) * 30%</u> # 0.00	# 0.05	# 0.05
2007	π ι	π 0	# O	π ι	π 0.00	π 0.03	π 0.03
2009	_	_	_	_	_	_	_
2010	-	_	_	_	_	_	_
2011	-	_	_	-	-	-	_
2012	-	_	_	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-
2016		<u>-</u> _		<del>_</del>	<del></del>		<del>_</del>
Total	1	-	-	1	-	0.05	0.05
	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Ultimate	Ultimate		IBNR	Total		
	Awarded	Denied	IBNR	Awarded	Awarded		Frequency
Year	(2)+(5)+(7)	<u>(1)-(8)</u>		(10)xAward Ratio	<u>(8)+(11)</u>	<u>Payroll</u>	(12)/(13) x 1000000
2007	# 0.05	# 0.95	# 0.2587	# 0.0513	# 0.1013	\$ 10,829,140	0.0094
2008	-	-	0.2318	0.0459	0.0459	8,481,888	0.0054
2009	-	-	0.2422	0.0480	0.0480	7,866,413	0.0061
2010	-	-	0.3001	0.0595	0.0595	8,732,701	0.0068
2011	-	-	0.3503	0.0694	0.0694	9,102,411	0.0076
2012	-	-	0.3870	0.0767	0.0767	9,047,745	0.0085
2013	-	-	0.4922	0.0976	0.0976	10,355,884	0.0094
2014 2015	-	-	0.6133 0.6746	0.1216 0.1337	0.1216 0.1337	11,721,184 11,748,205	0.0104 0.0114
2013	-	-	0.6746	0.1337	0.1337	11,386,837	0.0126
Total	0.05	0.95	4.2743	0.8472	0.8972	\$ 99,272,408	0.0090
	(15)	(16)	(17)	(18)			
	Statewide	(10)	Estimated	Frequency			
	Average	Adjustment	Miner	Claims per 100			
Year	Weekly Wage		Years	Miner Years			
2007	779	1.0560	253.2	0.0400			
2008	807	1.0560	191.4	0.0240			
2009	836	1.0560	171.4	0.0280			
2010	845	1.0560	188.2	0.0316			
2011	858	1.0560	193.2	0.0359			
2012	888	1.0560	185.5	0.0413			
2013	917	1.0560	205.7	0.0474			
2014	932	1.0560	229.0	0.0531			
2015	951	1.0560	225.0	0.0594			
2016	978	1.0560	212.0	0.0677			
Total			2,054.6	0.0437			

Sources:

Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.05)xCol.(4) Col.(7): (1.00)xCol.(6)

Col.(10): Exh. VIII-C Col.(13): Exhibit X Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) /( (15) x (16) x 52 )

Col.(18): (12) / (17) x 100

IBNR Award Ratio: 0.1982

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## Anthracite Prep-Plant (183)

		Co	ounts					
	(1)	(2)	(3)	(4)	(5) Pendi	ng	(6) Denied	(7) Denied
Year	Reported	Awarded	Pending	Denied	Awara (3) * 3	led	Reopened	Awarded
2007	<del></del>	# 0	# O	# O		0.00	# 0.00	# 0.00
2008	-	-	-	-		-	-	-
2009 2010	-	-	-	-		-	-	-
2010	- -	_	-	- -		_	_	- -
2012	_	-	_	-		_	-	-
2013	1	-	1	-		0.30	-	-
2014	1	-	1	-		0.30	-	-
2015	-	-	-	-		-	-	-
2016						-		
Total	2	-	2	-		0.60	-	-
	(8) Ultimate	(9) Ultimate	(10)	(11) IBNR	(12) Toto		(13)	(14)
	Awarded	Denied	IBNR	Awarded	Awara			Frequency
Year	<u>(2)+(5)+(7)</u>	<u>(1)-(8)</u>	151111	(10)xAward Ratio	(8)+(1		Payroll	(12)/(13) x 1000000
2007	# 0.00	# 0.00	# 0.2779	# 0.0551		0551	\$ 5,817,291	0.0095
2008	-	-	0.3134	0.0621	0.	0621	5,733,543	0.0108
2009	-	-	0.3858	0.0765		0765	6,264,606	0.0122
2010	-	-	0.3352	0.0664		0664	4,876,927	0.0136
2011	-	-	0.4712	0.0934		0934	6,123,259	0.0153
2012	- 0.20	- 0.70	0.6475	0.1283		1283	7,569,023	0.0170
2013 2014	0.30 0.30	0.70 0.70	0.6725 0.6825	0.1333 0.1353		4333 4353	7,074,886 6,521,541	0.0612 0.0667
2014	0.50	0.70	0.7117	0.1411		1411	6,196,596	0.0228
2016	_	_	0.6942	0.1376		1376	5,458,272	0.0252
Total	0.60	1.40	5.1919	1.0290		6290	\$ 61,635,944	0.0264
	(15)	(16)	(17)	(18)				
	Statewide		Estimated	Frequency				
	Average	Adjustment	Miner	Claims per 100				
Year	Weekly Wage		<u>Years</u>	Miner Years				
2007	779	1.0560	136.0	0.0405				
2008 2009	807 836	1.0560 1.0560	129.4 136.5	0.0480 0.0560				
2010	845	1.0560	105.1	0.0632				
2011	858	1.0560	130.0	0.0718				
2012	888	1.0560	155.2	0.0827				
2013	917	1.0560	140.5	0.3084				
2014	932	1.0560	127.4	0.3417				
2015	951	1.0560	118.7	0.1188				
<u>2016</u>	978	1.0560	101.6	0.1354				
Total			1,280.4	0.1272				

Sources:

Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.05)xCol.(4) Col.(7): (1.00)xCol.(6)

Col.(10): Exh. VIII-C Col.(13): Exhibit X Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) /( (15) x (16) x 52 )

Col.(18): (12) / (17) x 100

IBNR Award Ratio: 0.1982

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## Bituminous Prep-Plant (184)

Reported   Reported			Co	ounts				
2007	Valor		(2)	(3)		Pending Awarded	Denied	Denied
2000   1		<del></del>	# 0	# 0	# O		# 0.00	# 0.00
Part		-	-	-	-	-	-	-
2012   1		1	-	-	1	-	0.05	0.05
2013		-	-	=	-	-	-	-
2014		I	_	-	I	-	0.05	0.05
2015		-	_	-	-	-	-	-
Page		_	_	_	_	_	_	_
Total   Residual   R		-	-	-	-	-	-	-
Result   R	2016					<del>_</del>	<u>=</u>	<del>_</del>
Vera	Total	2	-	-	2	-	0.10	0.10
Year         Awarded (2)+(5)+(7)         Interpretation of the part of th				(10)			(13)	(14)
Year         (2)+(5)+(7)         (1)-(8)         (10)×Award Ratio         (8)+(11)         Payroll         (12)/(13) x 1000000           2007         # 0.00         # 0.4513         # 0.0894         # 0.0894         \$18,895,192         0.0047           2008         -         -         -         0.5808         0.1151         0.1151         21,250,256         0.0054           2009         0.05         0.95         0.6105         0.1210         0.1710         19,828,012         0.0086           2010         -         -         0.9044         0.1793         0.1793         26,313,130         0.0068           2011         0.05         0.95         1.3528         0.2681         0.3181         35,155,068         0.0090           2012         -         -         1.4634         0.2900         0.2900         34,211,729         0.0085           2013         -         -         1.5987         0.3169         0.3169         33,639,969         0.0094           2014         -         -         -         1.5966         0.2768         0.2768         24,320,608         0.0114           2015         -         -         1.1971         0.2333         0.2333         18,510,				IRNIR				Frequency
2007         # 0.00         # 0.4513         # 0.0894         \$ 18,895,192         0.0047           2008         -         -         0.5808         0.1151         0.1151         21,250,256         0.0054           2009         0.05         0.95         0.6105         0.1210         0.1710         19,828,012         0.0086           2010         -         -         0.9044         0.1793         0.1793         26,313,130         0.0068           2011         0.05         0.95         1.3528         0.2681         0.3181         35,155,068         0.0090           2012         -         -         1.5987         0.3169         0.3169         33,6339,969         0.0085           2013         -         -         1.5987         0.3169         0.3169         33,6339,969         0.0094           2014         -         -         1.5986         0.2768         0.2788         24,320,608         0.0114           2016         -         -         1.3966         0.2768         0.2788         24,320,608         0.0114           2016         0.10         1.90         111,2024         2.2203         2.3203         \$263,978,506         0.0088           2	Year			IDIAK			Pavroll	
2009         0.05         0.95         0.6105         0.1210         0.1710         19,828,012         0.0086           2010         -         -         0.9044         0.1793         0.1793         26,313,130         0.0068           2011         0.05         0.95         1.3528         0.2681         0.3181         35,155,068         0.0090           2012         -         -         1.4634         0.2900         0.2900         34,211,729         0.0085           2013         -         -         1.5987         0.3169         0.3169         33,639,969         0.0094           2014         -         -         1.6668         0.3304         0.3304         31,854,431         0.0104           2015         -         -         1.3966         0.2768         0.2768         24,320,608         0.0114           2016         -         -         1.1771         0.2333         0.2333         18,510,111         0.0126           Total         0.10         1.90         11.2024         2.2203         2.3203         \$263,978,506         0.0088           Year         Weekly Wage         Adjustment         Miner         Years         Years         Years				# 0.4513				
2010	2008	-	-	0.5808	0.1151	0.1151	21,250,256	0.0054
2011 0.05 0.95 1.3528 0.2681 0.3181 35,155,068 0.0090 2012 1.4634 0.2900 0.2900 34,211,729 0.0085 2013 1.5987 0.3169 0.3169 33,639,969 0.0094 2014 1.6668 0.3304 0.3304 31,854,431 0.0104 2015 1.3966 0.2768 0.2768 24,320,608 0.0114 2016 1.11771 0.2333 0.2333 18,510,111 0.0126 Total 0.10 1.90 11.2024 2.2203 2.3203 \$263,978,506 0.0088    (15)		0.05	0.95					
2012		-	-					
2013		0.05	0.95					
2014		-	-					
2015         -         -         1.3966         0.2768         0.2768         24,320,608         0.0114           2016         -         -         1.1771         0.2333         0.2333         18,510,111         0.0126           Total         0.10         1.90         11.2024         2.2203         2.3203         \$ 263,978,506         0.0088           (15)         (16)         (17)         (18)           Estimated Adjustment Miner Pears           2007         779         1.5050         309.9         0.0289           2008         807         1.5050         309.9         0.0289           2009         836         1.5050         303.1         0.0564           2010         845         1.5050         397.9         0.0450           2011         858         1.5050         397.9         0.0450           2012         888         1.5050         492.3         0.0589           2013         917         1.5050         468.8         0.0676           2014         932         1.5050         436.7         0.0756           2015         951         1.5050         326.8         0.0847           2016 </td <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		-						
2016 Total         -         -         1.1771 1.2024         0.2333 2.3203         18,510,111 3.00126         0.0126           Year Weekly Wage 2007         Adjustment Action (If) Statewide Average Adjustment Packs         Miner Frequency Claims per 100 Miner Pears         Miner Years Miner Pears         Miner Years Miner Pears         Miner Years Miner Pears         Miner Years         Miner Years <td< td=""><td></td><td>-</td><td>_</td><td></td><td></td><td></td><td></td><td></td></td<>		-	_					
Total         0.10         1.90         11.2024         2.2203         2.3203         \$ 263,978,506         0.0088           (15) (16) (17) (18) (18) Statewide Average Adjustment Winer Pears         Estimated Claims per 100         Frequency Claims per 100           Year Weekly Wage 2007 779 1.5050 309.9 0.0289         Miner Years Miner Years         Miner Years           2009 836 1.5050 336.5 0.0342         0.00564           2010 845 1.5050 397.9 0.0450         397.9 0.0450           2011 858 1.5050 523.6 0.0608         0.0608           2012 888 1.5050 492.3 0.0589         0.0676           2013 917 1.5050 468.8 0.0676         0.0756           2014 932 1.5050 436.7 0.0756         0.0847           2015 951 1.5050 241.8 0.0965         0.0965			_ _					
Statewide Average Adjustment         Estimated Miner Claims per 100           Year Weekly Wage 2007         Factor 779         Years Miner Years           2008         807         1.5050         336.5         0.0342           2009         836         1.5050         303.1         0.0564           2010         845         1.5050         397.9         0.0450           2011         858         1.5050         523.6         0.0608           2012         888         1.5050         492.3         0.0589           2013         917         1.5050         468.8         0.0676           2014         932         1.5050         326.8         0.0847           2015         951         1.5050         241.8         0.0965		0.10	1.90					
Statewide Average Adjustment         Estimated Miner Claims per 100           Year Weekly Wage 2007         Factor 779         Years Miner Years           2008         807         1.5050         336.5         0.0342           2009         836         1.5050         303.1         0.0564           2010         845         1.5050         397.9         0.0450           2011         858         1.5050         523.6         0.0608           2012         888         1.5050         492.3         0.0589           2013         917         1.5050         468.8         0.0676           2014         932         1.5050         326.8         0.0847           2015         951         1.5050         241.8         0.0965		(15)	(16)	(17)	(18)			
Year         Weekly Wage         Factor         Years         Miner Years           2007         779         1.5050         309.9         0.0289           2008         807         1.5050         336.5         0.0342           2009         836         1.5050         303.1         0.0564           2010         845         1.5050         397.9         0.0450           2011         858         1.5050         523.6         0.0608           2012         888         1.5050         492.3         0.0589           2013         917         1.5050         468.8         0.0676           2014         932         1.5050         436.7         0.0756           2015         951         1.5050         326.8         0.0847           2016         978         1.5050         241.8         0.0965					Frequency			
2007       779       1.5050       309.9       0.0289         2008       807       1.5050       336.5       0.0342         2009       836       1.5050       303.1       0.0564         2010       845       1.5050       397.9       0.0450         2011       858       1.5050       523.6       0.0608         2012       888       1.5050       492.3       0.0589         2013       917       1.5050       468.8       0.0676         2014       932       1.5050       436.7       0.0756         2015       951       1.5050       326.8       0.0847         2016       978       1.5050       241.8       0.0965								
2008       807       1.5050       336.5       0.0342         2009       836       1.5050       303.1       0.0564         2010       845       1.5050       397.9       0.0450         2011       858       1.5050       523.6       0.0608         2012       888       1.5050       492.3       0.0589         2013       917       1.5050       468.8       0.0676         2014       932       1.5050       436.7       0.0756         2015       951       1.5050       326.8       0.0847         2016       978       1.5050       241.8       0.0965								
2009       836       1.5050       303.1       0.0564         2010       845       1.5050       397.9       0.0450         2011       858       1.5050       523.6       0.0608         2012       888       1.5050       492.3       0.0589         2013       917       1.5050       468.8       0.0676         2014       932       1.5050       436.7       0.0756         2015       951       1.5050       326.8       0.0847         2016       978       1.5050       241.8       0.0965								
2010       845       1.5050       397.9       0.0450         2011       858       1.5050       523.6       0.0608         2012       888       1.5050       492.3       0.0589         2013       917       1.5050       468.8       0.0676         2014       932       1.5050       436.7       0.0756         2015       951       1.5050       326.8       0.0847         2016       978       1.5050       241.8       0.0965								
2011       858       1.5050       523.6       0.0608         2012       888       1.5050       492.3       0.0589         2013       917       1.5050       468.8       0.0676         2014       932       1.5050       436.7       0.0756         2015       951       1.5050       326.8       0.0847         2016       978       1.5050       241.8       0.0965								
2012       888       1.5050       492.3       0.0589         2013       917       1.5050       468.8       0.0676         2014       932       1.5050       436.7       0.0756         2015       951       1.5050       326.8       0.0847         2016       978       1.5050       241.8       0.0965								
2013       917       1.5050       468.8       0.0676         2014       932       1.5050       436.7       0.0756         2015       951       1.5050       326.8       0.0847         2016       978       1.5050       241.8       0.0965								
2014       932       1.5050       436.7       0.0756         2015       951       1.5050       326.8       0.0847         2016       978       1.5050       241.8       0.0965								
2015       951       1.5050       326.8       0.0847         2016       978       1.5050       241.8       0.0965								
Total 3,837.4 0.0605	2016	978	1.5050	241.8	0.0965			
	Total			3,837.4	0.0605			

Sources:

Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.05)xCol.(4)

Col.(7): (1.00)xCol.(6) Col.(10): Exh. VIII-C

Col.(13): Exhibit X

Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) /( (15) x (16) x 52 )

Col.(18): (12) / (17) x 100

IBNR Award Ratio: 0.1982

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#### **Total Other Classes**

		Co	ounts				
	(1)	(2)	(3)	(4)	(5) Pending	(6) Denied	(7) Denied
Year	Reported	Awarded	Pending	Denied	Awarded (3) * 30%	Reopened	Awarded
2007	# 1	# 0	<del></del>	# 1	# 0.00	# 0.05	# 0.05
2008 2009	- 1	_	-	- 1	-	0.05	0.05
2010	1	_	1	' -	0.30	-	-
2011	1	_	-	1		0.05	0.05
2012	1	_	-	1	<del>-</del>	0.05	0.05
2013	2	_	1	1	0.30	0.05	0.05
2014	1	_	1	-	0.30	-	-
2015	-	-	-	-	-	-	-
2016					<del>_</del>		
Total	8	-	3	5	0.90	0.25	0.25
	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Ultimate Awarded	Ultimate Denied	IBNR	IBNR Awarded	Total Awarded		Frequency
Year	(2)+(5)+(7)	(1)-(8)	IDINK	(10)xAward Ratio	(8)+(11)	Payroll	(12)/(13) x 1000000
2007	# 0.05	# 0.95	# 1.3593	# 0.2694	# 0.3194	\$ 59,519,410	0.0054
2008	# 0.05	0.75	1.4931	0.2959	0.2959	55,254,991	0.0054
2009	0.05	0.95	1.5575	0.3087	0.3587	47,614,281	0.0075
2010	0.30	0.70	1.9107	0.3787	0.6787	54,143,960	0.0125
2011	0.05	0.95	2.6885	0.5329	0.5829	66,137,721	0.0088
2012	0.05	0.95	3.0221	0.5990	0.6490	66,686,622	0.0097
2013	0.35	1.65	3.2570	0.6455	0.9955	64,540,358	0.0154
2014	0.30	0.70	3.5296	0.6996	0.9996	63,784,042	0.0157
2015	-	-	3.4614	0.6860	0.6860	56,815,357	0.0121
2016			3.2965	0.6534	0.6534	47,845,751	0.0137
Total	1.15	6.85	25.5757	5.0691	6.2191	\$ 582,342,493	0.0107
	(15)	(16)	(17)	(18)			
	Statewide	A divistra ant	Estimated	Frequency			
Year	Average <u>Weekly Wage</u>	Adjustment Factor	Miner <u>Years</u>	Claims per 100 Miner Years			
2007	779	<u>racioi</u>	1,259.7	0.0254			
2007	807		1,103.9	0.0268			
2009	836		908.4	0.0395			
2010	845		997.6	0.0680			
2011	858		1,181.3	0.0493			
2012	888		1,158.3	0.0560			
2013	917		1,082.5	0.0920			
2014	932		1,060.5	0.0943			
2015	951		949.1	0.0723			
2016	978		788.0	0.0829			
Total			10,489.3	0.0593			

Sources:

Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.05)xCol.(4) Col.(7): (1.00)xCol.(6)

Col.(10): Exh. VIII-C Col.(13): Sum of Pages 6 to 11 Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) /( (15) x (16) x 52 )

Col.(18): (12) / (17) x 100

IBNR Award Ratio: 0.1982

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Run Date: October 11, 2017 - 09:27:23 AM

Effective Date - April 01, 2018 1,164,775,055.108620

#### Grand Total

		Co	ounts				
	(1)	(2)	(3)	(4)	(5) Pending	(6) Denied	(7) Denied
Year	Reported	Awarded	Pending	Denied	Awarded (3) * 30%	Reopened	Awarded
2007	# 12	# 3	# 2	# 7	# 0.60	# 0.35	# 0.35
2008	7	2	1	4	0.30	0.20	0.20
2009	9	1	-	8	-	0.40	0.40
2010	7	_	2	5	0.60	0.25	0.25
2011	11	_	2	9	0.60	0.45	0.45
2012	14	2	-	12	-	0.60	0.60
2013	14	2	2	10	0.60	0.50	0.50
2014	14	-	5	9	1.50	0.45	0.45
2015	16	1	4	11	1.20	0.55	0.55
2016	7		6	1	1.80	0.05	0.05
Total	111	11	24	76	7.20	3.80	3.80
	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Ultimate	Ultimate		IBNR	Total		_
	Awarded	Denied	IBNR	Awarded	Awarded	<b>.</b>	Frequency
Year	<u>(2)+(5)+(7)</u>	<u>(1)-(8)</u>	W 0 00 40	(10)xAward Ratio	<u>(8)+(11)</u>	Payroll \$ 000 740 040	(12)/(13) x 1000000
2007	# 3.95	# 8.05	# 8.8843	# 1.7609	# 5.7109	\$ 220,760,862	0.0259
2008	2.50	4.50	12.2824	2.4344	4.9344	249,567,143	0.0198
2009	1.40	7.60	13.4019	2.6563	4.0563	229,498,510	0.0177
2010	0.85	6.15	17.8426	3.5364	4.3864	268,411,486	0.0163
2011	1.05	9.95	24.2235	4.8011	5.8511	323,119,308	0.0181
2012 2013	2.60 3.10	11.40 10.90	27.7589 28.8001	5.5018 5.7082	8.1018 8.8082	323,960,001 293,506,562	0.0250 0.0300
2013	1.95	12.05	37.2490	7.3828	9.3328	321,754,757	0.0300
2014	2.75	13.25	34.1335	6.7653	9.5153	261,874,410	0.0363
2013	1.85	5.15	33.3521	6.6104	8.4604	215,695,024	0.0392
Total	22.00	89.00	237.9283	47.1574	69.1574	\$ 2,708,148,063	0.0372
						•	
	(15)	(16)	(17)	(18)			
	Statewide	A aliat.aa a.at	Estimated	Frequency			
Voor	Average	Adjustment	Miner	Claims per 100			
Year 2007	Weekly Wage	<u>Factor</u>	<u>Years</u> 4,471.8	Miner Years 0.1277			
2007	779 807						
			4,806.4	0.1027			
2009 2010	836 845		4,211.8 4,809.1	0.0963 0.0912			
2010	858		5,695.5	0.1027			
2011	888		5,695.5 5,494.6	0.1027			
2012	917		3,494.6 4,769.6	0.1475			
2013	932		5,031.9	0.1855			
2014	951		4,072.8	0.1633			
2013 2016	978		3,253.0	0.2601			
	//0						
Total			46,616.5	0.1484			

Sources:

Cols.(1) to (4): CMCRB Claims Database

Col.(6): (0.05)xCol.(4) Col.(7): (1.00)xCol.(6) Col.(10): Exh. VIII-C

Col.(13): Sum of Pages 5 & 12

Col.(15): Exhibit XII-D Col.(16): Exhibit X-G

Col.(17): (13) /( (15) x (16) x 52)

Col.(18): (12) / (17) x 100

IBNR Award Ratio: 0.1982

File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-08-F.xlsm]p 13

"All Permanent Partial" Scenario (see r	

					Age of		Medical		Medical			F	Federal Exce	ess:		State plus			F	ederal Exce	ess:
	P	Awd (2)	)	Exp.	Miner at	State	Before	Act 44	After	Offset	s for:		After 0	Offsets:	State	Act 44	Offset	s for:		After (	Offsets:
ID No.	Class P	end (1)	) Type*	Yr. (	Comp Date	Benefit	Act 44	Factor	Act 44	Soc. Sec.	Pension	Base	SS	SS, PP	Benefit	Medical	Soc. Sec.	Pension	Base	SS	SS, PP
1717	1011	2		1993	61.26	586,466	21,109	1.00	21,109	_	143.881	34	34	5,407	306,608			77,832	172,646	172.646	172,646
	1011	2		1990	66.83	603,303	15,895	1.00	15,895	-	-	-	-	-	420,746	-	-	-	48,496	48,496	48,496
2053	1011	2		1992	47.39	1,641,541	35,482	1.00	35,482	296,889	184,863	0	28,551	166,234	593,599	-	-	-	412,903	412,903	412,903
3070	1011	2		1993	61.22	445,793	21,109	1.00	21,109	-	142,655	-	-	282	271,163	-	-	77,168	82,194	82,194	82,194
5551	1011	2		1993	64.79	553,575	17,544	1.00	17,544	-	155,057	11	11	2,642	308,909	-	-	102,698	143,941	143,941	144,640
5717	1011	2		1992	49.97	1,343,431	32,295	1.00	32,295	269,790	158,959	17	47,346	183,091	489,581	-	-	-	415,906	415,906	415,906
6627	1011	2	LS	1999	62.24	139,057	20,184	1.00	20,184	-	68,990	208,423	208,423	269,802	139,057	-	-	68,990	206,173	206,173	267,552
10280	1011	2	LS	2011	49.92	517,608	32,295	1.00	32,295	-	-	437,712	437,712	437,712	517,608	-	-	-	441,449	441,449	441,449
10536	1011	2	LS	2013	53.66	392,565	28,082	1.00	28,082	-	-	384,002	384,002	384,002	392,565	-	-	-	383,092	383,092	383,092

Total Underground Anthracite Average of 9 claims	9	6,223,338 691,482	223,997 24,889	223,997 24,889	566,679 62,964	854,406 94,934	1,030,199	1,106,079	1,449,171	3,439,835 382,204	0	0	326,687 36,299	2,306,799 256,311	2,306,799 256,311	2,368,878 263,209	
•		6,447,335															
Medical plus Indemnity		716,371			62,964	94,934	114,467	122,898	161,019	407,092		0	36,299	256,311	256,311	263,209	
Adjusted										407.092		0	36,299	256,311	256,311	263,209	

<sup>\*</sup> Type code is as follows: 500 is 500 Weeks; WO is Widow Only; LS is Lump Sum otherwise the claim is Lifetime.

For the "All Permanent Partial" Scenario, Permanent claims for a Miner or Miner and Spouse were re-run with 630 weeks of State Indemnity benefits. Widow Only, 500 Week and Lump Sums were the same as in the Base Scenario.

Sources: Individual claim data from CMCRB.

"All Permanent Partial" Scenario (see note) Age of Medical Medical Federal Excess: State plus Federal Excess: Offsets for: Awd (2) Exp. Miner at State Before Act 44 After After Offsets: State Act 44 Offsets for After Offsets: ID No. Class Pend (1) Type\* Yr. Comp Date Benefit Act 44 Factor Act 44 Soc. Sec. Pension Base SS, PP Benefit Medical Soc. Sec. Pension Base SS SS, PP 511 1002 2 1992 63.51 827,319 18.401 1.00 18,401 347,008 533,911 219,848 65,201 65,201 66,815 517 1002 2 LS 1993 64 91 109 029 17 544 1.00 17.544 92 549 206,280 206,280 297,910 109 029 92 549 206 415 206 415 298 045 518 1002 2 LS 1992 63.60 170.164 18.401 1.00 18.401 137,071 203.835 203,835 303.669 170.164 137,071 203,901 203,901 303,735 1330 1002 2 500 1993 63.31 394,302 19,281 1.00 19,281 121,749 251,743 251,743 251,743 394,302 121,749 252,441 252,441 252,441 220.359 1892 1002 2 LS 1990 67.38 60.006 15 895 1.00 15 895 46 447 220 359 266.806 60,006 46,447 219 772 219 772 266 219 217,936 3222 1002 2 500 1992 62.84 145.900 19.281 1.00 19.281 45.053 217.674 217.674 234.568 145.900 45.053 217.936 234.830 58.06 3532 1002 2 LS 1995 297,107 24.008 1.00 24.008 57.005 21,478 263,144 279,802 297.315 297,107 57,005 21,478 263,289 279,947 297,459 3706 1002 2 LS 1992 65.08 113.970 17.544 1.00 17,544 91,076 202,302 202,302 293,379 113.970 91,076 202,019 202,019 293.096 5479 1002 2 1992 825,285 18,401 18,401 142,057 155,740 155,740 63.72 1.00 224,224 13 447,060 156,782 15 895 24 5918 1002 2 1990 66.69 1 090 501 15.895 1.00 340.863 609,731 267,520 124 138 124 138 125 575 1002 1994 287.483 5966 2 58.76 1.515.645 23.023 1.00 23.023 310,154 309.166 3.322 128.355 624.051 102,451 124.641 289.190 310.817 6415 1002 2 500 1992 62 41 445 940 20.184 1.00 20 184 142 204 229.278 229,278 229,278 445 940 142.204 228,129 228.129 228,129 6771 1002 2 500 1992 62.49 98,009 20,184 1.00 20,184 69,708 98,384 98,384 152,001 98,009 69,708 98,384 98,384 152,001 7004 1002 2 1992 60.69 .141.327 21,109 1.00 21,109 281,232 0 590,989 166,229 180.512 180.512 181,900 298,148 7051 1002 2 LS 1997 56.50 146,703 25,009 1.00 25.009 26,076 77 274,028 298.072 146,703 26,076 77 274,001 298.045 298,121 LS 232,966 232,590 7941 1002 2 1994 66.34 17,793 16,709 1.00 16,709 232,966 246,486 17,793 13,520 232,590 246,110 8028 1002 2 1992 428 429 26 022 1.00 26 022 289,790 244,045 93 693 53,049 56,039 287 587 289 251 293 127 55.50 3.826 609 885 LS 29,127 1.00 29,127 432,885 432,885 432,885 433,109 433,109 9826 1002 2 1999 52.91 48.546 433,109 48.546 9829 1002 2 LS 2001 61.37 129,997 21,109 1.00 21,109 76,413 260,585 260,585 333,986 129,997 76,413 259,864 259,864 333 265 9835 1002 2 LS 1999 54.98 3,292 27,047 1.00 27,047 84 458,666 458,751 458,751 3,292 84 459,393 459,477 459,477 9841 1002 2 LS 2001 59.31 126,615 23,023 1.00 23,023 44,335 120 273,337 316,900 317,020 126,615 44,335 120 272,562 316,124 316,245 9886 1002 2 LS 22 056 76,830 259,320 76,830 259.331 259,331 2000 59 93 589,377 22.056 1.00 93,156 259,320 261,189 589,377 93,156 261,200 LS 516,972 516,972 516,972 9901 1002 2 2002 45.33 184.760 37.590 1.00 37.590 184.760 522,264 522.264 522.264 9996 1002 2 LS 2004 52.31 85.831 30,179 1.00 30,179 406.831 406.831 406,831 85.831 403,766 403,766 403,766 10016 1002 2 LS 2002 58.68 153.373 23.023 1.00 23.023 53,745 106 251,247 297,497 297,604 153.373 53.745 106 250,343 296,593 296,699 10021 1002 2 LS 2000 88,935 16,709 1.00 16,709 68,163 179,984 179,984 248,147 88,935 68,163 179,663 179,663 247,826 66.09 10022 1002 2 LS 2000 59.02 88,479 23.023 1.00 23 023 31.066 276,384 307,441 307,441 88,479 31.066 276,738 307,795 307,795 24.008 300,800 324,181 300.981 324,362 10025 1002 2 LS 2000 57.74 88,512 24.008 1.00 23,381 324.181 88,512 23,381 324,362 238,443 238,443 238,175 238,175 10026 1002 2 15 2000 61.43 86 600 21 109 1.00 21 109 52 087 290 474 52 087 290 206 86 600 10038 1002 2 15 2000 44 43 72 512 38 629 1.00 38 629 674.513 674 513 674 513 72.512 692 902 692 902 692 902 10048 1002 2 1.5 2005 54.58 87.841 27.047 1.00 27.047 2,253 351.411 353,664 353,664 87.841 2,253 343,681 345.934 345.934 10088 1002 2 LS 2005 60.48 116,995 22,056 1.00 22,056 68,743 100,539 100,539 152,173 116,995 68,743 100,539 100,539 152,173 10164 1002 2 1.5 2001 53.43 84.410 29,127 1.00 29.127 524,948 524,948 524.948 84.410 534,071 534.07 534.071 15 202 535 10208 1002 2 2005 61 64 217 327 20 184 1.00 20 184 129,962 206,113 206 113 270 845 217 327 129,962 202 535 267 267 10286 1002 2 LS 2008 57.98 110,615 24,008 1.00 24,008 29,220 352,902 381,920 381,920 110,615 29,220 354,923 383,941 383,941 10330 1002 2 LS 2012 63.34 190,397 19,281 1.00 19,281 131,999 253,566 253.566 339,845 190,397 131,999 252,603 252,603 338.882 10345 1002 2 LS 2008 49.57 501,188 32,295 1.00 32,295 462,951 462,951 462,951 501.188 467,033 467,033 467,033 10347 1002 2 LS 2011 65.26 230,459 17,544 1.00 17,544 75,820 75,820 75,820 230,459 75,820 75,820 75,820 243,735 243 957 243,957 10357 1002 2 LS 2012 62.39 94.058 20,184 1.00 20.184 58,243 243,735 301,758 94 058 58,243 301 980 10360 1002 2 LS 2013 59.65 103,902 22.056 1.00 22.056 45,634 113.830 152,918 152,918 103,902 45.634 113.830 152,918 152,918 10433 1002 2 LS 2012 67.99 85,192 15,105 1.00 15,105 65,840 210,667 210,667 276,507 85,192 65,840 210,580 210,580 276,421 10434 1002 2 LS 2013 62.69 72.277 19,281 1.00 19,281 51,424 256,322 256.322 307,746 72.277 51,424 256,335 256,335 307,758 10435 1002 2 LS 2013 58.48 206.999 24,008 1.00 24,008 48,147 6,533 282,838 312,014 318.475 206.999 48,147 6.533 283,360 312.536 318.997 10465 1002 2 LS 2011 65.82 15,938 16,709 1.00 16,709 130,019 130,019 130,019 15.938 130,019 130.019 130.019 LS 10516 1002 2 2014 75 79 72 396 9 700 1.00 9 700 42 868 103 796 103 796 42 868 103 680 103 680 146 664 72 396 146 547 LS 2014 123,792 1.00 21,109 92,959 92,959 151,503 123,792 92,959 92,959 10561 1002 2 60.60 21.109 83.764 83.764 151.503 10599 1002 2012 62.02 890.503 20,184 1.00 20,184 298,738 545,630 163,159 78,204 78,204 79,762 10601 1002 2 LS 2015 61.61 264,862 20,184 1.00 20.184 107.961 239,978 239,978 256,335 264,862 107.961 240.553 240.553 256,910 48 14.043.410 1 053 584 1 053 584 1.037.719 3 863 591 10.932.355 11 224 074 12 567 472 10 285 657 0 593 275 2.957.806 12 133 309 12.421.252 13 582 253 Total Underground Bituminous 292,571 21,950 21.619 233.835 261,822 214.285 12.360 252,777 258,776 Average of 48 claims 21.950 80.491 227,757 61.621 282,964 15.096.994 Medical plus Indemnity 314,521 21,619 80,491 227,757 233,835 261,822 236,234 12,360 61,621 252,777 258,776 282,964

For the "All Permanent Partial" Scenario, Permanent claims for a Miner or Miner and Spouse were re-run with 630 weeks of State Indemnity benefits. Widow Only, 500 Week and Lump Sums were the same as in the Base Scenario.

236,234

12,360

61,621

252,777

Sources: Individual claim data from CMCRB.

Adjusted

282,964

258,776

<sup>\*</sup> Type code is as follows: 500 is 500 Weeks; WO is Widow Only; LS is Lump Sum otherwise the claim is Lifetime.

"All Permanent Partial" Scenario (see note) State plus Age of Medical Medical Federal Excess: Federal Excess: Offsets for: After Offsets: State Offsets for: After Offsets: Awd (2) Exp. Miner at State Before Act 44 After Act 44 ID No. Class Pend (1) Type\* Yr. Comp Date Benefit Act 44 Factor Act 44 Soc. Sec. Pension Base SS SS, PP Benefit Medical Soc. Sec. Pension Base SS SS, PP 408 1016 2 1994 69.02 793,102 14,339 1.00 14,339 172,356 0 516,304 145,642 84,518 84,518 85,164 -439 1016 2 LS 1999 73.64 21,523 10,907 1.00 10,907 77,667 77,667 77,667 21,523 77 667 77,667 77,667 566 1016 2 1990 63.64 848,045 18,401 1.00 18,401 155,678 14,683 14,683 22,446 314,424 98,630 439,884 439,884 440,608 636 1016 2 1994 62.25 555,178 20,184 1.00 20,184 140,014 36 36 6,261 295,432 76,470 157,387 157,387 158,117 -778 1016 1991 2 WO N/A 285 103 1.00 284 376 1997 19,281 19,281 294,784 314,850 -924 1016 2 1.5 62.59 28.203 1.00 20.066 294,404 294,404 314.469 28.203 20.066 294.784 1719 1016 2 1996 63.07 668,644 19,281 1.00 19,281 227,602 420,450 134.530 72,410 72,410 73.533 -2268 1016 2 1997 66.58 503,092 15,895 1.00 15,895 350,859 48.947 48.947 48.947 -2287 1016 2 LS 1998 67.80 506,905 15,105 15,105 127,483 138,079 138,079 138,079 506,905 127,483 138,083 138,083 138,083 -1.00 134 587 2479 1016 2 1990 63.94 746 562 18,401 1.00 18 401 213,161 19 423 411 135,049 134 587 135 578 2794 1016 16,709 16,709 214,590 2 1993 65.92 950.213 1.00 587.345 175.370 98.379 98.379 99.240 -2827 1016 2 1992 66.08 743 564 16,709 1.00 16,709 164,206 Ω 454 812 132.592 105.019 105.019 105.690 3350 1016 2 WO 1993 N/A 634,387 1.00 638,109 3814 1016 2 1993 71.83 44.011 12,201 1.00 12,201 60.712 60.712 60.712 34.714 70,009 70,009 70,009 LS 3970 1016 2 1991 43.13 309,703 39,654 1.00 39,654 260,050 260,050 260,050 309,703 260,050 260,050 260,050 5605 1016 14,339 129,500 78,113 2 1992 69.33 701,814 14,339 1.00 151,731 0 462,146 78,113 78,668 -5805 1016 2 1992 562 923 15 895 1.00 15 895 392 585 48 678 67 23 48 678 48 678 6071 1016 1994 856,746 22,056 1.00 22,056 204,345 69 111,605 179,257 179,257 180,322 -2 60.28 445.670 6322 1016 2 LS 1991 59.49 525,908 23,023 1.00 23,023 52,565 51,645 119,134 119,134 119,134 525,908 52,565 51,645 119,134 119,134 119,134 -6481 1016 2 1990 65.74 629,333 16,709 1.00 16,709 140,244 Ω Ω 540 349,837 106,517 146,014 146,014 146,622 6603 1016 2 1995 69.81 397,967 13,599 1.00 13,599 85,955 30 30 4,142 254,053 72,216 94,112 94,112 94.790 6765 1016 2 1990 495,238 1.00 WO N/A 495.573 20,184 80.538 7028 1016 2 1997 62.27 585.529 1.00 20.184 187,370 3 358.765 102.334 79.561 79.561 7473 1016 2 1995 66.97 .283.091 15.895 1.00 15.895 322.912 2 616,509 241,165 182,916 182,916 184.327 7825 1016 2 1995 67.59 455,631 15,105 1.00 15,105 99,938 1,589 287.547 82.622 96,126 96.126 96.519 7857 1016 2 1993 59.70 698,303 22,056 1.00 22,056 246,295 196,547 4,122 69,040 406,367 93,077 89,274 93,458 94,787 100,483 225,407 9805 1016 2 LS 2000 74.58 18.589 10.293 1.00 10.293 12,674 225,461 225,461 238.135 18,589 12,674 225,407 238.081 1016 9811 2001 951.648 34,421 95,179 1,637 111.509 203,114 347,826 406,516 406.516 2 48.10 34,421 1.00 211,339 406.516 -9939 1016 2003 193,535 21,109 77.619 267.077 193.535 77,619 265,140 265,140 302.836 -2 LS 21 109 1.00 267 077 304 773 61 41 9981 1016 2 2004 79.61 550 911 7,558 1.00 7,558 152,640 475,408 149,670 14 724 14 724 14 865 10030 1016 2 2005 60.16 642,186 22,056 1.00 22,056 150,615 37 37 4,336 329.002 82.260 189,165 189,165 189,951 -10074 1016 2 LS 2003 61.47 92,897 21,109 1.00 21,109 55,875 101,069 101,069 153,008 92,897 55,875 101,069 101,069 153,008 10140 1016 2 LS 2007 68.81 100,844 14.339 1.00 14.339 75,625 170,537 170,537 246,162 100.844 75,625 170,359 170,359 245.985 15 2007 21,109 10190 1016 2 60.60 76.067 1.00 21,109 51,471 102,615 102,615 154.086 76.067 51,471 102,615 102.615 154.086 10203 1016 2 WO 2008 N/A 439,188 1.00 439,129 152,539 152,539 180,678 152,207 10259 1016 2 LS 2007 72.89 42,680 11,543 1.00 11,543 28,139 42,680 28,139 152,207 180,346 10278 1016 2 LS 2011 76.68 96,700 9,130 1.00 9,130 44,589 101,549 101,549 146,139 96,700 44,589 101,563 101,563 146,153

Total Surface Anthracite Average of 38 claims	38	19,201,882 505,313 19,808,879	606,997 15,974	606,997 15,974	510,199 13,426	3,921,607 103,200	2,087,319 54,929	2,201,313 57,929	2,704,651 71,175	12,595,188 331,452	0	145,642 3,833	2,801,544 73,725	5,007,495 131,776	5,008,823 131,811	5,350,479 140,802
Medical plus Indemnity		521,286			13,426	103,200	54,929	57,929	71,175	347,426		3,833	73,725	131,776	131,811	140,802
Adjusted										347,426		3,833	73,725	131,776	131,811	140,802

<sup>\*</sup> Type code is as follows: 500 is 500 Weeks; WO is Widow Only; LS is Lump Sum otherwise the claim is Lifetime.

For the "All Permanent Partial" Scenario, Permanent claims for a Miner or Miner and Spouse were re-run with 630 weeks of State Indemnity benefits. Widow Only, 500 Week and Lump Sums were the same as in the Base Scenario.

301,337

600,981

0

190,913

179,637

179,637

181,038

Sources: Individual claim data from CMCRB.

2016

63.69

1,165,918

18,401

1.00

18,401

10602 1016

"All Permanent Partial" Scenario (see note)

																All	rennanenir	aniai sceni	and (see no	(e)	
					Age of		Medical		Medical			F	ederal Exce	ess:		State plus			F	ederal Exce	ess:
	A	wd (2)		Exp.	Miner at	State	Before	Act 44	After	Offset	s for:		After 0	Offsets:	State	Act 44	Offset	ts for:		After (	Offsets:
ID No.	Class P	end (1	) Type*	Yr. (	Comp Date	Benefit	Act 44	Factor	Act 44	Soc. Sec.	Pension	Base	SS	SS, PP	Benefit	Medical	Soc. Sec.	Pension	Base	SS	SS, PP
513	1013	2		1993	64.41	1,281,487	18,401	1.00	18,401	-	380,415	-	-	2	617,789	-	-	241,013	186,087	186,087	187,855
656	1013	2		1999	53.50	1,019,095	28,082	1.00	28,082	236,740	153,019	16	40,016	169,512	418,939	-	19,487	16,973	313,490	314,873	322,362
1135	1013	2	LS	1990	45.48	566,572	37,590	1.00	37,590	-	-	501,652	501,652	501,652	566,572	-	-	-	504,970	504,970	504,970
2486	1013	2	LS	1996	64.21	75,192	18,401	1.00	18,401	-	60,568	93,511	93,511	154,079	75,192	-	-	60,568	93,511	93,511	154,079
3386	1013	2	LS	1993	57.79	330,142	24,008	1.00	24,008	38,417	36,762	291,371	293,864	315,997	330,142	-	38,417	36,762	292,342	294,835	316,968
3867	1013	2		1994	45.76	1,584,283	36,540	1.00	36,540	287,523	157,103	5	53,084	189,589	542,236	-	-	-	472,155	472,155	472,155
3968	1013	2	500	1991	43.69	423,785	38,629	1.00	38,629	-	-	251,142	251,142	251,142	423,785	-	-	-	251,142	251,142	251,142
5814	1013	2	LS	1997	61.04	10,350	21,109	1.00	21,109	-	6,225	295,616	295,616	301,842	10,350	-	-	6,225	292,805	292,805	299,031
5816	1013	2	LS	1996	61.04	174,908	21,109	1.00	21,109	-	105,202	221,420	221,420	296,741	174,908	-	-	105,202	221,633	221,633	296,954
5963	1013	2	LS	1994	59.11	63,523	23,023	1.00	23,023	22,304	-	334,900	357,204	357,204	63,523	-	22,304	-	335,376	357,680	357,680
5968	1013	2	LS	1995	56.89	307,291	25,009	1.00	25,009	22,367	19,893	329,228	331,821	343,069	307,291	-	22,367	19,893	330,075	332,668	343,916
7788	1013	2	LS	1991	69.22	188,120	14,339	1.00	14,339	-	125,776	91,817	91,817	177,017	188,120	-	-	125,776	91,294	91,294	176,494
9770	1013	2	LS	1999	59.19	42,244	23,023	1.00	23,023	14,832	-	309,014	323,846	323,846	42,244	-	14,832	-	309,475	324,307	324,307
9771	1013	2	LS	1998	62.52	110,503	19,281	1.00	19,281	-	78,620	91,336	91,336	152,091	110,503	-	-	78,620	91,336	91,336	152,091
9999	1013	2	LS	2005	46.21	33,932	36,540	1.00	36,540	-	-	282,816	282,816	282,816	33,932	-	-	-	282,816	282,816	282,816
10439	1013	2		2011	61.51	719,918	20,184	1.00	20,184	-	245,056	-	-	-	449,468	-	-	143,637	75,343	75,343	75,343
10537	1013	2	LS	2012	64.47	104,980	18,401	1.00	18,401	-	84,564	185,206	185,206	268,732	104,980	-	-	84,564	185,058	185,058	268,585
10582	1013	1		2015	72.09	294,277	12,201	1.00	12,201	-	-	-	-	-	232,115	-	-	-	26,677	26,677	26,677
10598	1013	2	LS	2012	61.71	22,755	20,184	1.00	20,184	-	15,777	302,714	302,714	318,491	22,755	-	-	15,777	303,280	303,280	319,057

Total Surface Bituminous Average of 19 claims	19	7,353,358 387,019 7,809,411	456,053 24,003	456,053 24,003	622,182 32,746	1,468,982 77,315	3,581,764 188,514	3,717,065 195,635	4,403,821 231,780	4,714,844 248,150	0	117,406 6,179	935,011 49,211	4,658,866 245,203	4,702,471 247,498	5,132,481 270,131
Medical plus Indemnity Adjusted		411,022			32,746	77,315	188,514	195,635	231,780	272,152 272,152		6,179 6,179	49,211 49,211	245,203 245,203	247,498 247,498	270,131 270,131

<sup>\*</sup> Type code is as follows: 500 is 500 Weeks; WO is Widow Only; LS is Lump Sum otherwise the claim is Lifetime.

For the "All Permanent Partial" Scenario, Permanent claims for a Miner or Miner and Spouse were re-run with 630 weeks of State Indemnity benefits. Widow Only, 500 Week and Lump Sums were the same as in the Base Scenario.

Sources: Individual claim data from CMCRB.

"All Permanent Partial" Scenario (see note)

															7 (11	Cimanoni	arnar scorn	ano (300 moi	10)	
				Age of		Medical		Medical			F	ederal Exce	ess:		State plus			F	ederal Exce	ess:
F	Awd (2)	)	Exp.	Miner at	State	Before	Act 44	After	Offset	s for:		After C	Offsets:	State	Act 44	Offset	s for:		After (	Offsets:
Class P	end (1	) Type*	Yr. (	Comp Date	Benefit	Act 44	Factor	Act 44	Soc. Sec.	Pension	Base	SS	SS, PP	Benefit	Medical	Soc. Sec.	Pension	Base	SS	SS, PP
1017	2		1993	60.76	1,406,271	21,109	1.00	21,109	-	400,001	-	-	223	618,083	-	-	236,430	239,946	239,946	241,920
1017	2	LS	1992	56.91	223,389	25,009	1.00	25,009	35,198	4,626	308,601	328,726	333,281	223,389	-	35,198	4,626	308,074	328,200	332,755
1022	2	LS	2003	53.06	81,876	29,127	1.00	29,127	-	-	362,402	362,402	362,402	81,876	-	-	-	362,147	362,147	362,147
1024	2	LS	2006	59.96	111,540	22,056	1.00	22,056	48,988	-	113,459	152,563	152,563	111,540	-	48,988	-	113,459	152,563	152,563
1026	2		1997	55.39	471,967	27,047	1.00	27,047	170,982	90,931	43	54,509	139,824	242,447	-	22,743	17,336	134,501	135,494	147,510
1026	2	LS	1997	54.71	37,604	27,047	1.00	27,047	964	-	198,264	199,229	199,229	37,604	-	964	-	198,264	199,229	199,229
1026	2	LS	2004	N/A	71,331	-	1.00	-	-	-	141,155	141,155	141,155	71,331	-	-	-	140,302	140,302	140,302
1026	2	LS	2007	43.15	28,359	39,654	1.00	39,654	-	-	707,108	707,108	707,108	28,359	-	-	-	722,490	722,490	722,490
1026	2		2010	74.49	420,597	10,907	1.00	10,907	-	87,003	-	-	5	315,031	-	-	80,489	43,102	43,102	43,318
1028	2	LS	2000	N/A	65,627	-	1.00	-	-	-	194,718	194,718	194,718	65,627	-	-	-	196,846	196,846	196,846
	1017 1017 1022 1024 1026 1026 1026 1026 1026	Class Pend (1)  1017 2 1017 2 1022 2 1024 2 1026 2 1026 2 1026 2 1026 2 1026 2	1017 2 1017 2 LS 1022 2 LS 1024 2 LS 1026 2 LS 1026 2 LS 1026 2 LS 1026 2 LS 1026 2 LS	Class Pend (1) Type* Yr. (1)  1017	Awd (2) Exp. Miner at Class Pend (1) Type* Yr. Comp Date  1017 2 1993 60.76 1017 2 LS 1992 56.91 1022 2 LS 2003 53.06 1024 2 LS 2006 59.96 1026 2 1997 55.39 1026 2 LS 1997 54.71 1026 2 LS 2004 N/A 1026 2 LS 2007 43.15 1026 2 2010 74.49	Awd (2) Exp. Miner at State Class Pend (1) Type* Yr. Comp Date Benefit  1017 2 1993 60.76 1,406,271 1017 2 LS 1992 56,91 223,389 1022 2 LS 2003 53.06 81,876 1024 2 LS 2006 59,96 111,540 1026 2 1997 55.39 471,967 1026 2 LS 1997 54,71 37,604 1026 2 LS 1997 54,71 37,604 1026 2 LS 2004 N/A 71,331 1026 2 LS 2007 43,15 28,359 1026 2 2010 74,49 420,597	Awd (2) Exp. Miner at State Before Class Pend (1) Type* Yr. Comp Date Benefit Act 44  1017 2 1993 60.76 1.406,271 21,109 1017 2 LS 1992 56.91 223,389 25,009 1022 2 LS 2003 53.06 81,876 29,127 1024 2 LS 2006 59,96 111,540 22,056 1026 2 1997 55.39 471,967 27,047 1026 2 LS 1997 54.71 37,604 27,047 1026 2 LS 2004 N/A 71,331 - 1026 2 LS 2007 43,15 28,359 39,654 1026 2 2010 74.49 420,597 10,907	Awd (2)         Exp.         Miner at Miner at Miner at Mode and the composition of th	Awd (2)         Exp.         Miner at Yr.         State         Before Act 44         After Act 44           Class Pend (1) Type*         Yr.         Comp Date         Benefit         Act 44         Factor         Act 44           1017         2         1993         60.76         1.406.271         21.109         1.00         21.109           1017         2         LS         1992         56.91         223.389         25.009         1.00         25.009           1022         LS         2003         53.06         81.876         29.127         1.00         29.127           1024         2         LS         2006         59.96         111.540         22.056         1.00         22.056           1026         2         1997         55.39         471.967         27.047         1.00         27.047           1026         2         LS         1997         54.71         37.604         27.047         1.00         27.047           1026         2         LS         2004         N/A         71.331         -         1.00         27.047           1026         2         LS         2007         43.15         28.359         39,654         1.00	Awd (2)         Exp.         Miner at Class Pend (1) Type*         Exp.         Miner at Miner at Miner at Benefit         Before Act 44 Act 44 Factor         Act 44 Facto	Awd (2) Exp. Miner at State Before Act 44 After Offsets for:  Class Pend (1) Type* Yr. Comp Date Benefit Act 44 Factor Act 44 Soc. Sec. Pension  1017 2 1993 60.76 1,406,271 21,109 1.00 21,109 - 400,001  1017 2 LS 1992 56.91 223,389 25,009 1.00 25,009 35,198 4,626  1022 2 LS 2003 53.06 81,876 29,127 1.00 29,127  1024 2 LS 2006 59.96 111,540 22,056 1.00 22,056 48,988 -  1026 2 1997 55.39 471,967 27,047 1.00 27,047 170,982 90,931  1026 2 LS 1997 54.71 37,604 27,047 1.00 27,047 964 -  1026 2 LS 2004 N/A 71,331 - 1.00  1026 2 LS 2007 43.15 28,359 39,654 1.00 39,654  1026 2 LS 2007 43.15 28,359 39,654 1.00 39,654  1026 2 LS 2007 44.15 28,359 39,654 1.00 39,654  1026 2 2010 74.49 420,597 10,907 1.00 10,907 - 87,003	Awd (2) Exp. Miner at Class Pend (1) Type* Yr. Comp Date Benefit Act 44 Factor Act 44 Soc. Sec. Pension Base  1017 2 1993 60.76 1,406,271 21,109 1.00 21,109 - 400,001 - 1017 2 LS 1992 56,91 223,389 25,009 1.00 25,009 35,198 4,626 308,601 1022 2 LS 2003 53.06 81,876 29,127 1.00 29,127 - 362,402 1024 2 LS 2006 59,96 111,540 22,056 1.00 22,056 48,988 - 113,459 1026 2 1997 55.39 471,967 27,047 1.00 27,047 170,982 90,931 43 1026 2 LS 1997 54,71 37,604 27,047 1.00 27,047 964 - 198,264 1026 2 LS 2004 N/A 71,331 - 1.00 141,155 1026 2 LS 2007 43,15 28,359 39,654 1.00 39,654 707,108 1026 2 2 2010 74,49 420,597 10,907 1.00 10,907 - 87,003 - 87,003	Awd (2)         Exp.         Miner at Class Pend (1) Type*         Yr.         Comp Date         Before Act 44 Before Act 44 Factor         After Offsets for: Act 44 Soc. Sec.         Pension         Base         SS           1017         2         1993         60.76         1,406.271         21,109         1.00         21,109         -         400,001         -         -           1017         2         15         1992         56.91         223,389         25,009         1.00         25,009         35,198         4,626         308,601         328,726           1022         2         LS         2003         53.06         81,876         29,127         1.00         29,127         -         362,402	Awd (2) Exp. Miner at Class Pend (1) Type* Yr. Comp Date Benefit Act 44 Factor Act 44 Soc. Sec. Pension Base SS SS, PP  1017 2 1993 60.76 1,406,271 21,109 1.00 21,109 - 400,001 - 23 1017 2 LS 1992 56.91 223,389 25,009 1.00 25,009 35,198 4,626 308,601 328,726 333,281 1022 2 LS 2003 53.06 81,876 29,127 1.00 29,127 - 362,402 362,402 362,402 1024 2 LS 2006 59,96 111,540 22,056 1.00 22,056 48,988 - 113,459 152,563 152,563 1026 2 1997 55.39 471,967 27,047 1.00 27,047 170,982 90,931 43 54,509 139,824 1026 2 LS 1997 54.71 37,604 27,047 1.00 27,047 964 - 198,264 199,229 199,229 1026 2 LS 2004 N/A 71,331 - 1.00 141,155 141,155 141,155 1026 2 LS 2007 43.15 28,359 39,654 1.00 39,654 707,108 707,108 707,108 1026 2 LS 2007 43.15 28,359 39,654 1.00 39,654 707,108 707,108 707,108 1026 2 LS 2010 74.49 420,597 10,907 1.00 10,907 - 87,003 5	Awd (2) Exp. Miner at Class Pend (1) Type* Yr. Comp Date Benefit Act 44 Factor Act 44 Soc. Sec. Pension Base SS SS, PP Benefit Class Pend (1) Type* Yr. Comp Date Benefit Act 44 Factor Act 44 Soc. Sec. Pension Base SS SS, PP Benefit Class Pend (1) Type* Yr. Comp Date Benefit Act 44 Factor Act 44 Soc. Sec. Pension Base SS SS, PP Benefit Class Pension Page SS, SS, PP Benefit Page SS, PP Page SS	Ayud   (2)   Exp.   Miner at   State   Before   Act   44   After   Offsets for:   Offsets for:	Age of Awd [2]   Exp.   Miner at State   Before   Act 44   After   Offsets for:   Bress   After Offsets:   State   Act 44   Offset   Offsets for:   Offsets for:   Act 44   Offset   Offsets for:   Off	Awd   2    Exp.   Miner at   State   Before   Act 44   After   Offsets for:   Base   SS   SS, PP   Benefit   Medical   Soc. Sec.   Pension   Base   SS   SS, PP   Benefit   Medical   Soc. Sec.   Pension   Base   SS   SS, PP   Benefit   Medical   Soc. Sec.   Pension   Base   SS   SS, PP   Benefit   Medical   Soc. Sec.   Pension   Base   SS   SS, PP   Benefit   Medical   Soc. Sec.   Pension   Base   SS   SS, PP   Benefit   Medical   Soc. Sec.   Pension   Base   SS   SS, PP   Benefit   Medical   Soc. Sec.   Pension   Pension   Soc. Sec.   Pension   Pension	Age of Awd [2] Exp. Miner at State Before Act 44 After Offsets for: Act 44 Soc. Sec. Pension Base SS SS. PP Benefit Medical Soc. Sec. Pension Pension Soc. Pension Pension Soc. Pension Base SS SS. PP Benefit Medical Soc. Pension Pension Soc. Pension P	Awd (2) Exp. Miner at State Before Act 44 After Offsets for: Act 44 Soc. Sec. Pension Base SS SS, PP Benefit Medical Soc. Sec. Pension Pension Pension Pension Pension Pension Pension P

Total Surface Bituminous Average of 10 claims	10	2,918,560 291,856 3,120,517	201,956 20,196	201,956 20,196	256,133 25,613	582,560 58,256	2,025,749 202,575	2,140,410 214,041	2,230,508 223,051	1,795,286 179,529	0	107,893 10,789	338,881 33,888	2,459,131 245,913	2,520,318 252,032	2,539,079 253,908	
Medical plus Indemnity Adjusted		312,052			25,613	58,256	202,575	214,041	223,051	199,724 199,724		10,789 10,789	33,888 33,888	245,913 245,913	252,032 252.032	253,908 253,908	

<sup>\*</sup> Type code is as follows: 500 is 500 Weeks; WO is Widow Only; LS is Lump Sum otherwise the claim is Lifetime.

For the "All Permanent Partial" Scenario, Permanent claims for a Miner or Miner and Spouse were re-run with 630 weeks of State Indemnity benefits. Widow Only, 500 Week and Lump Sums were the same as in the Base Scenario.

Sources: Individual claim data from CMCRB.

# Coal Mine Compensation Rating Bureau Individual Claim Detail for Federal Basic

Exhibit IX-B Page 1 <u>Underground Anthracite</u> Class 160

					Age of		
		Awd (2)	Exposure		Miner at	Federal	
ID No.	Class	Pend (1)	Date	Type* (	Comp. Date	Benefit	Medical
9,929	160	2	5/7/2001	0	51.00	435,099	75,570
1,335	160	2	4/4/1994	0	61.23	181,174	51,070
10,200	160	2	10/24/2006	0	53.47	557,274	70,468
2,051	160	2	12/6/1990	0	64.94	291,588	42,446
10,199	160	2	1/1/1990	0	60.50	399,033	53,361
9,876	160	2	6/13/2001	0	64.89	283,413	42,446
3,089	160	2	12/6/1990	0	52.39	578,257	73,013
3,156	160	2	6/22/1990	0	67.11	419,603	38,457
10,423	160	1	4/11/2011	0	58.26	391,496	58,084
3,720	160	2	10/1/1990	WO	N/A	235,673	-
10,532	160	1	2/28/2002	0	60.31	368,032	53,361
4,555	160	2	6/22/1990	0	67.34	288,938	38,457
4,735	160	2	5/5/1992	WO	N/A	269,137	-
10,237	160	2	7/21/2003	0	65.28	275,560	42,446
10,482	160	2	6/1/1991	0	61.87	409,409	48,831
10,395	160	1	6/30/1999	0	59.16	197,602	55,701
9,960	160	1	4/1/1999	0	54.42	430,559	67,941
7,258	160	2	12/2/1993	0	59.78	421,553	53,361
7,489	160	2	6/22/1990	0	54.50	529,882	65,437
7,863	160	2	12/6/1990	0	56.42	361,366	62,958

Total Underground Anthracite Average of 20 claims 7,324,646 993,407 59.60 366,232 49,670

Medical plus Indemnity 415,903

					Age of		
		wd (2)	Exposure		Miner at	Federal	
ID No.	Class Pe	nd (1)	Date	Type* Co	omp. Date	Benefit	Medical
10,579	158	1	12/29/2014	0	55.63	436,942	62,958
275	158	2	9/25/1992	0	71.39	269,242	31,177
10,530	158	1	5/26/2000	0	60.78	392,738	51,070
508	158	2	8/15/1991	0	75.55	83,254	23,468
917	158	2	4/1/1993	0	62.00	365,339	48,831
10,182	158	2	9/1/2001	0	61.75	336,126	48,831
931	158	2	3/3/1995	0	68.32	283,681	36,544
10,613	158	1	12/31/2002	0	53.34	249,989	70,468
10,162	158	1	12/31/2006	0	57.46	388,825	60,505
9,870	158	2	6/1/1994	WO	N/A	292,561	-
10,299	158	2	2/4/2001	0	65.28	260,812	42,446
10,287	158	1	2/19/2007	0	55.23	466,634	65,437
10,129	158	2	7/1/1993	0	61.63	486,190	48,831
9,863	158	2	5/1/1990	0	73.06	99,067	27,926
10,499	158	1	9/30/1996	0	43.02	340,344	95,938
10,464 10,387	158 158	1 2	9/12/2014	0 0	64.50 61.09	337,682 325,099	42,446 51,070
9,857	158	2	10/12/1991 7/14/1992	0	79.44	154,806	19,500
10,194	158	2	10/10/2001	0	66.61	297,926	38,457
10,174	158	2	12/1/1991	0	68.11	250,768	36,544
10,527	158	1	5/29/2000	0	62.00	336,126	48,831
10,315	158	2	4/1/1993	0	66.37	277,583	40,425
3,481	158	1	5/20/1990	0	36.42	871,749	111,965
10,605	158	i	7/1/2016	0	59.77	377,994	53,361
10,003	158	2	1/1/1999	0	66.66	271,974	38,457
10,446	158	2	12/1/1992	0	69.46	123,068	34,691
10,455	158	2	3/1/2002	0	67.39	263,975	38,457
10,546	158	1	1/5/2015	0	62.18	173,232	48,831
10,529	158	1	5/26/2000	0	66.26	269,655	40,425
10,086	158	2	2/9/2006	0	56.41	459,655	62,958
9,758	158	1	6/28/2000	0	52.23	500,104	73,013
10,523	158	1	4/11/1995	0	66.87	297,926	38,457
10,255	158	1	12/1/1992	0	55.01	490,763	65,437
10,584	158	1	7/15/1996	0	79.41	148,880	19,500
10,291	158	2	6/30/2002	0	67.37	136,428	38,457
10,254	158	2	5/1/1999	0	67.52	250,768	36,544
10,368	158	2	2/24/1996	0	70.14	323,027	32,901
10,558	158	1	9/30/1994	0	45.08	629,065	90,943
10,042	158	2	11/15/2001	0	55.61	459,655	62,958
10,545	158	1	5/31/2013	0	57.43	408,638	60,505
10,580	158	1	8/29/2014	0	55.08	232,141	65,437
10,402	158	2	1/15/2013	0	65.42	291,588	42,446
10,090	158	2	5/1/2004	0	61.18	342,568	51,070
10,573	158	1	6/15/1991	0	38.06	892,531	107,686
10,292	158	1	4/29/2002	0	47.94	295,427	83,276
10,540	158	1	9/11/2015	0	59.75	388,328	53,361
10,032	158	2	1/3/1999	0	74.23	239,040	26,388
10,328	158	2	4/6/1994	0	72.51	197,590	27,926
10,366	158	2	10/12/1991	0	71.12	220,663	31,177
9,839	158	1	11/1/2000	0	49.96	564,996	78,134
8,381	158	2	12/31/1997	0	77.23	168,176	22,089
5,821	158	2	5/1/1992	0	69.52	240,421	32,901
10,065	158	2	10/9/1992	WO	N/A	104,257	-
10,531	158	1	5/26/2000	0	72.80	179,039	27,926
10,293	158	2	12/1/2003	0	65.01	337,682	42,446
10,123	158	2	3/1/1999	0	52.44	477,263	73,013
10,189	158	2	7/11/2002	0	55.34	232,141	65,437
6,950	158	2	9/30/1990	0	57.91	391,496	58,084
10,265	158	2	5/15/1999	0	63.36	427,920	46,647
10,302	158	1	5/1/1994	0	44.37	636,552	93,456
10,585	158	1	2/5/1996	0	76.50	156,238	22,089
7,484	158	2	1/1/1990	WO	N/A	316,669 473,768	47 0 / 1
7,689	158	1	9/19/1991	0	54.11		67,941
10,336	158		6/1/1996	0	45.60 54.01	726,772	88,402
10,578 10,630	158 158	1	11/23/2015 1/30/2016	0	56.91 62.43	388,825 336,126	60,505
10,630	158	1	1/11/2016	0	58.96	374,759	48,831 55,701
10,632	158	1	6/29/2016	0	58.76	384,642	55,701
10,633	158	2	5/15/1992	0	75.59	83,254	23,468
10,498	158	1	9/5/2007	0	50.16	636,247	78,134
10,457	158	1	2/11/2010	0	73.01	204,388	27,926
10,575	158	1	1/6/2016	0	60.04	358,446	53,361
10,526	158	1	5/26/2000	0	63.92	343,317	44,519
10,326	158	2	6/10/1997	0	64.04	375,106	44,519
10,30/	100	_	0,10,1777	J	07.04	5/5,100	
Total Underg	round Bitur	ninous				25,206,665	3,639,556
Average of 7					61.79	340,631	49,183
2. 290 017					3,	2 .0,001	.,,.50
Medical plus	Indemnity					389 814	

\*Type is "WO" for Widow Only claims; 0 for all other claims. Source: Individual claim detail from CMCRB.

Medical plus Indemnity

389,814

			_		Age of		
		wd (2)	Exposure	Miner at		Federal	
ID No.	Class Pe	end (1)	Date	Type* Co	mp. Date	Benefit	Medical
10,156	153	2	10/21/2002	0	75.14	203,185	24,902
9,726	153	2	8/10/1995	0	68.28	266,587	36,544
10,232	153	2	7/31/2004	0	56.70	408,638	60,505
10,590	153	1	3/1/2000	0	57.13	214,646	60,505
926	153	2	2/29/1996	0	58.31	381,694	58,084
10,109	153	2	4/4/2003	0	65.00	150,578	42,446
10,261	153	2	5/30/1996	0	67.25	288,938	38,457
10,231	153	2	4/2/2003	0	65.03	283,413	42,446
9,935	153	1	8/16/1994	0	63.92	314,786	44,519
9,739	153	2	12/22/2000	0	73.86	207,248	26,388
10,145	153	2	5/24/2007	0	59.55	410,107	53,361
9,940	153	2	12/1/1990	0	63.20	466,906	46,647
10,107	153	2	1/6/2004	0	56.26	415,778	62,958
2,157	153	1	10/10/1990	0	54.96	557,871	65,437
10,634	153	1	2/16/2016	0	61.88	173,232	48,831
2,299	153	2	1/15/1990	0	60.12	399,033	53,361
10,073	153	2	3/1/2005	0	60.49	377,994	53,361
3,725	153	2	9/30/1995	0	65.56	247,791	40,425
10,049	153	1	11/19/2005	0	61.99	336,126	48,831
3,955	153	2	10/29/1995	0	66.54	316,961	38,457
10,222	153	1	2/2/2006	0	75.81	178,412	23,468
9,760	153	2	2/7/2000	0	75.44	182,442	24,902
4,749	153	2	1/3/1992	0	65.72	234,823	40,425
10,275	153	2	3/31/2003	0	68.92	287,748	34,691
5,044	153	2	2/4/1990	0	71.50	202,176	29,520
5,131	153	2	5/22/1992	0	68.11	311,874	36,544
10,384	153	2	10/23/2007	0	76.31	83,254	23,468
10,429	153	2	5/22/2013	0	54.36	485,557	67,941
5,372	153	2	3/10/1997	0	60.04	388,328	53,361
9,885	153	2	6/1/1998	0	66.88	256,294	38,457
5,952	153	2	1/31/1995	WO	N/A	118,191	-
9,793	153	1	1/26/2001	0	53.76	462,375	67,941
6,287	153	2	10/28/1990	0	73.92	180,431	26,388
6,303	153	2	8/5/1990	WO	N/A	185,121	-
6,581	153	2	6/5/1997	WO	N/A	194,718	-
10,459	153	2	8/3/2009	0	57.34	398,543	60,505
7,032	153	2	2/10/1993	0	62.41	355,230	48,831
7,250	153	2	9/30/1993	WO	N/A	292,561	-
7,263	153	2	3/1/1991	WO	N/A	194,718	-
7,451	153	2	11/5/1990	0	72.80	184,922	27,926

Total Surface Anthracite Average of 40 claims

Medical plus Indemnity 328,752

11,599,230 1,550,834

38,771

289,981

64.70

		(۵) است	F	Age of Miner at Federal				
ID No.	Awd (2) Class Pend (1)		Exposure Date	Miner at Type* Comp. Date		Benefit	Medical	
178	156	2	9/23/1994	0	70.19	240,421	32,901	
9,866	156	2	9/20/1994	0	78.84	69,177	19,500	
10,335	156	2	6/1/1995	WO	N/A	214,670	-	
600	156	2	9/10/1992	0	62.67	320,843	46,647	
601	156	2	6/19/1992	0	66.18	294,410	40,425	
9,795	156	2	12/1/1992	0	69.69	240,421	32,901	
10,333	156	1	6/15/1992	0	59.87	189,302	53,361	
1,356	156	2	5/1/1995	0	55.30	516,453	65,437	
10,458	156	1	11/1/2008	0	68.11	258,519	36,544	
10,554	156	2	4/13/2015	0	76.53	168,176	22,089	
10,418	156	2	1/1/2003	0	73.15	211,504	27,926	
10,478	156	1	7/15/2011	0	70.55	235,610	31,177	
10,521	156	1	5/1/1996	0	67.06	288,938	38,457	
10,453	156	1	2/28/2003	0	55.65	595,928	62,958	
10,609	156	1	7/1/1996	0	48.51	613,734	80,703	
2,494	156	2	4/19/1996	0	64.66	327,741	42,446	
10,414	156	2	4/27/2001	0	75.85	199,311	23,468	
9,945	156	2	8/31/1995	0	73.69	193,219	26,388	
10,114	156	2	10/26/1991	WO	N/A	166,697	-	
3,047	156	2	12/31/1996	0	77.58	146,862	20,767	
3,058	156	2	1/17/1991	0	65.64	303,334	40,425	
10,003	156	2	5/30/1995	0	72.79	211,504	27,926	
10,385	156	2	3/1/2012	WO	N/A	235,673	-	
10,221	156	2	1/1/1993	0	81.01	116,493	17,131	
10,128	156	2	8/1/1994	0	74.82	182,442	24,902	
9,953	156	2	3/1/1994	0	55.28	529,882	65,437	
10,204	156	2	2/28/1992	0	69.75	248,304	32,901	
5,221	156	2	6/4/1995	0	66.01	269,655	40,425	
10,305	156	2	3/1/1995	0	61.87	355,230	48,831	
10,217	156	2	11/25/2008	0	63.72	297,567	44,519	
5,374	156	2	10/21/1991	WO	N/A	482,569	-	
10,351	156	2	12/27/2012	0	58.61	394,899	55,701	
5,483	156	2	8/6/1990	0	61.43	181,174	51,070	
10,447	156	2	12/1/2008	0	76.83	162,062	22,089	
9,761	156	2	9/30/1991	0	74.06	180,431	26,388	
9,961	156	2	5/31/2000	0	52.09	564,239	73,013	
10,104	156	2	6/1/1990	0	71.51	104,723	29,520	
10,566	156	2	8/31/2001	0	76.17	149,533	23,468	
6,244	156		10/10/1990	0	81.72	97,904	16,051	
10,133	156	1	12/1/2006	0	62.84	359,341	46,647	
10,517 9,967	156 156	1 2	4/1/2014 1/15/1990	0 0	66.89 71.04	271,974 213,671	38,457	
10,400	156	1	2/28/1993	0	80.02	145,496	31,177 18,287	
6,949	156	2	12/7/1994	0		529,882		
	156	2		0	54.92 63.94	225,823	65,437	
10,112 10,604	156	1	12/1/2007 5/1/2001	0	60.37	368,032	44,519 53,361	
7,245	156	2	9/1/1991	0	77.57	146,862	20,767	
7,243	156	2	8/31/1995	0	64.94	291,588	42,446	
9,767	156	2	6/1/2000	0	62.11	345,490	48,831	
7,767	156	2	2/19/1992	0	61.43	342,568	51,070	
8,012	156	2	1/1/1990	0	70.45	225,602	32,901	
8,022	156	2	11/1/1995	0	61.86	336,126	48,831	
0,022	150		11/1/17/3	0	01.00	500,120	-0,001	

 Total Surface Bituminous
 14,894,280
 1,942,321

 Average of 53 claims
 67.24
 281,024
 36,648

Medical plus Indemnity 317,672

\*Type is "WO" for Widow Only claims; 0 for all other claims. Source: Individual claim detail from CMCRB.

10,607

156

1 1/8/2015

0

59.05

532,270

55,701

# Coal Mine Compensation Rating Bureau Individual Claim Detail for Federal Basic

Exhibit IX-B Page 5 Six Minor Classes Class - Other

					Age of		
		Awd (2)	Exposure		Miner at	Federal	
ID No	. Class	Pend (1)	Date	Type* C	omp. Date	Benefit	Medical
10,588	157	1	2/1/2010	0	72.29	223,344	29,520
3,158	181	2	3/14/1997	0	62.00	355,230	48,831
9,904	183	2	12/31/1997	WO	N/A	141,155	-
9,992	183	1	7/22/2004	0	62.34	345,490	48,831
10,533	183	1	5/15/2014	0	56.69	452,832	60,505
4,592	183	1	7/19/1997	0	53.33	438,192	70,468
10,620	183	1	10/1/2013	0	53.08	504,866	70,468
9,887	183	1	2/2/2000	0	51.88	259,017	73,013
10,603	183	1	12/31/1997	0	55.95	223,346	62,958
10,338	184	2	10/15/2005	0	68.77	123,068	34,691
10,565	184	1	8/31/2001	0	62.88	359,341	46,647
10,456	184	1	7/1/2006	0	56.10	405,768	62,958
10,135	184	2	2/1/2002	0	75.55	231,462	23,468

Total Other Classes Average of 13 claims 4,063,110 632,358 60.91 312,547 48,643 361,190

Medical plus Indemnity

<u>Traumatic</u>	Anthracite Underground	Bituminous Underground	Anthracite Surface	Bituminous Surface	Coke	Auger	Anthracite Co-gen	Bituminous Co-gen	Anthracite Prep Plant	Bituminous Prep Plant	Total
	(1010)	(1001)	(1012)	(1014)	(1469)	(1015)	(1021)	(1023)	(1025)	(1027)	
1997	591,339	71,376,959	17,783,135	67,905,789	53,119,079	1,193,492	3,520,161	856,052	1,149,401	13,783,647	231,279,054
1998	507,288	62,342,332	17,376,290	63,651,561	13,353,903	1,237,897	3,458,775	1,161,196	1,032,902	11,112,104	175,234,248
1999	537,329	59,962,066	18,441,144	54,162,273	12,293,477	1,136,891	3,604,305	1,494,276	1,231,124	10,691,780	163,554,665
2000	336,885	48,553,836	16,807,810	49,935,622	12,092,574	1,205,877	4,473,458	1,870,720	1,319,466	8,574,760	145,171,008
2001	434,499	49,724,653	13,940,797	58,151,332	10,375,826	1,429,131	5,234,468	2,121,331	3,609,649	10,155,025	155,176,711
2002 2003	197,351 75,855	50,439,544 55,493,906	12,251,258 12,166,211	53,502,085 47,873,740	10,485,005 11,534,080	1,150,843 1,102,223	6,358,543 7,137,655	2,386,124 3,052,523	3,781,693 3,721,296	12,649,826 14,752,318	153,202,272 156,909,807
2003	73,833	66,842,986	12,359,731	56,217,298	12,049,126	1,058,799	7,137,633	6,374,483	4,406,653	18,067,286	184,727,876
2005	_	72,290,188	12,140,911	64,871,562	12,860,979	1,036,777	7,855,289	8,524,752	5,170,069	17,690,358	202,430,645
2006	530	71,907,931	11,946,382	63,008,975	12,737,394	1,066,831	8,405,393	9,397,580	4,885,882	17,050,967	200,407,865
2007	-	81,566,803	14,555,579	63,295,774	13,669,925	1,121,156	9,160,450	10,789,214	5,756,439	18,895,192	218,810,532
2008	-	103,490,690	16,954,313	73,054,482	9,761,146	2,488,558	7,958,335	8,468,561	6,390,767	21,250,256	249,817,108
2009	-	102,684,006	16,445,462	61,784,394	5,173,552	926,163	8,004,644	7,866,413	6,749,748	19,828,012	229,462,394
2010	5,700	126,687,464	14,295,288	72,711,558	5,435,658	806,696	8,481,228	8,732,701	5,762,086	26,313,130	269,231,509
2011	110,125	149,633,528	21,034,600	86,074,064	3,599,086	1,176,255	11,720,035	9,102,411	7,236,583	35,155,068	324,841,755
2012	219,407	154,428,761	26,295,907	76,452,811	5,738,105	808,208	10,273,004	9,047,745	8,671,140	34,211,729	326,146,817
2013	175,900	149,953,068	22,449,824	61,349,745	4,791,910	1,025,399	8,342,651	10,355,884	8,265,665	34,253,697	300,963,743
2014	258,809	271,230,707	20,466,075	54,050,731	4,464,398	806,976	9,060,883	11,721,184	8,234,771	43,520,040	423,814,574
2015	254,336	216,454,460	24,218,779	40,934,048	4,340,376	582,619	10,469,089	11,748,205	7,606,274	33,564,176	350,172,362
2016	163,760	148,894,215	20,810,850	28,999,042	2,313,724	372,496	10,847,424	11,386,837	6,971,270	22,131,423	252,891,041
State OD											
	(1011)	(1002)	(1016)	(1013)	(1017)	(1019)	(1022)	(1024)	(1026)	(1028)	
1997	1,571,605	70,396,693	17,783,135	67,905,789	53,119,079	1,193,492	3,520,161	856,052	1,149,401	13,783,647	231,279,054
1998	1,762,286	61,087,334	17,376,290	63,651,561	13,353,903	1,237,897	3,458,775	1,161,196	1,032,902	11,112,104	175,234,248
1999	1,814,157	58,685,238	18,441,144	54,162,273	12,293,477	1,136,891	3,604,305	1,494,276	1,231,124	10,691,780	163,554,665
2000	1,370,159	47,520,562	16,807,810	49,935,622	12,092,574	1,205,877	4,473,458	1,870,720	1,319,466	8,574,760	145,171,008
2001	1,636,522	48,522,630	13,940,797	58,151,332	10,375,826	1,429,131	5,234,468	2,121,331	3,609,649	10,155,025	155,176,711
2002	1,386,545	49,250,350	12,251,258	53,502,085	10,485,005	1,150,843	6,358,543	2,386,124	3,781,693	12,649,826	153,202,272
2003 2004	1,354,265	54,215,496	12,166,211	47,873,740	11,534,080	1,102,223	7,137,655	3,052,523	3,721,296	14,752,318	156,909,807
2004	1,345,321 1,417,568	65,497,665 70,872,620	12,359,731 12,140,911	56,217,298 64,871,562	12,049,126 12,860,979	1,058,799 1,026,537	7,351,514 7,855,289	6,374,483 8,524,752	4,406,653 5,170,069	18,067,286 17,690,358	184,727,876 202,430,645
2003	1,417,566	70,872,820	11,946,382	63,008,975	12,737,394	1,066,831	8,405,393	9,397,580	4,885,882	17,050,967	200,407,865
2007	1,662,537	79,904,266	14,555,579	63,295,774	13,669,925	1,121,156	9,160,450	10,789,214	5,756,439	18,895,192	218,810,532
2008	2,136,713	101,353,977	16,954,313	73,054,482	9,761,146	2,488,558	7,958,335	8,468,561	6,390,767	21,250,256	249,817,108
2009	1,335,866	101,348,140	16,445,462	61,784,394	5,173,552	926,163	8,004,644	7,866,413	6,749,748	19,828,012	229,462,394
2010	1,299,588	125,393,576	14,295,288	72,711,558	5,435,658	806,696	8,481,228	8,732,701	5,762,086	26,313,130	269,231,509
2011	1,257,944	148,485,709	21,034,600	86,074,064	3,599,086	1,176,255	11,720,035	9,102,411	7,236,583	35,155,068	324,841,755
2012	1,029,260	153,618,908	26,295,907	76,452,811	5,738,105	808,208	10,273,004	9,047,745	8,671,140	34,211,729	326,146,817
2013	381,876	149,747,092	22,449,824	61,349,745	4,791,910	1,025,399	8,342,651	10,355,884	8,265,665	34,253,697	300,963,743
2014	258,809	271,230,707	20,466,075	54,050,731	4,464,398	806,976	9,060,883	11,721,184	8,234,771	43,520,040	423,814,574
2015	254,336	216,454,460	24,218,779	40,934,048	4,340,376	582,619	10,469,089	11,748,205	7,606,274	33,564,176	350,172,362
2016	163,760	148,894,215	20,810,850	28,999,042	2,313,724	372,496	10,847,424	11,386,837	6,971,270	22,131,423	252,891,041
Federal OD			,		,===	,	,	,			
1007	(0160)	(0158)	(0153)	(0156)	(0154)	(0157)	(0181)	(0182)	(0183)	(0184)	001 070 057
1997	1,571,605	70,396,693 61.087.334	17,783,135	67,905,789	53,119,079 13,353,903	1,193,492	3,520,161	856,052	1,149,401	13,783,647	231,279,054
1998 1999	1,762,286 1,814,157	58,685,238	17,376,290 18,441,144	63,651,561 54,162,273	13,353,903	1,237,897 1,136,891	3,458,775 3,604,305	1,161,196 1,494,276	1,032,902 1,231,124	11,112,104 10,691,780	175,234,248 163,554,665
2000	1,814,157	47,520,562	16,807,810	49,935,622	12,293,477	1,136,891	4,473,458	1,494,276	1,231,124	8,574,760	145,171,008
2001	1,636,522	48,522,630	12,923,748	58,151,332	10,375,826			2,121,331	2,216,299	10,155,025	152,193,657
2001	1,386,545	40,837,995	11,046,570	53,502,085	10,373,828	1,429,131 1,150,843	4,661,813 5,658,774	2,386,124	2,322,815	10,133,023	138,871,305
2002	1,354,265	36,498,406	11,928,209	47,873,740	11,534,080	1,102,223	7,009,619	3,052,523	3,407,998	10,074,347	133,956,269
2004	1,345,321	46,073,900	12,359,731	56,217,298	12,049,126	1,058,799	7,351,514	6,374,483	4,406,653	13,460,201	160,697,026
2005	1,417,568	66,275,755	12,140,911	64,871,562	12,860,979	1,026,537	7,855,289	8,524,752	5,170,069	16,548,307	196,691,729
2006	1,442,524	70,465,937	12,065,323	63,798,502	12,737,394	1,066,831	8,412,527	9,423,575	4,885,882	17,050,967	201,349,462
2007	1,662,537	79,904,266	14,866,556	64,808,093	13,669,925	1,121,156	9,186,706	10,829,140	5,817,291	18,895,192	220,760,862
2008	2,136,713	101,353,977	16,220,231	74,601,231	9,761,146	2,506,758	7,521,400	8,481,888	5,733,543	21,250,256	249,567,143
2009	1,335,866	101,348,140	15,893,528	63,306,695	5,173,552	946,963	7,534,735	7,866,413	6,264,606	19,828,012	229,498,510
2010	1,299,588	125,393,576	13,319,185	74,255,177	5,435,658	827,496	7,958,048	8,732,701	4,876,927	26,313,130	268,411,486
2011	1,257,944	148,485,709	19,507,428	87,730,506	3,599,086	1,176,255	10,981,642	9,102,411	6,123,259	35,155,068	323,119,308
2012	1,029,260	153,618,908	24,734,711	77,890,500	5,738,105	808,208	9,311,812	9,047,745	7,569,023	34,211,729	323,960,001
2013	381,876	145,146,253	20,720,014	62,718,061	4,791,910	1,046,947	7,630,762	10,355,884	7,074,886	33,639,969	293,506,562
2014	258,809	183,431,952	18,911,339	55,368,615	4,464,398	861,590	8,360,898	11,721,184	6,521,541	31,854,431	321,754,757
2015	254,336	140,570,275	22,234,350	42,000,092	4,340,376	654,766	9,554,806	11,748,205	6,196,596	24,320,608	261,874,410
2016	163,760	118,883,295	19,043,330	29,758,888	2,313,724	392,776	9,784,031	11,386,837	5,458,272	18,510,111	215,695,024

 $Note: Federal\ and\ State\ OD\ payrolls\ are\ derived\ from\ Traumatic\ payrolls\ after\ adjustments\ on\ Exhibits\ X-C\ \&\ X-D$ 

Source: Exhibits X-C and X-D Prior filing for 1997 - 2005

## COAL MINE COMPENSATION RATING BUREAU History of Reported OD Payrolls 1979-1996

	Anthracite Underground	Bituminous Underground	Anthracite Surface	Bituminous Surface	Coke	Auger	Anthracite Co-gen	Bituminous Co-gen	Anthracite Prep Plant	Bituminous Prep Plant	
State OD											
1070	(1011)	(1002)	(1016)	(1013)	(1017)	(1019)	(1022)	(1024)	(1026)	(1028)	<u>Total</u>
1979			33,547,630	189,274,623	8,602,156	1,250,040	0	0	0	0	391,532,381
1980 1981		146,370,736	39,976,938	180,192,249	4,240,988	1,445,092	0	0	0	0	376,159,743
1981	4,989,959 5,295,887	141,497,489	45,905,609	193,710,747	3,521,616	1,581,422	0	0	0	0	391,206,842
1983		170,306,624 82,776,145	42,724,737 34,841,224	194,074,092 146,423,067	1,831,640 124,805	1,682,037 1,260,780	0	0	0	0	415,915,017 269,595,036
1984		77,024,693	34,531,000	174,212,221	2,078,069	1,778,957	0	0	0	0	293,762,660
1985		46,693,499	31,216,341	143,422,695	2,528,033	1,561,675	0	0	0	0	229,929,913
1786		43,203,448	32,077,958	136,641,573	19,044,481	1,669,241	0	0	0	0	237,532,755
1987			25,008,155	134,305,891	26,573,681	1,695,582	0	0	0	0	246,681,761
1988			23,099,360	126,493,210	18,498,632	1,626,194	0	0	0	0	237,306,382
1989			27,044,506	125,361,713	12,583,451	1,888,442	0	0	0	0	243,279,690
1990		77,524,448	32,392,891	124,189,071	61,308,712	2,295,585	676,180	0	0	0	299,933,938
1991	718,147	59,439,370	30,956,584	104,583,500	52,451,102	1,718,758	1,093,089	0	0	0	250,960,550
1992		63,646,939	29,476,120	100,999,381	42,761,324	1,181,625	3,505,476	47,640	0	0	242,551,306
1993		52,756,526	30,103,392	94,556,592	53,619,736	1,112,232	3,624,439	391,507	0	0	237,346,421
1994			30,210,452	92,464,635	54,721,324	1,485,044	3,704,499	377,617	0	0	244,865,184
1995		65,271,146	20,288,894	78,752,605	55,000,220	1,499,639	3,481,847	360,161	0	0	226,148,035
1996	1,612,698	75,223,041	16,192,165	77,828,405	54,571,209	846,623	3,758,973	370,201	221,068	3,066,567	233,690,950
	Anthracite Underground	Bituminous Underground	Anthracite Surface	Bituminous Surface	Coke	Auger	Anthracite Co-gen	Bituminous Co-gen	Anthracite Prep Plant	Bituminous Prep Plant	
Federal OD	Underground				Coke	Auger					
Federal OE	Underground				Coke ( <u>0154)</u>	Auger (0157)					<u>Total</u>
Federal OE	Underground <u>(0160)</u>	Underground (0158)	Surface	Surface			Co-gen	Co-gen	Prep Plant	Prep Plant	<u>Total</u> 391,532,381
	Underground  (0160) 3,398,172	Underground (0158)	Surface (0153)	Surface (0156)	<u>(0154)</u>	(0157)	Co-gen (0181)	Co-gen (0182)	Prep Plant (0183)	Prep Plant (0184)	·
1979	Underground  (0160) 3,398,172	<u>(0158)</u> 155,459,760	Surface (0153) 33,547,630	Surface (0156) 189,274,623	( <u>0154)</u> 8,602,156	(0157) 1,250,040	Co-gen (0181) 0	Co-gen (0182) 0	Prep Plant (0183) 0	Prep Plant (0184) 0	391,532,381
1979 1980	Underground  (0160) 3,398,172 3,933,740 4,989,959	(0158) 155,459,760 146,370,736	(0153) 33,547,630 39,976,938	(0156) 189,274,623 180,192,249	(0154) 8,602,156 4,240,988	(0157) 1,250,040 1,445,092	Co-gen (0181) 0	Co-gen (0182) 0	(0183) 0	(0184) 0 0	391,532,381 376,159,743
1979 1980 1981	Underground (0160) 3,398,172 3,933,740 4,989,959 5,295,887	(0158) 155,459,760 146,370,736 141,497,489 170,306,624	[0153] 33,547,630 39,976,938 45,905,609 42,724,737 34,841,224	[0156] 189,274,623 180,192,249 193,710,747	(0154) 8,602,156 4,240,988 3,521,616	(0157) 1,250,040 1,445,092 1,581,422	(0181) 0 0	(0182) 0 0	(0183) 0 0	(0184) 0 0 0	391,532,381 376,159,743 391,206,842
1979 1980 1981 1982	Underground  (0160) 3,398,172 3,933,740 4,989,959 5,295,887 4,169,015	(0158) 155,459,760 146,370,736 141,497,489 170,306,624	(0153) 33,547,630 39,976,938 45,905,609 42,724,737	(0156) 189,274,623 180,192,249 193,710,747 194,074,092	(0154) 8,602,156 4,240,988 3,521,616 1,831,640	(0157) 1,250,040 1,445,092 1,581,422 1,682,037	(0181) 0 0 0 0 0	(0182) 0 0 0 0 0	(0183) 0 0 0	(0184) 0 0 0 0	391,532,381 376,159,743 391,206,842 415,915,017
1979 1980 1981 1982 1983	(0160) 3,398,172 3,933,740 4,989,959 5,295,887 4,169,015 4,137,720	(0158) 155,459,760 146,370,736 141,497,489 170,306,624 82,776,145	[0153] 33,547,630 39,976,938 45,905,609 42,724,737 34,841,224	(0156) 189,274,623 180,192,249 193,710,747 194,074,092 146,423,067	(0154) 8,602,156 4,240,988 3,521,616 1,831,640 124,805	(0157) 1,250,040 1,445,092 1,581,422 1,682,037 1,260,780	(0181) 0 0 0 0 0	(0182) 0 0 0 0 0	(0183) 0 0 0 0	(0184) 0 0 0 0	391,532,381 376,159,743 391,206,842 415,915,017 269,595,036
1979 1980 1981 1982 1983 1984 1985	(0160) 3,398,172 3,933,740 4,989,959 5,295,887 4,169,015 4,137,720 4,507,670 4,896,054	(0158) 155,459,760 146,370,736 141,497,489 170,306,624 82,776,145 77,024,693	[0153] 33,547,630 39,976,938 45,905,609 42,724,737 34,841,224 34,531,000	[0156] 189,274,623 180,192,249 193,710,747 194,074,092 146,423,067 174,212,221	(0154) 8,602,156 4,240,988 3,521,616 1,831,640 124,805 2,078,069	(0157) 1,250,040 1,445,092 1,581,422 1,682,037 1,260,780 1,778,957	(0181) 0 0 0 0 0 0	(0182) 0 0 0 0 0 0	(0183) 0 0 0 0 0 0 0	(0184) 0 0 0 0 0	391,532,381 376,159,743 391,206,842 415,915,017 269,595,036 293,762,660 229,929,913 237,532,755
1979 1980 1981 1982 1983 1984 1985 1986	(0160) 3,398,172 3,933,740 4,989,959 5,295,887 4,169,015 4,137,720 4,507,670 4,896,054 4,061,875	(0158) 155,459,760 146,370,736 141,497,489 170,306,624 82,776,145 77,024,693 46,693,499	[0153] 33,547,630 39,976,938 45,905,609 42,724,737 34,841,224 34,531,000 31,216,341	[0156] 189,274,623 180,192,249 193,710,747 194,074,092 146,423,067 174,212,221 143,422,695	(0154) 8,602,156 4,240,988 3,521,616 1,831,640 124,805 2,078,069 2,528,033	(0157) 1,250,040 1,445,092 1,581,422 1,682,037 1,260,780 1,778,957 1,561,675	(0181) 0 0 0 0 0 0 0	(0182) 0 0 0 0 0 0 0	(0183) 0 0 0 0 0 0	(0184) 0 0 0 0 0 0	391,532,381 376,159,743 391,206,842 415,915,017 269,595,036 293,762,660 229,929,913 237,532,755 233,721,884
1979 1980 1981 1982 1983 1984 1985	(0160) 3,398,172 3,933,740 4,989,959 5,295,887 4,169,015 4,137,720 4,507,670 4,896,054 4,061,875	(0158) 155,459,760 146,370,736 141,497,489 170,306,624 82,776,145 77,024,693 46,693,499 43,203,448	[0153] 33,547,630 39,976,938 45,905,609 42,724,737 34,841,224 34,531,000 31,216,341 32,077,958	[0156] 189,274,623 180,192,249 193,710,747 194,074,092 146,423,067 174,212,221 143,422,695 136,641,573	(0154) 8,602,156 4,240,988 3,521,616 1,831,640 124,805 2,078,069 2,528,033 19,044,481	(0157) 1,250,040 1,445,092 1,581,422 1,682,037 1,260,780 1,778,957 1,561,675 1,669,241	(0181) 0 0 0 0 0 0	(0182) 0 0 0 0 0 0	(0183) 0 0 0 0 0 0 0	(0184) 0 0 0 0 0 0 0	391,532,381 376,159,743 391,206,842 415,915,017 269,595,036 293,762,660 229,929,913 237,532,755
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988	(0160) 3,398,172 3,933,740 4,989,959 5,295,887 4,169,015 4,137,720 4,507,670 4,896,054 4,061,875 2,745,685 2,066,292	(0158) 155,459,760 146,370,736 141,497,489 170,306,624 82,776,145 77,024,693 46,693,499 43,203,448 42,076,700 51,133,431 58,507,532	\$urface [0153] 33,547,630 39,976,938 45,905,609 42,724,737 34,841,224 34,531,000 31,216,341 32,077,958 25,008,155 23,099,360 27,044,506	(0156) 189,274,623 180,192,249 193,710,747 194,074,092 146,423,067 174,212,221 143,422,695 136,641,573 134,305,891 126,493,210 125,361,713	(0154) 8,602,156 4,240,988 3,521,616 1,831,640 124,805 2,078,069 2,528,033 19,044,481 26,573,681 18,498,632 12,583,451	(0157) 1,250,040 1,445,092 1,581,422 1,682,037 1,260,780 1,778,957 1,561,675 1,669,241 1,695,582 1,626,194 1,888,442	(0181) 0 0 0 0 0 0 0 0	(0182) 0 0 0 0 0 0 0 0	(0183) 0 0 0 0 0 0 0 0 0 0	(0184) 0 0 0 0 0 0 0 0	391,532,381 376,159,743 391,206,842 415,915,017 269,595,036 293,762,660 229,929,913 237,532,755 233,721,884 223,596,512 227,451,936
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988	(0160) 3,398,172 3,933,740 4,989,959 5,295,887 4,169,015 4,137,720 4,507,670 4,896,054 4,061,875 2,745,685 2,066,292 1,547,051	(0158) 155,459,760 146,370,736 141,497,489 170,306,624 82,776,145 77,024,693 46,693,499 43,203,448 42,076,700 51,133,431 58,507,532 63,271,520	[0153] 33,547,630 39,976,938 45,905,609 42,724,737 34,841,224 34,531,000 31,216,341 32,077,958 25,008,155 23,099,360 27,044,506 32,392,891	(0156) 189,274,623 180,192,249 193,710,747 194,074,092 146,423,067 174,212,221 143,422,695 136,641,573 134,305,891 126,493,210 125,361,713 124,189,071	(0154) 8,602,156 4,240,988 3,521,616 1,831,640 124,805 2,078,069 2,528,033 19,044,481 26,573,681 18,498,632 12,583,451 61,308,712	(0157) 1,250,040 1,445,092 1,581,422 1,682,037 1,260,780 1,778,957 1,561,675 1,669,241 1,695,582 1,626,194 1,888,442 2,295,585	(0181) 0 0 0 0 0 0 0 0 0 0 0	(0182) 0 0 0 0 0 0 0 0 0	(0183) 0 0 0 0 0 0 0 0 0 0 0	(0184) 0 0 0 0 0 0 0 0 0 0 0	391,532,381 376,159,743 391,206,842 415,915,017 269,595,036 293,762,660 229,929,913 237,532,755 233,721,884 223,596,512 227,451,936 285,681,010
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990	(0160) 3,398,172 3,933,740 4,989,959 5,295,887 4,169,015 4,137,720 4,507,670 4,896,054 4,061,875 2,745,685 2,066,292 1,547,051 718,147	(0158) 155,459,760 146,370,736 141,497,489 170,306,624 82,776,145 77,024,693 46,693,499 43,203,448 42,076,700 51,133,431 58,507,532 63,271,520 58,318,242	[0153] 33,547,630 39,976,938 45,905,609 42,724,737 34,841,224 34,531,000 31,216,341 32,077,958 25,008,155 23,099,360 27,044,506 32,392,891 30,956,584	(0156) 189,274,623 180,192,249 193,710,747 194,074,092 146,423,067 174,212,221 143,422,695 136,641,573 134,305,891 126,493,210 125,361,713 124,189,071 104,583,500	(0154) 8,602,156 4,240,988 3,521,616 1,831,640 124,805 2,078,069 2,528,033 19,044,481 26,573,681 18,498,632 12,583,451 61,308,712 52,451,102	(0157) 1,250,040 1,445,092 1,581,422 1,682,037 1,260,780 1,778,957 1,561,675 1,669,241 1,695,582 1,626,194 1,888,442 2,295,585 1,718,758	(0181) 0 0 0 0 0 0 0 0 0 0 0 676,180 1,093,089	(0182) 0 0 0 0 0 0 0 0 0 0	(0183) 0 0 0 0 0 0 0 0 0 0 0 0	(0184) 0 0 0 0 0 0 0 0 0 0 0 0	391,532,381 376,159,743 391,206,842 415,915,017 269,595,036 293,762,660 229,929,913 237,532,755 233,721,884 223,596,512 227,451,936 285,681,010 249,839,422
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991	(0160) 3,398,172 3,933,740 4,989,959 5,295,887 4,169,015 4,137,720 4,507,670 4,896,054 4,061,875 2,745,685 2,066,292 1,547,051 718,147 932,801	(0158) 155,459,760 146,370,736 141,497,489 170,306,624 82,776,145 77,024,693 46,693,499 43,203,448 42,076,700 51,133,431 58,507,532 63,271,520 58,318,242 63,401,297	[0153] 33,547,630 39,976,938 45,905,609 42,724,737 34,841,224 34,531,000 31,216,341 32,077,958 25,008,155 23,099,360 27,044,506 32,392,891 30,956,584 29,476,120	[0156] 189,274,623 180,192,249 193,710,747 194,074,092 146,423,067 174,212,221 143,422,695 136,641,573 134,305,891 126,493,210 125,361,713 124,189,071 104,583,500 100,999,381	(0154) 8,602,156 4,240,988 3,521,616 1,831,640 124,805 2,078,069 2,528,033 19,044,481 26,573,681 18,498,632 12,583,451 61,308,712 52,451,102 42,761,324	(0157) 1,250,040 1,445,092 1,581,422 1,682,037 1,260,780 1,778,957 1,561,675 1,669,241 1,695,582 1,626,194 1,888,442 2,295,585 1,718,758 1,181,625	Co-gen  (0181) 0 0 0 0 0 0 0 0 0 0 676,180 1,093,089 3,505,476	(0182) 0 0 0 0 0 0 0 0 0 0 0 0 47,640	(0183) 0 0 0 0 0 0 0 0 0 0 0 0 0	Prep Plant  (0184) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	391,532,381 376,159,743 391,206,842 415,915,017 269,595,036 293,762,660 229,929,913 237,532,755 233,721,884 223,596,512 227,451,936 285,681,010 249,839,422 242,305,664
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992	(0160) 3,398,172 3,933,740 4,989,959 5,295,887 4,169,015 4,137,720 4,507,670 4,896,054 4,061,875 2,745,685 2,066,292 1,547,051 718,147 932,801 1,181,997	(0158) 155,459,760 146,370,736 141,497,489 170,306,624 82,776,145 77,024,693 46,693,499 43,203,448 42,076,700 51,133,431 58,507,532 63,271,520 58,318,242 63,401,297 52,756,526	[0153] 33,547,630 39,976,938 45,905,609 42,724,737 34,841,224 34,531,000 31,216,341 32,077,958 25,008,155 23,099,360 27,044,506 32,392,891 30,956,584 29,476,120 30,103,392	[0156] 189,274,623 180,192,249 193,710,747 194,074,092 146,423,067 174,212,221 143,422,695 136,641,573 134,305,891 126,493,210 125,361,713 124,189,071 104,583,500 100,999,381 94,556,592	(0154) 8,602,156 4,240,988 3,521,616 1,831,640 124,805 2,078,069 2,528,033 19,044,481 26,573,681 18,498,632 12,583,451 61,308,712 52,451,102 42,761,324 53,619,736	(0157) 1,250,040 1,445,092 1,581,422 1,682,037 1,260,780 1,778,957 1,561,675 1,669,241 1,695,582 1,626,194 1,888,442 2,295,585 1,718,758 1,181,625 1,112,232	Co-gen  (0181) 0 0 0 0 0 0 0 0 0 0 0 0 1,093,089 3,505,476 3,624,439	(0182) 0 0 0 0 0 0 0 0 0 0 0 47,640 391,507	(0183) 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Prep Plant  (0184) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	391,532,381 376,159,743 391,206,842 415,915,017 269,595,036 293,762,660 229,929,913 237,532,755 233,721,884 223,596,512 227,451,936 285,681,010 249,839,422 242,305,664 237,346,421
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992	(0160) 3,398,172 3,933,740 4,989,959 5,295,887 4,169,015 4,137,720 4,507,670 4,896,054 4,061,875 2,745,685 2,066,292 1,547,051 718,147 932,801 1,181,997 1,310,675	(0158) 155,459,760 146,370,736 141,497,489 170,306,624 82,776,145 77,024,693 46,693,499 43,203,448 42,076,700 51,133,431 58,507,532 63,271,520 58,318,242 63,401,297 52,756,526 60,590,938	\$urface  \[ \begin{array}{c} \(\begin{array}{c} \left(0.153) \\ 33,547,630 \\ 39,976,938 \\ 45,905,609 \\ 42,724,737 \\ 34,841,224 \\ 34,531,000 \\ 31,216,341 \\ 32,077,958 \\ 25,008,155 \\ 23,099,360 \\ 27,044,506 \\ 32,392,891 \\ 30,956,584 \\ 29,476,120 \\ 30,103,392 \\ 30,210,452	(0156) 189,274,623 180,192,249 193,710,747 194,074,092 146,423,067 174,212,221 143,422,695 136,641,573 134,305,891 126,493,210 125,361,713 124,189,071 104,583,500 100,999,381 94,556,592 92,464,635	(0154) 8,602,156 4,240,988 3,521,616 1,831,640 124,805 2,078,069 2,528,033 19,044,481 26,573,681 18,498,632 12,583,451 61,308,712 52,451,102 42,761,324 53,619,736 54,721,324	(0157) 1,250,040 1,445,092 1,581,422 1,682,037 1,260,780 1,778,957 1,561,675 1,669,241 1,695,582 1,626,194 1,888,442 2,295,585 1,718,758 1,181,625 1,112,232 1,485,044	Co-gen  (0181) 0 0 0 0 0 0 0 0 0 0 0 676,180 1,093,089 3,505,476 3,624,439 3,704,499	Co-gen  (0182) 0 0 0 0 0 0 0 0 0 47,640 391,507 377,617	Prep Plant  (0183) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Prep Plant  (0184) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	391,532,381 376,159,743 391,206,842 415,915,017 269,595,036 293,762,660 229,929,913 237,532,755 233,721,884 223,596,512 227,451,936 285,681,010 249,839,422 242,305,664 237,346,421 244,865,184
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992	(0160) 3,398,172 3,933,740 4,989,959 5,295,887 4,169,015 4,137,720 4,507,670 4,896,054 4,061,875 2,745,685 2,066,292 1,547,051 718,147 932,801 1,181,997 1,310,675 1,493,523	(0158) 155,459,760 146,370,736 141,497,489 170,306,624 82,776,145 77,024,693 46,693,499 43,203,448 42,076,700 51,133,431 58,507,532 63,271,520 58,318,242 63,401,297 52,756,526 60,590,938 65,271,146	[0153] 33,547,630 39,976,938 45,905,609 42,724,737 34,841,224 34,531,000 31,216,341 32,077,958 25,008,155 23,099,360 27,044,506 32,392,891 30,956,584 29,476,120 30,103,392	[0156] 189,274,623 180,192,249 193,710,747 194,074,092 146,423,067 174,212,221 143,422,695 136,641,573 134,305,891 126,493,210 125,361,713 124,189,071 104,583,500 100,999,381 94,556,592	(0154) 8,602,156 4,240,988 3,521,616 1,831,640 124,805 2,078,069 2,528,033 19,044,481 26,573,681 18,498,632 12,583,451 61,308,712 52,451,102 42,761,324 53,619,736	(0157) 1,250,040 1,445,092 1,581,422 1,682,037 1,260,780 1,778,957 1,561,675 1,669,241 1,695,582 1,626,194 1,888,442 2,295,585 1,718,758 1,181,625 1,112,232	Co-gen  (0181) 0 0 0 0 0 0 0 0 0 0 0 0 1,093,089 3,505,476 3,624,439	(0182) 0 0 0 0 0 0 0 0 0 0 0 47,640 391,507	(0183) 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Prep Plant  (0184) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	391,532,381 376,159,743 391,206,842 415,915,017 269,595,036 293,762,660 229,929,913 237,532,755 233,721,884 223,596,512 227,451,936 285,681,010 249,839,422 242,305,664 237,346,421

Source: Prior Filings

File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-10.xlsm]X-A-2

Run Date: August 30, 2017 - 02:11:40 PM

	ANTHRA	CITE UNDERGRO	OUND (1010)	BITUMII	nous undergro	DUND (1001)	AN	THRACITE SURFAC	CE (1012)	BIT	uminous surfac	E (1014)
-	LOSS	DEVELOPED	LOSS COST	LOSS	DEVELOPED	LOSS COST	LOSS	DEVELOPED	LOSS COST	LOSS	DEVELOPED	LOSS COST
YEAR	COST	PAYROLL	PREMIUM	COST	PAYROLL	PREMIUM	COST	PAYROLL	PREMIUM	COST	PAYROLL	PREMIUM
2006	20.44	530	108	6.18	71,907,931	4,443,910	8.27	11,946,382	987,966	2.45	63,008,975	1,543,720
2007	20.44	0	0	6.18	81,566,803	5,040,828	8.27	14,555,579	1,203,746	2.45	63,295,774	1,550,746
2008	20.44	0	0	6.18	103,490,690	6,395,725	8.27	16,954,313	1,402,122	2.45	73,054,482	1,789,835
2009	20.44	0	0	6.18	102,684,006	6,345,872	8.27	16,445,462	1,360,040	2.45	61,784,394	1,513,718
2010	20.44	5,700	1,165	6.18	126,687,464	7,829,285	8.27	14,295,288	1,182,220	2.45	72,711,558	1,781,433
2011	20.44	110,125	22,510	6.18	149,633,528	9,247,352	8.27	21,034,600	1,739,561	2.45	86,074,064	2,108,815
2012	20.44	219,407	44,847	6.18	154,428,761	9,543,697	8.27	26,295,907	2,174,672	2.45	76,452,811	1,873,094
2013	20.44	175,900	35,954	6.18	149,953,068	9,267,100	8.27	22,449,824	1,856,600	2.45	61,349,745	1,503,069
2014	20.44	258,809	52,901	6.18	271,230,707	16,762,058	8.27	20,466,075	1,692,544	2.45	54,050,731	1,324,243
2015	20.44	254,336	51,986	6.18	216,454,460	13,376,886	8.27	24,218,779	2,002,893	2.45	40,934,048	1,002,884
2016	20.44	163,760	33,473	6.18	148,894,215	9,201,662	8.27		1,721,057	2.45	28,999,042	710,477
20.0	20	.00,, 00	33, ., 3	00	. 10,07 1,210	,,20.,002	0.27	20,0.0,000	.,, 2.,00,	2.10	20,,,,,0.12	, , . , . ,
		COKE (1469	·)		AUGER (1015	5)	AN	THRACITE CO-GI	EN (1021)	BIT	UMINOUS CO-GE	N (1023)
-	LOSS	DEVELOPED	LOSS COST	LOSS	DEVELOPED	LOSS COST	LOSS	DEVELOPED	LOSS COST	LOSS	DEVELOPED	LOSS COST
YEAR	COST	PAYROLL	PREMIUM	COST	PAYROLL	PREMIUM	COST	PAYROLL	PREMIUM	COST	PAYROLL	PREMIUM
2006	4.54	12,737,394	578,278	16.44	1,066,831	175,387	3.12	8,405,393	262,248	1.14	9,397,580	107,132
2007	4.54	13,669,925	620,615	16.44	1,121,156	184,318	3.12	9,160,450	285,806	1.14	10,789,214	122,997
2008	4.54	9,761,146	443,156	16.44	2,488,558	409,119	3.12	7,958,335	248,300	1.14	8,468,561	96,542
2009	4.54	5,173,552	234,879	16.44	926,163	152,261	3.12	8,004,644	249,745	1.14	7,866,413	89,677
2010	4.54	5,435,658	246,779	16.44	806,696	132,621	3.12		264,614	1.14	8,732,701	99,553
2011	4.54	3,599,086	163,399	16.44	1,176,255	193,376	3.12		365,665	1.14	9,102,411	103,767
2012	4.54	5,738,105	260,510	16.44	808,208	132,869	3.12	10,273,004	320,518	1.14	9,047,745	103,144
2013	4.54	4,791,910	217,553	16.44	1,025,399	168,576	3.12		260,291	1.14	10,355,884	118,057
2014	4.54	4,464,398	202,684	16.44	806,976	132,667	3.12		282,700	1.14	11,721,184	133,621
2015	4.54	4,340,376	197,053	16.44	582,619	95,783	3.12	10,469,089	326,636	1.14	11,748,205	133,930
2016	4.54	2,313,724	105,043	16.44	372,496	61,238	3.12		338,440	1.14	11,386,837	129,810
	ANTH	RACITE PREP PLA	ANT (1025)	BITU	MINOUS PREP PLA	NT (1027)						TOTAL
_	LOSS	DEVELOPED	LOSS COST	LOSS	DEVELOPED	LOSS COST	=				DEVELOPED	LOSS COST
YEAR	COST	PAYROLL	PREMIUM	COST	PAYROLL	PREMIUM					PAYROLL	PREMIUM
2006	4.53	4,885,882	221,330	1.81	17,050,967	308,623					200,407,865	8,628,702
2007	4.53	5,756,439	260,767	1.81	18,895,192	342,003					218,810,532	9,611,826
2008	4.53	6,390,767	289,502	1.81	21,250,256	384,630					249,817,108	11,458,931
2009	4.53	6,749,748	305,764	1.81	19,828,012	358,887					229,462,394	10,610,843
2010	4.53	5,762,086	261,022	1.81	26,313,130	476,268					269,231,509	12,274,960
2011	4.53	7,236,583	327,817	1.81	35,155,068	636,307					324,841,755	14,908,569
2012	4.53	8,671,140	392,803	1.81	34,211,729	619,232					326,146,817	15,465,386
2013	4.53	8,265,665	374,435	1.81	34,253,697	619,992					300,963,743	14,421,627
2014	4.53	8,234,771	373,035	1.81	43,520,040	787,713					423,814,574	21,744,166
2015	4.53	7,606,274	344,564	1.81	33,564,176	607,512					350,172,362	18,140,127
2016	4.53	6,971,270	315,799	1.81	22,131,423	400,579					252,891,041	13,017,578
20.0		3,,270	0.0,, //	1.01	22,.0.,120	.00,077					202,07.1,011	. 0,0 ,0 / 0

Payroll - Exhibit X-D, pages 1, 2, 3, 4 and 5; Loss Costs - Exhibit X-B Page 2

File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-10.xlsm]X-B-1

Run Date: August 30, 2017 - 02:11:40 PM

# Coal Mine Compensation Rating Bureau Traumatic & OD Loss costs Approved Effective April 1, 2017

CLASS DESCRIPTION	CLASS <u>CODE</u> TRA	CURRENT MANUAL LOSS COST UMATIC	CLASS CODE STA	CURRENT MANUAL LOSS COST ATE O D	CLASS <u>Code</u> Fede	CURRENT MANUAL LOSS COST ERAL O D
UNDERGROUND Anthracite Bituminous	1010 1001	\$20.44 \$6.18	1011 1002	\$6.59 \$0.59	0160 0158	\$11.90 \$0.72
SURFACE Anthracite Bituminous	1012 1014	\$8.27 \$2.45	1016 1013	\$1.67 \$0.14	0153 0156	\$2.78 \$0.63
COKE	1469	\$4.54	1017	\$0.12	0154	\$0.09
AUGER	1015	\$16.44	1019	\$0.24	0157	\$0.33
CO-GEN Anthracite Bituminous	1021 1023	\$3.12 \$1.14	1022 1024	\$0.30 \$0.42	0181 0182	\$0.42 \$0.31
PREP PLANT Anthracite Bituminous	1025 1027	\$4.53 \$1.81	1026 1028	\$2.19 \$0.21	0183 0184	\$0.97 \$0.36
CLASS DESCRIPTION	CLASS <u>CODE</u> TRA	UNLOADED APPROVED LOSS COST UMATIC	CLASS CODE STA	UNLOADED APPROVED LOSS COST ATE O D	CLASS <u>CODE</u> <b>FEDE</b>	UNLOADED APPROVED LOSS COST ERAL O D
UNDERGROUND Anthracite Bituminous	1010 1001	\$20.01 \$5.96	1011 1002	\$6.59 \$0.59	0160 0158	\$11.90 \$0.72
SURFACE Anthracite Bituminous	1012 1014	\$8.13 \$2.39	1016 1013	\$1.67 \$0.14	0153 0156	\$2.78 \$0.63
COKE	1469	\$4.45	1017	\$0.12	0154	\$0.09
AUGER	1015	\$16.14	1019	\$0.24	0157	\$0.33
CO-GEN Anthracite Bituminous	1021 1023	\$3.05 \$1.10	1022 1024	\$0.30 \$0.42	0181 0182	\$0.42 \$0.31
PREP PLANT Anthracite Bituminous	1025 1027	\$4.44 \$1.76	1026 1028	\$2.19 \$0.21	0183 0184	\$0.97 \$0.36

Source: Manual Loss Costs approved effective April 1, 2017; Section 2, pages 2 and 3 of Approved Manual Unloaded Approved Loss Costs from Exhibit V-A, column (9) of current approved filing.

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Run Date: August 30, 2017 - 02:11:40 PM

## Coal Mine Compensation Rating Bureau Adjustments from 2017 Filing

Exhibit X-B Page 3

#### Section 1 Catastrophic Loss Cost (2017)

Underground

Anthracite 0.13 Bituminous 0.13

Auger 0.06 (1/3 Underground, 2/3 Surface)

Other Classes 0.02

#### Section 2 Load Factors (2017)

Experience Rating	1.0000
Merit Rating (Exh XIV-A, page 1)	1.0002
Safety Committee (Exh. XIV-B)	1.0145
•	1.0147
Small Business Advocate (XI-A)	1.0001

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Run Date: August 30, 2017 - 02:11:40 PM Effective Date - April 01, 2018

5.369500

## COAL MINE COMPENSATION RATING BUREAU FEDERAL OD PAYROLL

Developed Payroll         Federal Exempt Reported Payroll         Partnership Reported Payroll         Development Factor         Payroll Payroll         Payroll Factor         Payroll (1) + [(3]-(2)]*(4)         Payroll (5) (5)           Year         (11)         (2)         (3)         (4)         (5)           2006         1,442,524         0         0         1,0000         1,442,524           2007         1,662,537         0         0         1,0000         1,662,537           2008         2,136,713         0         0         1,0000         2,136,713           2009         1,335,866         0         0         1,0000         1,335,866           2010         1,299,588         0         0         1,0000         1,299,588	Payroll Per Million (5)/1000000 (6) 1.442524 1.662537	Payroll (1) + [(3)-(2)]*(4)	Development	D. J l.		State OD	
Payroll         Reported Payroll         Reported Payroll         Factor         (1) + [(3)-(2)]*(4)         (5)           Year         (1)         (2)         (3)         (4)         (5)           2006         1,442,524         0         0         1,0000         1,442,524           2007         1,662,537         0         0         1,0000         1,662,537           2008         2,136,713         0         0         1,0000         2,136,713           2009         1,335,866         0         0         1,0000         1,335,866           2010         1,299,588         0         0         1,0000         1,299,588	(5)/1000000 ( <u>6)</u> 1.442524	(1) + [(3)-(2)]*(4)	Development	Don't a section			
Year         (1)         (2)         (3)         (4)         (5)           2006         1,442,524         0         0         1,0000         1,442,524           2007         1,662,537         0         0         1,0000         1,662,537           2008         2,136,713         0         0         1,0000         2,136,713           2009         1,335,866         0         0         1,0000         1,335,866           2010         1,299,588         0         0         1,0000         1,299,588	( <u>6)</u> 1.442524			Parmersnip	Federal Exempt	Developed	
2006     1,442,524     0     0     1,0000     1,442,524       2007     1,662,537     0     0     1,0000     1,662,537       2008     2,136,713     0     0     1,0000     2,136,713       2009     1,335,866     0     0     1,0000     1,335,866       2010     1,299,588     0     0     1,0000     1,299,588	1.442524	(5)	Factor	Reported Payroll	Reported Payroll	Payroll	
2007     1,662,537     0     0     1,0000     1,662,537       2008     2,136,713     0     0     1,0000     2,136,713       2009     1,335,866     0     0     1,0000     1,335,866       2010     1,299,588     0     0     1,0000     1,299,588							
2008     2,136,713     0     0     1.0000     2,136,713       2009     1,335,866     0     0     1.0000     1,335,866       2010     1,299,588     0     0     1.0000     1,299,588	1.662537						
2009     1,335,866     0     0     1,0000     1,335,866       2010     1,299,588     0     0     1,0000     1,299,588							
2010 1,299,588 0 0 1.0000 1,299,588	2.136713						
	1.335866						
	1.299588						
	1.257944	1,257,944	1.0000	0	0	1,257,944	2011
2012 1,029,260 0 0 1.0000 1,029,260	1.029260						
2013 381,876 0 0 1.0000 381,876	0.381876						
2014 258,809 0 0 1.0000 258,809	0.258809						
2015 254,336 0 0 1.0000 254,336	0.254336						
2016 163,760 0 0 1.0000 163,760	0.163760	163,760	1.0000	0	0	163,760	2016
BITUMINOUS UNDERGROUND (1001)					(1001)	S UNDERGROUND	BITUMINOUS
	Payroll						
	Per Million	•		·	•		
	(5)/1000000					,	
<u>Year</u> (1) (2) (3) (4) (5)	<u>(6)</u>						
	70.465937						
	79.904266					79,904,266	
	101.353977						
	101.348140						
	125.393576						
		148,485,709	1.0000	0	0	148,485,709	2011
	148.485709	1 50 / 10 000	1.0000				
2012 153,618,908 0 0 1.0000 153,618,908 1	153.618908			<u> </u>	4,600,839	149,747,092	2013
2012     153,618,908     0     0     1.0000     153,618,908     1.       2013     149,747,092     4,600,839     0     1.0000     145,146,253     1.	153.618908 145.146253	145,146,253					
2012     153,618,908     0     0     1.0000     153,618,908     1       2013     149,747,092     4,600,839     0     1.0000     145,146,253     1       2014     271,230,707     87,798,755     0     1.0000     183,431,952     13	153.618908 145.146253 183.431952	145,146,253 183,431,952	1.0000	0		271,230,707	2014
2012     153,618,908     0     0     1.0000     153,618,908     1       2013     149,747,092     4,600,839     0     1.0000     145,146,253     1       2014     271,230,707     87,798,755     0     1.0000     183,431,952     1       2015     216,454,460     75,884,185     0     1.0000     140,570,275     1	153.618908 145.146253	145,146,253 183,431,952 140,570,275	1.0000 1.0000	0	75,884,185	271,230,707 216,454,460	2014 2015
2012 153,618,908 0 0 1,0000 153,618,908 1. 2013 149,747,092 4,600,839 0 1,0000 145,146,253 1. 2014 271,230,707 87,798,755 0 1,0000 183,431,952 1. 2015 216,454,460 75,884,185 0 1,0000 140,570,275 1. 2016 148,894,215 30,010,920 0 1,0000 118,883,295 1.  ANTHRACITE SURFACE (1012) State OD Federal OD	153.618908 145.146253 183.431952 140.570275 118.883295 Payroll	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD	1.0000 1.0000 1.0000	0 0 0	75,884,185 30,010,920	271,230,707 216,454,460 148,894,215 E SURFACE (1012) State OD	2014 2015 2016
2012       153,618,908       0       0       1,0000       153,618,908       1         2013       149,747,092       4,600,839       0       1,0000       145,146,253       1         2014       271,230,707       87,798,755       0       1,0000       183,431,952       1         2015       216,454,460       75,884,185       0       1,0000       140,570,275       1         2016       148,894,215       30,010,920       0       1,0000       118,883,295       1    ANTHRACITE SURFACE (1012)  State OD  Developed Federal Exempt Partnership Development Payroll P	153.618908 145.146253 183.431952 140.570275 118.883295 Payroll Per Million	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll	1.0000 1.0000 1.0000 Development	0 0 0	75,884,185 30,010,920 Federal Exempt	271,230,707 216,454,460 148,894,215 E SURFACE (1012) State OD Developed	2014 2015 2016
2012       153,618,908       0       0       1,0000       153,618,908       1         2013       149,747,092       4,600,839       0       1,0000       145,146,253       1         2014       271,230,707       87,798,755       0       1,0000       183,431,952       1         2015       216,454,460       75,884,185       0       1,0000       140,570,275       1         2016       148,894,215       30,010,920       0       1,0000       118,883,295       1    ANTHRACITE SURFACE (1012)  State OD  Developed Federal Exempt Payroll Reported Payroll Reported Payroll Reported Payroll Factor (1) + [(3]-(2)]*(4) (5)	153.618908 145.146253 183.431952 140.570275 118.883295 Payroll Per Million (5)/1000000	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4)	1.0000 1.0000 1.0000 Development Factor	0 0 0 Partnership Reported Payroll	75,884,185 30,010,920 Federal Exempt Reported Payroll	271,230,707 216,454,460 148,894,215 E SURFACE (1012) State OD Developed Payroll	2014 2015 2016 ANTHRACITE
2012       153,618,908       0       0       1,0000       153,618,908       1         2013       149,747,092       4,600,839       0       1,0000       145,146,253       1         2014       271,230,707       87,798,755       0       1,0000       183,431,952       16         2015       216,454,460       75,884,185       0       1,0000       140,570,275       1         2016       148,894,215       30,010,920       0       1,0000       118,883,295       1         ANTHRACITE SURFACE (1012)         State OD       Federal DD         Developed       Federal Exempt       Partnership       Development       Payroll       P         Payroll       Reported Payroll       Reported Payroll       Factor       (1) + [(3)-(2)]*(4)       (5)         Year       (1)       (2)       (3)       (4)       (5)	153.618908 145.146253 183.431952 140.570275 118.883295 Payroll Per Million (5)/1000000 (6)	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4)	1.0000 1.0000 1.0000 Development Factor (4)	0 0 0 Partnership Reported Payroll	75,884,185 30,010,920 Federal Exempt Reported Payroll (2)	271,230,707 216,454,460 148,894,215 E SURFACE (1012) State OD Developed Payroll (1)	2014 2015 2016 ANTHRACITE
2012 153,618,908 0 0 1,0000 153,618,908 1. 2013 149,747,092 4,600,839 0 1,0000 145,146,253 13 2014 271,230,707 87,798,755 0 1,0000 183,431,952 18 2015 216,454,460 75,884,185 0 1,0000 140,570,275 13 2016 148,894,215 30,010,920 0 1,0000 118,883,295 1  ANTHRACITE SURFACE (1012)  State OD  Developed Federal Exempt Partnership Development Payroll Payroll Reported Payroll Reported Payroll Factor (1) + [(3)-(2)]*(4) (5)  Year (1) (2) (3) (4) (5) 2006 11,946,382 0 118,941 1,0000 12,065,323	153.618908 145.146253 183.431952 140.570275 118.883295 Payroll Per Million (5)/1000000	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323	1.0000 1.0000 1.0000 Development Factor (4) 1.0000	Partnership Reported Payroll (3) 118,941	75,884,185 30,010,920 Federal Exempt Reported Payroll (2) 0	271,230,707 216,454,460 148,894,215 E SURFACE (1012) State OD Developed Payroll (1) 11,946,382	2014 2015 2016 ANTHRACITE Year 2006
2012 153,618,908 0 0 1.0000 153,618,908 1. 2013 149,747,092 4,600,839 0 1.0000 145,146,253 13 2014 271,230,707 87,798,755 0 1.0000 183,431,952 13 2015 216,454,460 75,884,185 0 1.0000 140,570,275 13 2016 148,894,215 30,010,920 0 1.0000 118,883,295 1  ANTHRACITE SURFACE (1012)  State OD  Developed Federal Exempt Partnership Development Payroll Payroll Reported Payroll Reported Payroll Factor (1) + [(3)-(2)]*(4) (5)  Year (1) (2) (3) (4) (5) 2006 11,946,382 0 118,941 1.0000 12,065,323 2007 14,555,579 0 310,977 1.0000 14,866,556	153.618908 145.146253 183.431952 140.570275 118.883295 Payroll Per Million (5)/1000000 (6) 12.065323	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556	1.0000 1.0000 1.0000 Development Factor (4) 1.0000 1.0000	Partnership Reported Payroll  [3]  118,941 310,977	75,884,185 30,010,920 Federal Exempt Reported Payroll (2) 0	271,230,707 216,454,460 148,894,215 E SURFACE (1012) State OD Developed Payroll (1) 11,946,382 14,555,579	2014 2015 2016 ANTHRACITE Year 2006 2007
2012 153,618,908 0 0 1.0000 153,618,908 1. 2013 149,747,092 4,600,839 0 1.0000 145,146,253 13 2014 271,230,707 87,798,755 0 1.0000 183,431,952 13 2015 216,454,460 75,884,185 0 1.0000 140,570,275 13 2016 148,894,215 30,010,920 0 1.0000 118,883,295 1  ANTHRACITE SURFACE (1012)  State OD  Developed Federal Exempt Partnership Development Payroll Payroll Reported Payroll Factor (1) + [(3)-(2)]*(4) (5)  Year (1) (2) (3) (4) (5) 2006 11,946,382 0 118,941 1.0000 12,065,323 2007 14,555,579 0 310,977 1.0000 14,866,556 2008 16,954,313 1,047,741 313,659 1.0000 16,220,231	153.618908 145.146253 183.431952 140.570275 118.883295 Payroll Per Million (5)/1000000 (6) 12.065323 14.866556	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) [5] 12,065,323 14,866,556 16,220,231	1.0000 1.0000 1.0000 Development Factor (4) 1.0000 1.0000	0 0 0 0 Partnership Reported Payroll (3) 118,941 310,977 313,659	75,884,185 30,010,920 Federal Exempt Reported Payroll (2) 0 0 1,047,741	271,230,707 216,454,460 148,894,215 E SURFACE (1012) State OD Developed Payroll (1) 11,946,382 14,555,579 16,954,313	2014 2015 2016 ANTHRACITE Year 2006 2007 2008
2012 153,618,908 0 0 1.0000 153,618,908 1. 2013 149,747,092 4,600,839 0 1.0000 145,146,253 13 2014 271,230,707 87,798,755 0 1.0000 183,431,952 13 2015 216,454,460 75,884,185 0 1.0000 140,570,275 13 2016 148,894,215 30,010,920 0 1.0000 118,883,295 1  ANTHRACITE SURFACE (1012)  State OD  Developed Federal Exempt Partnership Development Payroll Payroll Reported Payroll Reported Payroll Factor (1) + [(3)-[2])*(4) (5)  Year (1) (2) (3) (4) (5) 2006 11,946,382 0 118,941 1.0000 12,065,323 2007 14,555,579 0 310,977 1.0000 14,866,556 2008 16,954,313 1,047,741 313,659 1.0000 16,220,231 2009 16,445,462 903,752 351,818 1.0000 15,893,528	153.618908 145.146253 183.431952 140.570275 118.883295 Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556 16,220,231 15,893,528	1.0000 1.0000 1.0000 Development Factor (4) 1.0000 1.0000 1.0000	0 0 0 0 Partnership Reported Payroll (3) 118,941 310,977 313,659 351,818	75,884,185 30,010,920 Federal Exempt Reported Payroll (2) 0 0 1,047,741 903,752	271,230,707 216,454,460 148,894,215 E SURFACE (1012) State OD Developed Payroll (1) 11,946,382 14,555,579 16,954,313 16,445,462	2014 2015 2016 ANTHRACITE Year 2006 2007 2008 2009
2012 153,618,908 0 0 1.0000 153,618,908 1. 2013 149,747,092 4,600,839 0 1.0000 145,146,253 13 2014 271,230,707 87,798,755 0 1.0000 183,431,952 13 2015 216,454,460 75,884,185 0 1.0000 140,570,275 13 2016 148,894,215 30,010,920 0 1.0000 118,883,295 1  ANTHRACITE SURFACE (1012)  State OD  Developed Federal Exempt Partnership Development Payroll Reported Payroll Reported Payroll Factor (1) + [(3)-(2)]*(4) (5)  Year (1) (2) (3) (4) (5) 2006 11,946,382 0 118,941 1.0000 12,065,323 2007 14,555,579 0 310,977 1.0000 14,866,556 2008 16,954,313 1,047,741 313,659 1.0000 16,220,231 2009 16,445,462 903,752 351,818 1.0000 15,893,528 2010 14,295,288 1,205,978 229,875 1.0000 13,319,185	153.618908 145.146253 183.431952 140.570275 118.883295 Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231 15.893528	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185	1.0000 1.0000 1.0000 1.0000 Development Factor (4) 1.0000 1.0000 1.0000 1.0000	Partnership Reported Payroll  [3]  118,941  310,977  313,659  351,818  229,875	75,884,185 30,010,920 Federal Exempt Reported Payroll (2) 0 0 1,047,741 903,752 1,205,978	271,230,707 216,454,460 148,894,215 E SURFACE (1012) State OD Developed Payroll (1) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288	2014 2015 2016 ANTHRACITE Year 2006 2007 2008 2009 2010
2012 153,618,908 0 0 1.0000 153,618,908 1. 2013 149,747,092 4,600,839 0 1.0000 145,146,253 13 2014 271,230,707 87,798,755 0 1.0000 183,431,952 13 2015 216,454,460 75,884,185 0 1.0000 140,570,275 13 2016 148,894,215 30,010,920 0 1.0000 118,883,295 1  ANTHRACITE SURFACE (1012)  State OD  Developed Federal Exempt Partnership Development Payroll Federal OD  Payroll Reported Payroll Reported Payroll Factor (1) + [(3)-(2)]*(4) (5)  Year (1) (2) (3) (4) (5) 2006 11,946,382 0 118,941 1.0000 12,065,323 2007 14,555,579 0 310,977 1.0000 14,866,556 2008 16,954,313 1,047,741 313,659 1.0000 16,220,231 2009 16,445,462 903,752 351,818 1.0000 15,893,528 2010 14,295,288 1,205,978 229,875 1.0000 13,319,185 2011 21,034,600 1,929,891 402,719 1.0000 19,507,428	153.618908 145.146253 183.431952 140.570275 118.883295 Payroll Per Million (5)/1000000 (6) 12.045323 14.866556 16.220231 15.893528 13.319185	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428	1.0000 1.0000 1.0000 1.0000 Development Factor (4) 1.0000 1.0000 1.0000 1.0000 1.0000	Partnership Reported Payroll  [3]  118,941  310,977  313,659  351,818  229,875  402,719	75,884,185 30,010,920 Federal Exempt Reported Payroll (2) 0 0 1,047,741 903,752 1,205,978 1,929,891	271,230,707 216,454,460 148,894,215 E SURFACE (1012) State OD Developed Payroll (1) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600	2014 2015 2016 ANTHRACITE Year 2006 2007 2008 2009 2010 2011
2012 153,618,908 0 0 1.0000 153,618,908 1. 2013 149,747,092 4,600,839 0 1.0000 145,146,253 13 2014 271,230,707 87,798,755 0 1.0000 183,431,952 13 2015 216,454,460 75,884,185 0 1.0000 140,570,275 13 2016 148,894,215 30,010,920 0 1.0000 118,883,295 1  ANTHRACITE SURFACE (1012)  State OD  Developed Federal Exempt Reported Payroll Reported Payroll Payroll Factor (1) + [(3)-(2)]*(4) (5)  Year (1) (2) (3) (4) (5) 2006 11,946,382 0 118,941 1.0000 12,065,323 2007 14,555,579 0 310,977 1.0000 14,866,556 2008 16,954,313 1.047,741 313,659 1.0000 16,220,231 2009 16,445,462 903,752 351,818 1.0000 15,893,528 2010 14,295,288 1,205,978 229,875 1.0000 13,319,185 2011 21,034,600 1,929,891 402,719 1.0000 19,507,428 2012 26,295,907 1,973,449 412,253 1.0000 24,734,711 1.0000 19,507,428 2012 26,295,907 1,973,449 412,253 1.0000 24,734,711 1.0000 19,507,428 2012 26,295,907 1,973,449 412,253 1.0000 24,734,711 1.0000 11,970,7428	153.618908 145.146253 183.431952 140.570275 118.883295 Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231 15.893528 13.319185 19.507428	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428 24,734,711	1.0000 1.0000 1.0000 1.0000 Development Factor (4) 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Partnership Reported Payroll  [3]  118,941  310,977  313,659  351,818  229,875  402,719  412,253	75,884,185 30,010,920 Federal Exempt Reported Payroll (2) 0 0 1,047,741 903,752 1,205,978 1,929,891 1,973,449	271,230,707 216,454,460 148,894,215 E SURFACE (1012) State OD Developed Payroll (1) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600 26,295,907	2014 2015 2016 ANTHRACITE Year 2006 2007 2008 2009 2010 2011 2012
2012 153,618,908 0 0 1.0000 153,618,908 1.2013 149,747,092 4,600,839 0 1.0000 145,146,253 1.2014 271,230,707 87,798,755 0 1.0000 183,431,952 1.2015 216,454,460 75,884,185 0 1.0000 140,570,275 1.2016 148,894,215 30,010,920 0 1.0000 118,883,295 1.2016 148,894,215 30,010,920 0 1.0000 118,883,295 1.2016 148,894,215 30,010,920 0 1.0000 118,883,295 1.2016 148,894,215 30,010,920 0 1.0000 118,883,295 1.2016 148,894,215 30,010,920 0 1.0000 118,883,295 1.2016 148,894,215 30,010,920 0 1.0000 118,883,295 1.2016 14,146,382 0 1.2016 14,146,382 0 1.2016 14,146,382 0 1.2016 14,146,382 0 1.2016 14,146,382 0 1.2016 14,146,382 0 1.2016 14,146,382 0 1.2016 14,146,462 0 1.2016 14,146,462 14,146	153.618908 145.146253 183.431952 140.570275 118.883295 Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231 15.893528 13.319185 19.507428 24.734711	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428 24,734,711 20,720,014	1.0000 1.0000 1.0000 1.0000 Development Factor (4) 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Partnership Reported Payroll  (3)  118,941  310,977  313,659  351,818  229,875  402,719  412,253  577,413	75,884,185 30,010,920 Federal Exempt Reported Payroll (2) 0 0 1,047,741 903,752 1,205,978 1,929,891 1,973,449 2,307,223	271,230,707 216,454,460 148,894,215 E SURFACE (1012) State OD Developed Payroll (1) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600 26,295,907 22,449,824	2014 2015 2016 ANTHRACITE Year 2006 2007 2008 2009 2010 2011 2012 2013
2012 153,618,908 0 0 1.0000 153,618,908 1.2013 149,747,092 4,600,839 0 1.0000 145,146,253 1.2014 271,230,707 87,798,755 0 1.0000 183,431,952 1.2015 216,454,460 75,884,185 0 1.0000 140,570,275 1.2016 148,894,215 30,010,920 0 1.0000 118,883,295 1.2016 148,04,215 30,010,920 0 1.0000 118,883,295 1.2016 Payroll Reported Payroll Reported Payroll Factor (1) + [(3)-(2)]*(4) (5) (1) + [(3)-(2)]*(4) (5) (2) (3) (4) (5) (2) (2) (3) (4) (5) (2) (2) (3) (2) (2) (3) (4) (5) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2	153.618908 145.146253 183.431952 140.570275 118.883295 Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231 15.893528 13.319185 19.507428 24.734711 20.720014	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428 24,734,711 20,720,014 18,911,339	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Partnership Reported Payroll  (3)  118,941  310,977  313,659  351,818  229,875  402,719  412,253  577,413  656,071	75,884,185 30,010,920 Federal Exempt Reported Payroll (2) 0 0 1,047,741 903,752 1,205,978 1,929,891 1,973,449 2,307,223 2,210,807	271,230,707 216,454,460 148,894,215 E SURFACE (1012) State OD Developed Payroll (1) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600 26,295,907 22,449,824 20,466,075	2014 2015 2016 ANTHRACITE Year 2006 2007 2008 2009 2010 2011 2012 2013 2014
2012 153,618,908 0 0 1.0000 153,618,908 1.2013 149,747,092 4,600,839 0 1.0000 145,146,253 1.2014 271,230,707 87,798,755 0 1.0000 183,431,952 1.2015 216,454,460 75,884,185 0 1.0000 140,570,275 1.2016 148,894,215 30,010,920 0 1.0000 118,883,295 1.2016 148,894,215 30,010,920 0 1.0000 118,883,295 1.2016 Payroll Reported Payroll Reported Payroll Reported Payroll Factor (1) + [(3)-(2)]*(4) (5)	153.618908 145.146253 183.431952 140.570275 118.883295 Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231 15.893528 13.319185 19.507428 24.734711 20.720014 18.911339	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428 24,734,711 20,720,014 18,911,339 22,234,350	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Partnership Reported Payroll  (3)  118,941  310,977  313,659  351,818  229,875  402,719  412,253  577,413  656,071  684,662	75,884,185 30,010,920 Federal Exempt Reported Payroll (2) 0 0 1,047,741 903,752 1,205,978 1,929,891 1,973,449 2,307,223 2,210,807 2,669,091	271,230,707 216,454,460 148,894,215 E SURFACE (1012) State OD Developed Payroll (1) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600 26,295,907 22,449,824 20,466,075 24,218,779	2014 2015 2016 ANTHRACITE Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
2012 153,618,908 0 0 1.0000 153,618,908 1. 2013 149,747,092 4,600,839 0 1.0000 145,146,253 1. 2014 271,230,707 87,798,755 0 1.0000 183,431,952 1. 2015 216,454,460 75,884,185 0 1.0000 140,570,275 1. 2016 148,894,215 30,010,920 0 1.0000 118,883,295 1.  ANTHRACITE SURFACE (1012)  State OD  Developed Federal Exempt Reported Payroll Payr	153.618908 145.146253 183.431952 140.570275 118.883295 Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231 15.893528 13.319185 19.507428 24.734711 20.720014 18.911339 22.234350	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) [5] 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428 24,734,711 20,720,014 18,911,339 22,234,350 19,043,330	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Partnership Reported Payroll  (3)  118,941  310,977  313,659  351,818  229,875  402,719  412,253  577,413  656,071  684,662	75,884,185 30,010,920 Federal Exempt Reported Payroll (2) 0 0 1,047,741 903,752 1,205,978 1,929,891 1,973,449 2,307,223 2,210,807 2,669,091	271,230,707 216,454,460 148,894,215 E SURFACE (1012) State OD Developed Payroll (11) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600 26,295,907 22,449,824 20,466,075 24,218,779 20,810,850	2014 2015 2016 ANTHRACITE Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016
2012 153,618,908 0 0 1.0000 153,618,908 1. 2013 149,747,092 4,600,839 0 1.0000 145,146,253 13. 2014 271,230,707 87,798,755 0 1.0000 183,431,952 13. 2015 216,454,460 75,884,185 0 1.0000 140,570,275 13. 2016 148,894,215 30,010,920 0 1.0000 118,883,295 1.  ANTHRACITE SURFACE (1012)  State OD  Developed Federal Exempt Reported Payroll Payroll Payroll Reported Payroll Reported Payroll Reported Payroll Reported Payroll Reported Payroll Payroll Payroll Payroll Payroll Payroll Reported Payroll Pay	153.618908 145.146253 183.431952 140.570275 118.883295 Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231 15.893528 13.319185 19.507428 24.734711 20.720014 18.911339 22.234350 19.043330	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428 24,734,711 20,720,014 18,911,339 22,234,350 19,043,330 Federal OD	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Partnership Reported Payroll  [3]  118,941  310,977  313,659  351,818  229,875  402,719  412,253  577,413  656,071  684,662  618,553	75,884,185 30,010,920 Federal Exempt Reported Payroll (2) 0 0 1,047,741 903,752 1,205,978 1,929,891 1,973,449 2,307,223 2,210,807 2,669,091 2,378,155	271,230,707 216,454,460 148,894,215 E SURFACE (1012) State OD Developed Payroll (11) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600 26,295,907 22,449,824 20,466,075 24,218,779 20,810,850 S SURFACE (1014) State OD	2014 2015 2016 ANTHRACITE Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016
2012 153,618,908 0 0 1.0000 153,618,908 1. 2013 149,747,092 4,600,839 0 1.0000 145,146,253 1. 2014 271,230,707 87,798,755 0 1.0000 183,431,952 1. 2015 216,454,460 75,884,185 0 1.0000 140,570,275 1. 2016 148,894,215 30,010,920 0 1.0000 118,883,295 1.  ANTHRACITE SURFACE (1012)  State OD  Developed Federal Exempt Reported Payroll Reported Payroll Factor (1) + [(3)-(2)]*(4) (5)  Year (1) (2) (3) (4) (5)  Year (1) (2) (3) (4) (5)  2006 11,946,382 0 118,941 1.0000 12,045,323 2.007 14,555,579 0 310,977 1.0000 14,866,556 2.008 16,954,313 1.047,741 313,659 1.0000 16,220,231 2.009 16,445,462 903,752 351,818 1.0000 15,893,528 2.010 14,295,288 1,205,978 229,875 1.0000 15,893,528 2.010 14,295,288 1,205,978 229,875 1.0000 13,319,185 2.011 21,034,600 1,929,891 402,719 1.0000 19,507,428 2.012 26,295,907 1,973,449 412,253 1.0000 24,734,711 2.013 22,449,824 2,307,223 577,413 1.0000 24,734,711 2.013 22,449,824 2,307,223 577,413 1.0000 24,734,711 2.013 22,449,824 2,307,223 577,413 1.0000 24,734,711 2.013 22,449,824 2,307,223 577,413 1.0000 24,734,711 2.013 22,449,824 2,307,223 577,413 1.0000 24,734,711 2.013 22,449,824 2,307,223 577,413 1.0000 22,234,350 2.016 20,810,850 2,378,155 618,553 1.0045 19,043,330 2.016 20,810,850 2,378,155 618,553 1.0045 Payroll Prayroll Prayro	153.618908 145.146253 183.431952 140.570275 118.883295 Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231 15.893528 13.319185 19.507428 24.734711 20.720014 18.911339 22.234350 19.043330	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428 24,734,711 20,720,014 18,911,339 22,234,350 19,043,330 Federal OD Payroll	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Partnership Reported Payroll  [3]  118,941 310,977 313,659 351,818 229,875 402,719 412,253 577,413 656,071 684,662 618,553  Partnership	75,884,185 30,010,920 Federal Exempt Reported Payroll (2) 0 1,047,741 903,752 1,205,978 1,929,891 1,973,449 2,307,223 2,210,807 2,669,091 2,378,155	271,230,707 216,454,460 148,894,215  E SURFACE (1012) State OD Developed Payroll (1) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600 26,295,970 22,449,824 20,466,075 24,218,779 20,810,850  S SURFACE (1014) State OD Developed	2014 2015 2016 ANTHRACITE Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016
2012 153,618,908 0 0 1.0000 153,618,908 1. 2013 149,747,092 4,600,839 0 1.0000 145,146,253 1. 2014 271,230,707 87,798,755 0 1.0000 183,431,952 1. 2015 216,454,460 75,884,185 0 1.0000 140,570,275 1. 2016 148,894,215 30,010,920 0 1.0000 118,883,295 1.  ANTHRACITE SURFACE (1012)  State OD  Developed Federal Exempt Reported Payroll Reported Payroll Factor (1) + [(3)-(2)]*(4) (5)  Year (1) (2) (3) (4) (5)  Year (1) (2) (3) (4) (5)  2006 11,946,382 0 118,941 1.0000 12,045,323 2.007 14,555,579 0 310,977 1.0000 14,866,556 2.008 16,954,313 1.047,741 313,659 1.0000 16,220,231 2.009 16,445,462 903,752 351,818 1.0000 15,893,528 2.010 14,295,288 1,205,978 229,875 1.0000 15,893,528 2.010 14,295,288 1,205,978 229,875 1.0000 13,319,185 2.011 21,034,600 1,929,891 402,719 1.0000 19,507,428 2.012 26,295,907 1,973,449 412,253 1.0000 24,734,711 2.013 22,449,824 2,307,223 577,413 1.0000 24,734,711 2.013 22,449,824 2,307,223 577,413 1.0000 24,734,711 2.013 22,449,824 2,307,223 577,413 1.0000 24,734,711 2.013 22,449,824 2,307,223 577,413 1.0000 24,734,711 2.013 22,449,824 2,307,223 577,413 1.0000 24,734,711 2.013 22,449,824 2,307,223 577,413 1.0000 22,234,350 2.016 20,810,850 2,378,155 618,553 1.0045 19,043,330 BITUMINOUS SURFACE (1014)  State OD  Developed Federal Exempt Partnership Development Payroll P	153.618908 145.146253 183.431952 140.570275 118.883295 Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231 15.893528 13.319185 19.507428 24.734711 20.720014 18.911339 22.234350 19.043330 Payroll Per Million	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428 24,734,711 20,720,014 18,911,339 22,234,350 19,043,330 Federal OD Payroll (1) + [(3)-(2)]*(4)	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Partnership Reported Payroll  [3]  118,941 310,977 313,659 351,818 229,875 402,719 412,253 577,413 656,071 684,662 618,553  Partnership Reported Payroll	75,884,185 30,010,920 Federal Exempt Reported Payroll (2) 0 0 1,047,741 903,752 1,205,978 1,929,891 1,973,449 2,307,223 2,210,807 2,669,091 2,378,155	271,230,707 216,454,460 148,894,215  E SURFACE (1012) State OD Developed Payroll (1) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600 26,295,907 22,449,824 20,466,075 24,218,779 20,810,850  S SURFACE (1014) State OD Developed Payroll	2014 2015 2016 ANTHRACITE Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 BITUMINOUS
2012   153,618,908   0   0   1.0000   153,618,908   1.0013   149,747,092   4,600,839   0   1.0000   145,146,253   1.0014   271,230,707   87,798,755   0   1.0000   183,431,952   1.0015   216,454,460   75,884,185   0   1.0000   140,570,275   1.0016   148,894,215   30,010,920   0   1.0000   1140,570,275   1.0016   148,894,215   30,010,920   0   1.0000   118,883,295   1.0016   148,894,215   30,010,920   0   1.0000   118,883,295   1.0016   148,894,215   30,010,920   0   1.0000   118,883,295   1.0016   1.0	153.618908 145.146253 183.431952 140.570275 118.883295  Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231 15.893528 13.319185 19.507428 24.734711 20.720014 18.911339 22.234350 19.043330  Payroll Per Million (5)/1000000	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428 24,734,711 20,720,014 18,911,339 22,234,350 19,043,330 Federal OD Payroll (1) + [(3)-(2)]*(4) (5)	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Partnership Reported Payroll [3]  118,941 310,977 313,659 351,818 229,875 402,719 412,253 577,413 656,071 684,662 618,553  Partnership Reported Payroll [3]	75,884,185 30,010,920 Federal Exempt Reported Payroll (2) 0 0 1,047,741 903,752 1,205,978 1,929,891 1,973,449 2,307,223 2,210,807 2,669,091 2,378,155 Federal Exempt Reported Payroll (2)	271,230,707 216,454,460 148,894,215  E SURFACE (1012) State OD Developed Payroll (1) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600 26,295,907 22,449,824 20,466,075 24,218,779 20,810,850  S SURFACE (1014) State OD Developed Payroll (1)	2014 2015 2016 ANTHRACITE Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 BITUMINOUS
2012   153,618,908   0	153.618908 145.146253 183.431952 140.570275 118.883295  Payroll Per Million (5)/1000000 (6) 12.045323 14.866556 16.220231 15.893528 13.319185 19.507428 24.734711 20.720014 18.911339 22.234350 19.043330  Payroll Per Million (5)/1000000 (6)	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428 24,734,711 20,720,014 18,911,339 22,234,350 19,043,330 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 63,798,502	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Partnership Reported Payroll  [3]  118,941  310,977  313,659  351,818  229,875  402,719  412,253  577,413  656,071  684,662  618,553  Partnership Reported Payroll  [3]  789,527	75,884,185 30,010,920 Federal Exempt Reported Payroll (2)  0 0 1,047,741 903,752 1,205,978 1,929,891 1,973,449 2,307,223 2,210,807 2,669,091 2,378,155  Federal Exempt Reported Payroll (2) 0	271,230,707 216,454,460 148,894,215  E SURFACE (1012) State OD Developed Payroll (1) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600 26,295,907 22,449,824 20,466,075 24,218,779 20,810,850  S SURFACE (1014) State OD Developed Payroll (1) 63,008,975	2014 2015 2016 ANTHRACITE Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 BITUMINOUS
2012 153,618,908 0 0 1.0000 153,618,908 1. 2013 149,747,092 4,600,839 0 1.0000 145,146,253 1. 2014 271,230,707 87,798,755 0 1.0000 183,431,952 18 2015 216,454,460 75,884,185 0 1.0000 140,570,275 1. 2016 148,894,215 30,010,920 0 1.0000 110,000 118,883,295 1.  ANTHRACITE SURFACE (1012)  State OD  Developed Payroll Reported Payroll Reported Payroll Pa	153.618908 145.146253 183.431952 140.570275 118.883295  Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231 15.893528 13.319185 19.507428 24.734711 20.720014 18.911339 22.234350 19.043330  Payroll Per Million (5)/1000000 (6) 63.798502	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428 24,734,711 20,720,014 18,911,339 22,234,350 19,043,330 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 63,798,502 64,808,093	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Partnership Reported Payroll  [3]  118,941 310,977 313,659 351,818 229,875 402,719 412,253 577,413 656,071 684,662 618,553  Partnership Reported Payroll  [3] 789,527 1,512,319	75,884,185 30,010,920  Federal Exempt Reported Payroll  [2]  0 0,0 1,047,741 903,752 1,205,978 1,929,891 1,973,449 2,307,223 2,210,807 2,669,091 2,378,155  Federal Exempt Reported Payroll  [2]  0 0	271,230,707 216,454,460 148,894,215  E SURFACE (1012) State OD Developed Payroll (1) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600 26,295,907 22,449,824 20,466,075 24,218,779 20,810,850  S SURFACE (1014) State OD Developed Payroll (1) 63,008,975 63,295,774	2014 2015 2016 ANTHRACITE Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 BITUMINOUS
2012   153,618,908   0	153.618908 145.146253 183.431952 140.570275 118.883295  Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231 15.893528 13.319185 19.507428 24.734711 20.720014 18.911339 22.234350 19.043330  Payroll Per Million (5)/1000000 (6) 63.798502 64.808093	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428 24,734,711 20,720,014 18,911,339 22,234,350 19,043,330 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 63,798,502 64,808,093 74,601,231	1.0000 1.0000	Partnership Reported Payroll  [3]  118,941  310,977  313,659  351,818  229,875  402,719  412,253  577,413  656,071  684,662  618,553  Partnership Reported Payroll  [3]  789,527  1,512,319  1,546,749	75,884,185 30,010,920  Federal Exempt Reported Payroll  (2)  0  1,047,741 903,752 1,205,978 1,929,891 1,973,449 2,307,223 2,210,807 2,669,091 2,378,155  Federal Exempt Reported Payroll  (2)  0  0 0	271,230,707 216,454,460 148,894,215  E SURFACE (1012) State OD Developed Payroll (1) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600 26,295,907 22,449,824 20,466,075 24,218,779 20,810,850  S SURFACE (1014) State OD Developed Payroll (1) 63,008,975 63,295,774 73,054,482	2014 2015 2016 ANTHRACITE Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 BITUMINOUS
2012   153,618,908   0	153.618908 145.146253 183.431952 140.570275 118.883295  Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231 15.893528 13.319185 19.507428 24.734711 20.720014 18.911339 22.234350 19.043330  Payroll Per Million (5)/1000000 (6) 63.798502 64.808093 74.601231	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428 24,734,711 20,720,014 18,911,339 22,234,350 19,043,330 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 63,798,502 64,808,093 74,601,231 63,306,695	1.0000 1.0000	Partnership Reported Payroll  (3)  118,941 310,977 313,659 351,818 229,875 402,719 412,253 577,413 656,071 684,662 618,553  Partnership Reported Payroll (3) 789,527 1,512,319 1,546,749 1,522,301	75,884,185 30,010,920  Federal Exempt Reported Payroll  (2)  0 0 1,047,741 903,752 1,205,978 1,929,891 1,973,449 2,307,223 2,210,807 2,669,091 2,378,155  Federal Exempt Reported Payroll  (2)  0 0 0 0 0	271,230,707 216,454,460 148,894,215  E SURFACE (1012) State OD Developed Payroll (1] 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600 26,295,907 22,449,824 20,466,075 24,218,779 20,810,850  S SURFACE (1014) State OD Developed Payroll (1) 63,008,975 63,295,774 73,054,482 61,784,394	2014 2015 2016 ANTHRACITE Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 BITUMINOUS Year 2006 2007 2008 2007 2010
2012   153,618,908	153.618908 145.146253 183.431952 140.570275 118.883295  Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231 15.893528 13.319185 19.507428 24.734711 20.72014 18.911339 22.234350 19.043330  Payroll Per Million (5)/10000000 (6) 63.798502 64.808093 74.601231 63.306695	145,146,253 183,431,952 140,570,275 118,883,295 Federal OD Payroll (1) + [(3)-(2)]*(4) (5] 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428 24,734,711 20,720,014 18,911,339 22,234,350 19,043,330 Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 63,798,502 64,808,093 74,601,231 63,306,695 74,255,177	1.0000 1.0000	Partnership Reported Payroll  (3)  118,941 310,977 313,659 351,818 229,875 402,719 412,253 577,413 656,071 684,662 618,553  Partnership Reported Payroll (3) 789,527 1,512,319 1,546,749 1,522,301 1,543,619	75,884,185 30,010,920  Federal Exempt Reported Payroll (2)  0 0 1,047,741 903,752 1,205,978 1,929,891 1,973,449 2,307,223 2,210,807 2,669,091 2,378,155  Federal Exempt Reported Payroll (2) 0 0 0 0 0 0	271,230,707 216,454,460 148,894,215  E SURFACE (1012) State OD Developed Payroll (11) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600 26,295,907 22,449,824 20,466,075 24,218,779 20,810,850  S SURFACE (1014) State OD Developed Payroll (11) 63,008,975 63,295,774 73,054,482 61,784,394 72,711,558	2014 2015 2016 ANTHRACITE  Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 BITUMINOUS  Year 2006 2007 2008 2009 2010
2012   153,618,908   0	153.618908 145.146253 183.431952 140.570275 118.883295  Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231 15.893528 13.319185 19.507428 24.734711 20.720014 18.911339 22.234350 19.043330  Payroll Per Million (5)/1000000 (6) 63.798502 64.808093 74.601231 63.306695 74.255177	145,146,253 183,431,952 140,570,275 118,883,295  Federal OD Payroll (1) + [(3)-(2)]*(4) [5] 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428 24,734,711 20,720,014 18,911,339 22,234,350 19,043,330  Federal OD Payroll (1) + [(3)-(2)]*(4) [5] 63,798,502 64,808,093 74,601,231 63,306,695 74,255,177 87,730,506	1.0000 1.0000	Partnership Reported Payroll  (3)  118,941 310,977 313,659 351,818 229,875 402,719 412,253 577,413 656,071 684,662 618,553  Partnership Reported Payroll (3) 789,527 1,512,319 1,546,749 1,522,301 1,543,619 1,656,442	75,884,185 30,010,920  Federal Exempt Reported Payroll (2)  0  1,047,741 903,752 1,205,978 1,929,891 1,973,449 2,307,223 2,210,807 2,669,091 2,378,155  Federal Exempt Reported Payroll (2)  0  0  0  0  0  0 0	271,230,707 216,454,460 148,894,215  E SURFACE (1012) State OD Developed Payroll (11) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600 26,295,907 22,449,824 20,466,075 24,218,779 20,810,850  S SURFACE (1014) State OD Developed Payroll (11) 63,008,975 63,295,774 73,054,482 61,784,394 72,711,558 86,074,064	2014 2015 2016 ANTHRACITE  Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 BITUMINOUS  Year 2006 2007 2008 2009 2010 2011 2012 2013
2012   153,618,908   0	153.618908 145.146253 183.431952 140.570275 118.883295  Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231 15.893528 13.319185 19.507428 24.734711 20.720014 18.911339 22.234350 19.043330  Payroll Per Million (5)/1000000 (6) 63.798502 64.808093 74.601231 63.306695 74.255177 87.730506	145,146,253 183,431,952 140,570,275 118,883,295  Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428 24,734,711 20,720,014 18,911,339 22,234,350 19,043,330  Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 63,798,502 64,808,093 74,601,231 63,306,695 74,255,177 87,730,506 77,890,500	1.0000 1.0000	Partnership Reported Payroll  [3]  118,941 310,977 313,659 351,818 229,875 402,719 412,253 577,413 656,071 684,662 618,553  Partnership Reported Payroll  [3] 789,527 1,512,319 1,546,749 1,522,301 1,543,619 1,656,442 1,437,689 1,368,316	75,884,185 30,010,920  Federal Exempt Reported Payroll (2)  0 1,047,741 903,752 1,205,978 1,929,891 1,973,449 2,307,223 2,210,807 2,669,091 2,378,155  Federal Exempt Reported Payroll (2)  0 0 0 0 0 0 0 0	271,230,707 216,454,460 148,894,215  E SURFACE (1012) State OD Developed Payroll (11) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600 26,295,907 22,449,824 20,466,075 24,218,779 20,810,850  S SURFACE (1014) State OD Developed Payroll (11) 63,008,975 63,295,774 73,054,482 61,784,394 72,711,558 86,074,064 76,452,811	2014 2015 2016  ANTHRACITE  Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016  BITUMINOUS  Year 2006 2007 2008 2009 2010 2011 2012 2013
2012   153,618,908	153.618908 145.146253 183.431952 140.570275 118.883295  Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231 15.893528 13.319185 19.507428 24.734711 20.720014 18.911339 22.234350 19.043330  Payroll Per Million (5)/1000000 (6) 63.798502 64.808093 74.601231 63.306695 74.255177 87.730506 77.890500	145,146,253 183,431,952 140,570,275 118,883,295  Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428 24,734,711 20,720,014 18,911,339 22,234,350 19,043,330  Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 63,798,502 64,808,093 74,601,231 63,306,695 74,255,177 87,730,506 77,890,500 62,718,061	1.0000 1.0000	Partnership Reported Payroll  [3]  118,941 310,977 313,659 351,818 229,875 402,719 412,253 577,413 656,071 684,662 618,553  Partnership Reported Payroll  [3]  789,527 1,512,319 1,546,749 1,522,301 1,543,619 1,656,442 1,437,689 1,368,316 1,317,884	75,884,185 30,010,920  Federal Exempt Reported Payroll (2)  0 1,047,741 903,752 1,205,978 1,929,891 1,973,449 2,307,223 2,210,807 2,669,091 2,378,155  Federal Exempt Reported Payroll (2)  0 0 0 0 0 0 0 0 0 0	271,230,707 216,454,460 148,894,215  E SURFACE (1012) State OD Developed Payroll (1) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600 26,295,907 22,449,824 20,466,075 24,218,779 20,810,850  S SURFACE (1014) State OD Developed Payroll (1) 63,008,975 63,295,774 73,054,482 61,784,394 72,711,558 86,074,064 76,452,811 61,349,745	2014 2015 2016 ANTHRACITE  Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016  BITUMINOUS  Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016
2012   153,618,908   0	153.618908 145.146253 183.431952 140.570275 118.883295  Payroll Per Million (5)/1000000 (6) 12.065323 14.866556 16.220231 15.893528 13.319185 19.507428 24.734711 20.720014 18.911339 22.234350 19.043330  Payroll Per Million (5)/1000000 (6) 63.798502 64.808093 74.601231 63.306695 74.255177 87.730506 77.890500 62.718061	145,146,253 183,431,952 140,570,275 118,883,295  Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 12,065,323 14,866,556 16,220,231 15,893,528 13,319,185 19,507,428 24,734,711 20,720,014 18,911,339 22,234,350 19,043,330  Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 63,798,502 64,808,093 74,601,231 63,306,695 74,255,177 87,730,506 77,890,500 62,718,061 55,368,615 42,000,092	1.0000 1.0000	Partnership Reported Payroll  [3]  118,941 310,977 313,659 351,818 229,875 402,719 412,253 577,413 656,071 684,662 618,553  Partnership Reported Payroll  [3]  789,527 1,512,319 1,546,749 1,522,301 1,543,619 1,656,442 1,437,689 1,368,316 1,317,884 1,066,044	75,884,185 30,010,920  Federal Exempt Reported Payroll (2)  0 0 1,047,741 903,752 1,205,978 1,929,891 1,973,449 2,307,223 2,210,807 2,669,091 2,378,155  Federal Exempt Reported Payroll (2)  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	271,230,707 216,454,460 148,894,215  E SURFACE (1012) State OD Developed Payroll (1) 11,946,382 14,555,579 16,954,313 16,445,462 14,295,288 21,034,600 26,295,907 22,449,824 20,466,075 24,218,779 20,810,850  S SURFACE (1014) State OD Developed Payroll (1) 63,008,975 63,295,774 73,054,482 61,784,394 72,711,558 86,074,044 76,452,811 61,349,745 54,050,731 40,934,048	2014 2015 2016 ANTHRACITE  Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016  BITUMINOUS  Year 2006 2007 2008 2009 2010 2011 2012 2018 2019 2010 2011 2012 2013 2014 2015

Source: Anthracite Underground (1010) - Exhibit X-C, page 4
Bituminous Underground (1001) - Exhibit X-C, page 4
Anthracite Surface (1012) - Exhibit X-D, page 2
Bituminous Surface (1014) - Exhibit X-D, page 2

## COAL MINE COMPENSATION RATING BUREAU Federal OD Payrolls

COKE (1469)						
	State OD				Federal OD	Payroll
	Developed	Federal Exempt	Partnership	Development	Payroll	Per Million
	Payroll	Reported Payroll	Reported Payroll	Factor	(1) + [(3)-(2)]*(4)	(5)/1000000
<u>Year</u> 2006	<u>(1)</u> 12,737,394	<u>(2)</u> 0	<u>(3)</u> 0	<u>(4)</u> 1.0000	<u>(5)</u> 12,737,394	<u>(6)</u> 12.737394
2007	13,669,925	0	0	1.0000	13,669,925	13.669925
2008	9,761,146	0	0	1.0000	9,761,146	9.761146
2009	5,173,552	0	0	1.0000	5,173,552	5.173552
2010	5,435,658	0	0	1.0000	5,435,658	5.435658
2011	3,599,086	0	0	1.0000	3,599,086	3.599086
2012	5,738,105	0	0	1.0000	5,738,105	5.738105
2013	4,791,910	0	0	1.0000	4,791,910	4.791910
2014	4,464,398	0	0	1.0000	4,464,398	4.464398
2015	4,340,376	0	0	1.0000	4,340,376	4.340376
2016	2,313,724	0	0	1.0000	2,313,724	2.313724
AUGER (1015	5)					
	State OD		_ ,		Federal OD	Payroll
	Developed	Federal Exempt	Partnership	Development	Payroll	Per Million
	Payroll	Reported Payroll	Reported Payroll	Factor	(1) + [(3)-(2)]*(4)	(5)/1000000
<u>Year</u>	(1)	(2)	(3)	(4)	<u>(5)</u>	<u>(6)</u>
2006	1,066,831	0	0	1.0000	1,066,831	1.066831 1.121156
2007 2008	1,121,156 2,488,558	0	18,200	1.0000 1.0000	1,121,156 2,506,758	2.506758
2009	926,163	0	20,800	1.0000	946,963	0.946963
2010	806,696	0	20,800	1.0000	827,496	0.827496
2011	1,176,255	0	0	1.0000	1,176,255	1.176255
2012	808,208	0	0	1.0000	808,208	0.808208
2013	1,025,399	0	21,548	1.0000	1,046,947	1.046947
2014	806,976	0	54,614	1.0000	861,590	0.861590
2015	582,619	0	72,147	1.0000	654,766	0.654766
2016	372,496	0	20,280	1.0000	392,776	0.392776
ANTHRACITE	CO-GEN (1021)					
ANTHRACITE	CO-GEN (1021) State OD				Federal OD	Payroll
ANTHRACITE	State OD Developed	Federal Exempt	Partnership	Development	Payroll	Per Million
	State OD Developed Payroll	Reported Payroll	Reported Payroll	Factor	Payroll (1) + [(3)-(2)]*(4)	Per Million (5)/1000000
<u>Year</u>	State OD Developed Payroll (1)	Reported Payroll (2)	Reported Payroll (3)	Factor (4)	Payroll (1) + [(3)-(2)]*(4) <u>(5)</u>	Per Million (5)/1000000 (6)
<u>Year</u> 2006	State OD Developed Payroll (1) 8,405,393	Reported Payroll (2)	Reported Payroll (3) 7,134	Factor ( <u>4)</u>	Payroll (1) + [(3)-(2)]*(4) (5) 8,412,527	Per Million (5)/1000000 (6) 8.412527
<u>Year</u> 2006 2007	State OD Developed Payroll (1) 8,405,393 9,160,450	Reported Payroll (2) 0	Reported Payroll (3) 7,134 26,256	Factor (4) 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4) (5) 8,412,527 9,186,706	Per Million (5)/1000000 (6) 8.412527 9.186706
<u>Year</u> 2006 2007 2008	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335	Reported Payroll (2) 0 0 0 477,298	Reported Payroll (3) 7,134 26,256 40,363	Factor (4) 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4) (5) 8,412,527 9,186,706 7,521,400	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400
<u>Year</u> 2006 2007 2008 2009	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644	Reported Payroll (2)  0 0 477,298 505,653	Reported Payroll (3) 7,134 26,256 40,363 35,744	Factor (4) 1.0000 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4)	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735
<u>Year</u> 2006 2007 2008	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335	Reported Payroll (2) 0 0 0 477,298	Reported Payroll (3) 7,134 26,256 40,363	Factor (4) 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4) (5) 8,412,527 9,186,706 7,521,400	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400
Year 2006 2007 2008 2009 2010	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228	Reported Payroll (2) 0 0 477,298 505,653 594,188	Reported Payroll (3) 7,134 26,256 40,363 35,744 71,008	Factor (4) 1.0000 1.0000 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4)	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048
Year 2006 2007 2008 2009 2010 2011 2012 2013	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651	Reported Payroll (2)  0 0 477,298 505,653 594,188 827,364 1,025,112 792,519	Reported Payroll (3)  7,134 26,256 40,363 35,744 71,008 88,971 63,920 80,630	Factor (4)  1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4)	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048 10.981642 9.311812 7.630762
Year 2006 2007 2008 2009 2010 2011 2012 2013 2014	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883	Reported Payroll (2)  0 0 477,298 505,653 594,188 827,364 1,025,112 792,519 838,824	Reported Payroll  (3)  7,134  26,256  40,363  35,744  71,008  88,971  63,920  80,630  138,839	Factor (4)  1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4)	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048 10.981642 9.311812 7.630762 8.360898
Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089	Reported Payroll (2)  0 0 477,298 505,653 594,188 827,364 1,025,112 792,519 838,824 1,048,903	Reported Payroll  (3)  7,134  26,256  40,363  35,744  71,008  88,971  63,920  80,630  138,839  134,620	Factor (4)  1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4) (5) 8,412,527 9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,554,806	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048 10.981642 9.311812 7.630762 8.360898 9.554806
Year 2006 2007 2008 2009 2010 2011 2012 2013 2014	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883	Reported Payroll (2)  0 0 477,298 505,653 594,188 827,364 1,025,112 792,519 838,824	Reported Payroll  (3)  7,134  26,256  40,363  35,744  71,008  88,971  63,920  80,630  138,839	Factor (4)  1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4)	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048 10.981642 9.311812 7.630762 8.360898
Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089	Reported Payroll (2)  0 0 477,298 505,653 594,188 827,364 1,025,112 792,519 838,824 1,048,903	Reported Payroll  (3)  7,134  26,256  40,363  35,744  71,008  88,971  63,920  80,630  138,839  134,620	Factor (4)  1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4) (5) 8,412,527 9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,554,806	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048 10.981642 9.311812 7.630762 8.360898 9.554806
Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424	Reported Payroll (2)  0 0 477,298 505,653 594,188 827,364 1,025,112 792,519 838,824 1,048,903 1,137,185	Reported Payroll (3) 7,134 26,256 40,363 35,744 71,008 88,971 63,920 80,630 138,839 134,620 73,792	Factor (4)  1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4) (5) 8,412,527 9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,554,806	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048 10.981642 9.311812 7.630762 8.360898 9.554806 9.784031
Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424  CO-GEN (1023) State OD	Reported Payroll (2)  0 0 477,298 505,653 594,188 827,364 1,025,112 792,519 838,824 1,048,903 1,137,185	Reported Payroll (3)  7,134 26,256 40,363 35,744 71,008 88,971 63,920 80,630 138,839 134,620 73,792  Partnership	Factor (4)  1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4)	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048 10.981642 9.311812 7.630762 8.360898 9.554806 9.784031 Payroll Per Million
Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 BITUMINOUS	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424  CO-GEN (1023) State OD	Reported Payroll (2)  0 0 477,298 505,653 594,188 827,364 1,025,112 792,519 838,824 1,048,903 1,137,185  Federal Exempt Reported Payroll	Reported Payroll (3) 7,134 26,256 40,363 35,744 71,008 88,971 63,920 80,630 138,839 134,620 73,792  Partnership Reported Payroll	Factor (4)  1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Development Factor	Payroll (1) + [(3)-(2)]*(4)	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048 10.981642 9.311812 7.630762 8.360898 9.554806 9.784031 Payroll Per Million (5)/1000000
Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 BITUMINOUS	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424  CO-GEN (1023) State OD Payroll (1)	Reported Payroll (2)  0 0 477,298 505,653 594,188 827,364 1,025,112 792,519 838,824 1,048,903 1,137,185  Federal Exempt Reported Payroll (2)	Reported Payroll (3) 7,134 26,256 40,363 35,744 71,008 88,971 63,920 80,630 138,839 134,620 73,792  Partnership Reported Payroll (3)	Factor (4)  1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 Development Factor (4)	Payroll (1) + [(3)-(2)]*(4)	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048 10.981642 9.311812 7.630762 8.360898 9.554806 9.784031 Payroll Per Million (5)/1000000 (6)
Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 BITUMINOUS	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424  CO-GEN (1023) State OD Payroll (1) 9,397,580	Reported Payroll (2)  0 0 477,298 505,653 594,188 827,364 1,025,112 792,519 838,824 1,048,903 1,137,185  Federal Exempt Reported Payroll (2) 0	Reported Payroll  (3)  7,134  26,256  40,363  35,744  71,008  88,971  63,920  80,630  138,839  134,620  73,792   Partnership  Reported Payroll  (3)  25,995	Factor (4)  1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000  Development Factor (4) 1.0000	Payroll (1) + [(3)-(2)]*(4)	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048 10.981642 9.311812 7.630762 8.360898 9.554806 9.784031 Payroll Per Million (5)/1000000 (6) 9.423575
Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 BITUMINOUS	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424  CO-GEN (1023) State OD  Payroll (1) 9,397,580 10,789,214	Reported Payroll (2)  0 0 477,298 505,653 594,188 827,364 1,025,112 792,519 838,824 1,048,903 1,137,185  Federal Exempt Reported Payroll (2) 0 0	Reported Payroll  (3)  7,134  26,256  40,363  35,744  71,008  88,971  63,920  80,630  138,839  134,620  73,792   Partnership  Reported Payroll  (3)  25,995  39,926	Factor (4)  1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4) (5) 8,412,527 9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,554,806 9,784,031  Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 9,423,575 10,829,140	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048 10.981642 9.311812 7.630762 8.360898 9.554806 9.784031 Per Million (5)/1000000 (6) 9.423575 10.829140
Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 BITUMINOUS Year 2006 2007 2008	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424  CO-GEN (1023) State OD  Payroll (1) 9,397,580 10,789,214 8,468,561	Reported Payroll  (2)  0  477,298  505,653  594,188  827,364  1,025,112  792,519  838,824  1,048,903  1,137,185  Federal Exempt Reported Payroll  (2)  0  0 0	Reported Payroll  (3)  7,134  26,256  40,363  35,744  71,008  88,971  63,920  80,630  138,839  134,620  73,792   Partnership  Reported Payroll  (3)  25,995  39,926  13,327	Factor (4)  1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4) (5) 8,412,527 9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,554,806 9,784,031  Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 9,423,575 10,829,140 8,481,888	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048 10.981642 9.311812 7.630762 8.360898 9.554806 9.784031  Payroll Per Million (5)/1000000 (6) 9.423575 10.829140 8.481888
Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 BITUMINOUS	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424  CO-GEN (1023) State OD  Payroll (1) 9,397,580 10,789,214	Reported Payroll (2)  0 0 477,298 505,653 594,188 827,364 1,025,112 792,519 838,824 1,048,903 1,137,185  Federal Exempt Reported Payroll (2) 0 0	Reported Payroll  (3)  7,134  26,256  40,363  35,744  71,008  88,971  63,920  80,630  138,839  134,620  73,792   Partnership  Reported Payroll  (3)  25,995  39,926	Factor (4)  1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4) (5) 8,412,527 9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,554,806 9,784,031  Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 9,423,575 10,829,140	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048 10.981642 9.311812 7.630762 8.360898 9.554806 9.784031  Per Million (5)/1000000 (6) 9.423575 10.829140 8.481888 7.866413
Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 BITUMINOUS Year 2006 2007 2008	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424  CO-GEN (1023) State OD  Payroll (1) 9,397,580 10,789,214 8,468,561 7,866,413	Reported Payroll (2)  0 0 477,298 505,653 594,188 827,364 1,025,112 7792,519 838,824 1,048,903 1,137,185  Federal Exempt Reported Payroll (2)  0 0 0 0	Reported Payroll  (3)  7,134  26,256  40,363  35,744  71,008  88,971  63,920  80,630  138,839  134,620  73,792   Partnership  Reported Payroll  (3)  25,995  39,926  13,327  0	Factor (4)  1.0000	Payroll (1) + [(3)-(2)]*(4)	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048 10.981642 9.311812 7.630762 8.360898 9.554806 9.784031  Payroll Per Million (5)/1000000 (6) 9.423575 10.829140 8.481888
Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 BITUMINOUS  Year 2006 2007 2008 2009 2010	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424  CO-GEN (1023) State OD  Payroll (1) 9,397,580 10,789,214 8,468,561 7,866,413 8,732,701	Reported Payroll (2)  0 0 477,298 505,653 594,188 827,364 1,025,112 792,519 838,824 1,048,903 1,137,185  Federal Exempt Reported Payroll (2)  0 0 0 0 0 0	Reported Payroll  (3)  7,134  26,256  40,363  35,744  71,008  88,71  63,920  80,630  138,839  134,620  73,792   Partnership  Reported Payroll  (3)  25,995  39,926  13,327  0 0	Factor (4)  1.0000	Payroll (1) + [(3)-(2)]*(4) (5) 8,412,527 9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,554,806 9,784,031  Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 9,423,575 10,829,140 8,481,888 7,866,413 8,732,701	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048 10.981642 9.311812 7.630762 8.360898 9.554806 9.784031  Per Million (5)/1000000 (6) 9.423575 10.829140 8.481888 7.866413 8.732701
Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016  BITUMINOUS  Year 2006 2007 2008 2009 2010 2011	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424  CO-GEN (1023) State OD  Payroll (1) 9,397,580 10,789,214 8,468,561 7,866,413 8,732,701 9,102,411	Reported Payroll (2)  0 0 477,298 505,653 594,188 827,364 1,025,112 792,519 838,824 1,048,903 1,137,185  Federal Exempt Reported Payroll (2)  0 0 0 0 0 0 0	Reported Payroll  (3)  7,134  26,256  40,363  35,744  71,008  88,971  63,920  80,630  138,839  134,620  73,792   Partnership  Reported Payroll  (3)  25,995  39,926  13,327  0 0 0	Factor (4)  1.0000	Payroll (1) + [(3)-(2)]*(4) (5) 8,412,527 9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,554,806 9,784,031  Federal OD Payroll (1) + [(3)-(2)]*(4) (5) 9,423,575 10,829,140 8,481,888 7,866,413 8,732,701 9,102,411	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048 10.981642 9.311812 7.630762 8.360898 9.554806 9.784031 Per Million (5)/1000000 (6) 9.423575 10.829140 8.481888 7.866413 8.732701 9.102411
Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016  BITUMINOUS  Year 2006 2007 2008 2009 2010 2011 2012 2013 2014	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424  CO-GEN (1023) State OD  Payroll (1) 9,397,580 10,789,214 8,468,561 7,866,413 8,732,701 9,102,411 9,047,745 10,355,884 11,721,184	Reported Payroll (2)  0 0 477,298 505,653 594,188 827,364 1,025,112 792,519 838,824 1,048,903 1,137,185  Federal Exempt Reported Payroll (2)  0 0 0 0 0 0 0 0 0 0 0 0 0 0	Reported Payroll  (3)  7,134  26,256  40,363  35,744  71,008  88,971  63,920  80,630  138,839  134,620  73,792   Partnership Reported Payroll  (3)  25,995  39,926  13,327  0  0  0  0  0  0  0  0	Factor (4)  1.0000	Payroll (1) + [(3)-(2)]*(4)	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048 10.981642 9.311812 7.630762 8.360898 9.754806 9.784031 Per Million (5)/1000000 (6) 9.423575 10.829140 8.481888 7.866413 8.732701 9.102411 9.047745 10.355884 11.721184
Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016  BITUMINOUS  Year 2006 2007 2008 2009 2010 2011 2012 2013	State OD Developed Payroll (1) 8,405,393 9,160,450 7,958,335 8,004,644 8,481,228 11,720,035 10,273,004 8,342,651 9,060,883 10,469,089 10,847,424  CO-GEN (1023) State OD  Payroll (1) 9,397,580 10,789,214 8,468,561 7,866,413 8,732,701 9,102,411 9,047,745 10,355,884	Reported Payroll (2)  0 0 477,298 505,653 594,188 827,364 1,025,112 792,519 838,824 1,048,903 1,137,185  Federal Exempt Reported Payroll (2)  0 0 0 0 0 0 0 0 0 0	Reported Payroll  (3)  7,134  26,256  40,363  35,744  71,008  88,971  63,920  80,630  138,839  134,620  73,792   Partnership  Reported Payroll  (3)  25,995  39,926  13,327  0  0  0  0  0  0	Factor (4)  1.0000	Payroll (1) + [(3)-(2)]*(4) [5] 8,412,527 9,186,706 7,521,400 7,534,735 7,958,048 10,981,642 9,311,812 7,630,762 8,360,898 9,554,806 9,784,031  Federal OD Payroll (1) + [(3)-(2)]*(4) [5] 9,423,575 10,829,140 8,481,888 7,866,413 8,732,701 9,102,411 9,047,745 10,355,884	Per Million (5)/1000000 (6) 8.412527 9.186706 7.521400 7.534735 7.958048 10.981642 9.311812 7.630762 8.360898 9.554806 9.784031  Payroll Per Million (5)/1000000 (6) 9.423575 10.829140 8.481888 7.866413 8.732701 9.102411 9.047745 10.355884

Source: Auger (1015) - Exhibit X-D, page 3 Coke (1469) - Exhibit X-D, page 3

Anthracite Co-Gen (1021) - Exhibit X-D, page 4 Bituminous Co-Gen (1023) - Exhibit X-D, page 4

## COAL MINE COMPENSATION RATING BUREAU Federal OD Payrolls

ANTHRACITE	PREP PLANT (10	25)				
	State OD				Federal OD	Payroll
	Developed	Federal Exempt	Partnership	Development	Payroll	Per Million
	Payroll	Reported Payroll	Reported Payroll	Factor	(1) + [(3)-(2)]*(4)	(5)/1000000
<u>Year</u>	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	<u>(5)</u>	<u>(6)</u>
2006	4,885,882	0	0	1.0000	4,885,882	4.885882
2007	5,756,439	0	60,852	1.0000	5,817,291	5.817291
2008	6,390,767	766,824	109,600	1.0000	5,733,543	5.733543
2009	6,749,748	584,144	99,002	1.0000	6,264,606	6.264606
2010	5,762,086	1,016,835	131,676	1.0000	4,876,927	4.876927
2011	7,236,583	1,246,194	132,870	1.0000	6,123,259	6.123259
2012	8,671,140	1,248,180	146,063	1.0000	7,569,023	7.569023
2013	8,265,665	1,400,236	209,457	1.0000	7,074,886	7.074886
2014	8,234,771	1,877,979	164,749	1.0000	6,521,541	6.521541
2015	7,606,274	1,549,878	140,200	1.0000	6,196,596	6.196596
2016	6,971,270	1,728,560	215,562	1.0000	5,458,272	5.458272
BITUMINOUS	C DDED DI ANT /10	07)				
	) FREF FLAINT (TU	2/)				
5	State OD	2/)			Federal OD	Payroll
5110111111000	•	27) Federal Exempt	Partnership	Development	Federal OD Payroll	Payroll Per Million
5.10.11.11.000	State OD	•	Partnership Reported Payroll	Development Factor		,
<u>Year</u>	State OD Developed	Federal Exempt	•		Payroll	Per Million
	State OD Developed Payroll	Federal Exempt Reported Payroll	Reported Payroll	Factor	Payroll (1) + [(3)-(2)]*(4)	Per Million (5)/1000000
<u>Year</u>	State OD Developed Payroll (1)	Federal Exempt Reported Payroll (2)	Reported Payroll (3)	Factor <u>(4)</u>	Payroll (1) + [(3)-(2)]*(4) <u>(5)</u>	Per Million (5)/1000000 (6)
<u>Year</u> 2006	State OD Developed Payroll (1) 17,050,967	Federal Exempt Reported Payroll (2) 0	Reported Payroll (3) 0	Factor <u>(4)</u> 1.0000	Payroll (1) + [(3)-(2)]*(4)	Per Million (5)/1000000 (6) 17.050967
<u>Year</u> 2006 2007	State OD Developed Payroll (1) 17,050,967 18,895,192	Federal Exempt Reported Payroll (2) 0	Reported Payroll (3) 0	Factor (4) 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4) (5) 17,050,967 18,895,192	Per Million (5)/1000000 (6) 17.050967 18.895192
<u>Year</u> 2006 2007 2008	State OD Developed Payroll (1) 17,050,967 18,895,192 21,250,256	Federal Exempt Reported Payroll (2) 0 0 0	Reported Payroll (3) 0 0 0	Factor (4) 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4) (5) 17,050,967 18,895,192 21,250,256	Per Million (5)/1000000 (6) 17.050967 18.895192 21.250256
<u>Year</u> 2006 2007 2008 2009	State OD Developed Payroll (1) 17,050,967 18,895,192 21,250,256 19,828,012	Federal Exempt Reported Payroll (2) 0 0 0	Reported Payroll (3) 0 0 0 0	Factor (4) 1.0000 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4) (5) 17,050,967 18,895,192 21,250,256 19,828,012	Per Million (5)/1000000 (6) 17.050967 18.895192 21.250256 19.828012
Year 2006 2007 2008 2009 2010	State OD Developed Payroll (1) 17,050,967 18,895,192 21,250,256 19,828,012 26,313,130	Federal Exempt Reported Payroll (2) 0 0 0 0	Reported Payroll (3) 0 0 0 0 0	Factor (4) 1.0000 1.0000 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4) (5) 17,050,967 18,895,192 21,250,256 19,828,012 26,313,130	Per Million (5)/1000000 (6) 17.050967 18.895192 21.250256 19.828012 26.313130
Year 2006 2007 2008 2009 2010 2011	State OD Developed Payroll (1) 17,050,967 18,895,192 21,250,256 19,828,012 26,313,130 35,155,068	Federal Exempt Reported Payroll (2)  0 0 0 0 0 0	Reported Payroll (3) 0 0 0 0 0 0	Factor (4) 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4) (5) 17,050,967 18,895,192 21,250,256 19,828,012 26,313,130 35,155,068	Per Million (5)/1000000 (6) 17.050967 18.895192 21.250256 19.828012 26.313130 35.155068
Year 2006 2007 2008 2009 2010 2011 2012	State OD Developed Payroll (1) 17,050,967 18,895,192 21,250,256 19,828,012 26,313,130 35,155,068 34,211,729	Federal Exempt Reported Payroll (2)  0 0 0 0 0 0 0 0	Reported Payroll (3) 0 0 0 0 0 0 0 0	Factor (4) 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4) (5) 17,050,967 18,895,192 21,250,256 19,828,012 26,313,130 35,155,068 34,211,729	Per Million (5)/1000000 (6) 17.050967 18.895192 21.250256 19.828012 26.313130 35.155068 34.211729
Year 2006 2007 2008 2009 2010 2011 2012 2013	State OD Developed Payroll (11) 17,050,967 18,895,192 21,250,256 19,828,012 26,313,130 35,155,068 34,211,729 34,253,697	Federal Exempt Reported Payroll (2) 0 0 0 0 0 0 0 0	Reported Payroll (3) 0 0 0 0 0 0 0 0 0 0	Factor (4)  1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Payroll (1) + [(3)-(2)]*(4) (5) 17,050,967 18,895,192 21,250,256 19,828,012 26,313,130 35,155,068 34,211,729 33,639,969	Per Million (5)/1000000 (6) 17.050967 18.895192 21.250256 19.828012 26.313130 35.155068 34.211729 33.639969

Source: Anthracite Prep Plant (1025) - Exhibit X-D, page 5 Bituminous Prep Plant (1027) - Exhibit X-D, page 5

#### ANTHRACITE UNDERGROUND (1010)

	Developed	Files 258,330,4027 & 4049	OD	Payroll
	Payroll	Developed Payroll*	Payroll	Per Million
Year	(1)	(2)	(3) = (1) + (2)	(4) = (3)/1000000
2006	530	1,441,994	1,442,524	1.442524
2007	0	1,662,537	1,662,537	1.662537
2008	0	2,136,713	2,136,713	2.136713
2009	0	1,335,866	1,335,866	1.335866
2010	5,700	1,293,888	1,299,588	1.299588
2011	110,125	1,147,819	1,257,944	1.257944
2012	219,407	809,853	1,029,260	1.029260
2013	175,900	205,976	381,876	0.381876
2014	258,809	0	258,809	0.258809
2015	254,336	0	254,336	0.254336
2016	163,760	0	163,760	0.163760

#### BITUMINOUS UNDERGROUND (1001)

	1	,			
	Developed	Files 258,330,4027 & 40	)49	OD	Payroll
	Payroll	Developed Payroll*	k	Payroll	Per Million
Year	(1)	(2)	(2)	(3) = (1) - (2)	(4) = (3)/1000000
2006	71,907,931	1,441,994		70,465,937	70.465937
2007	81,566,803	1,662,537		79,904,266	79.904266
2008	103,490,690	2,136,713		101,353,977	101.353977
2009	102,684,006	1,335,866		101,348,140	101.348140
2010	126,687,464	1,293,888		125,393,576	125.393576
2011	149,633,528	1,147,819		148,485,709	148.485709
2012	154,428,761	809,853		153,618,908	153.618908
2013	149,953,068	205,976		149,747,092	149.747092
2014	271,230,707	0		271,230,707	271.230707
2015	216,454,460	0		216,454,460	216.454460
2016	148,894,215	0		148,894,215	148.894215

<sup>\*</sup> The reclassification from Anthracite U/G to Bituminous U/G applies to Traumatic, but not to OD. For Traumatic Files 258, 330, 4027 & 4049 are coded 1001 (payroll and losses). The above reclassification is made to move State and Federal O.D. exposures from Class 1001 (Bituminous U/G) back to Class 1010 (Anthracite U/G)

Other classification payrolls for these four files are unaffected by the re-classification.

Source: Developed Payroll - Exhibit X-D, page 1

CMCRB database for file 258, 330, 4027 and 4049 Payrolls as of 4-30-2017

#### ANTHRACITE UNDERGROUND (1010)

	REPORTED PAYROLL*	DEVELOPMENT FACTORS**	DEVELOPED PAYROLL
Year	FAIROLL	FACTORS.	PATROLL
2006	1,441,994	1.0000	1,441,994
2007	1,662,537	1.0000	1,662,537
2008	2,136,713	1.0000	2,136,713
2009	1,335,866	1.0000	1,335,866
2010	1,293,888	1.0000	1,293,888
2011	1,147,819	1.0000	1,147,819
2012	809,853	1.0000	809,853
2013	205,976	1.0000	205,976
2014	0	1.0000	0
2015	0	1.0000	0
2016	0	1.0000	0

Source: CMCRB database for file 258, 330, 4027 and 4049 Payrolls as of 4-30-2017

<sup>\*</sup> For Traumatic Files 258, 330, 4027 and 4049 only.

<sup>\*\*</sup> Development Factors are averages of U/G Ant. and U/G Bit. Development Factors from Exhibit X-E-1

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ANTHRACITE UNDERGROUND	110101	

	REPORTED	DEVELOPMENT	DEVELOPED	PAYROLL
YEAR	PAYROLL	FACTORS	PAYROLL	PER MILLION
	(1)	(2)	(3)	(4)
			$=(1) \times (2)$	=(1)X(2)/1000000
2006	530	1.0000	530	0.000530
2007	-	1.0000	-	0.000000
2008	-	1.0000	-	0.000000
2009	-	1.0000	-	0.000000
2010	5,700	1.0000	5,700	0.005700
2011	110,125	1.0000	110,125	0.110125
2012	219,407	1.0000	219,407	0.219407
2013	175,900	1.0000	175,900	0.175900
2014	258,809	1.0000	258,809	0.258809
2015	254,336	1.0000	254,336	0.254336
2016	163,760	1.0000	163,760	0.163760

#### BITUMINOUS UNDERGROUND (1001)

	REPORTED	DEVELOPMENT	DEVELOPED	PAYROLL
YEAR	PAYROLL	FACTORS	PAYROLL	PER MILLION
	(1)	(2)	(3)	(4)
			$=(1) \times (2)$	=(1)X(2)/1000000
2006	71,907,931	1.0000	71,907,931	71.907931
2007	81,566,803	1.0000	81,566,803	81.566803
2008	103,490,690	1.0000	103,490,690	103.490690
2009	102,684,006	1.0000	102,684,006	102.684006
2010	126,687,464	1.0000	126,687,464	126.687464
2011	149,633,528	1.0000	149,633,528	149.633528
2012	154,428,761	1.0000	154,428,761	154.428761
2013	149,953,068	1.0000	149,953,068	149.953068
2014	271,230,707	1.0000	271,230,707	271.230707
2015	216,454,460	1.0000	216,454,460	216.454460
2016	148,894,215	1.0000	148,894,215	148.894215

ANTHRACITE SU	RFACE (1012)			
	REPORTED	DEVELOP	DEVELOPMENT	PAYROLL
YEAR	PAYROLL	FACTORS	PAYROLL	PER MILLION
	(1)	(2)	(3)	(4)
			$=(1) \times (2) =$	(1)X(2)/1000000
2006	11,946,382	1.0000	11,946,382	11.946382
2007	14,555,579	1.0000	14,555,579	14.555579
2008	16,954,313	1.0000	16,954,313	16.954313
2009	16,445,462	1.0000	16,445,462	16.445462
2010	14,295,288	1.0000	14,295,288	14.295288
2011	21,034,600	1.0000	21,034,600	21.034600
2012	26,295,907	1.0000	26,295,907	26.295907
2013	22,449,824	1.0000	22,449,824	22.449824
2014	20,466,075	1.0000	20,466,075	20.466075
2015	24,218,779	1.0000	24,218,779	24.218779
2016	20,717,621	1.0045	20,810,850	20.810850
BITUMINOUS SU	RFACE (1014)			
	REPORTED	DEVELOP		PAYROLL
YEAR	PAYROLL	FACTORS	PAYROLL	PER MILLION
	(1)	(2)	(3)	(4)
		. ,		(1)X(2)/1000000
2006	63,008,975	1.0000	63,008,975	63.008975
2007	63,295,774	1.0000	63,295,774	63.295774
2008	73,054,482	1.0000	73,054,482	73.054482
2009	61,784,394	1.0000	61,784,394	61.784394
2010	72,711,558	1.0000	72,711,558	72.711558
2011	86,074,064	1.0000	86,074,064	86.074064
2012	76,452,811	1.0000	76,452,811	76.452811
2013	61,349,745	1.0000	61,349,745	61.349745
2014	54,050,731	1.0000	54,050,731	54.050731

1.0000

1.0000

40,934,048

28,999,042

2015

2016

40,934,048

28,999,042

40.934048

28.999042

<sup>(1)</sup> Payroll and (2) Development - Exhibit X-E, page 2

COKE (1469)				
	REPORTED	DEVELOPMENT	DEVELOPED	PAYROLL
YEAR	PAYROLL	FACTORS	PAYROLL	PER MILLION
	(1)	(2)	(3)	(4)
			$=(1) \times (2)$	=(1)X(2)/1000000
2006	12,737,394	1.0000	12,737,394	12.737394
2007	13,669,925	1.0000	13,669,925	13.669925
2008	9,761,146	1.0000	9,761,146	9.761146
2009	5,173,552	1.0000	5,173,552	5.173552
2010	5,435,658	1.0000	5,435,658	5.435658
2011	3,599,086	1.0000	3,599,086	3.599086
2012	5,738,105	1.0000	5,738,105	5.738105
2013	4,791,910	1.0000	4,791,910	4.791910
2014	4,464,398	1.0000	4,464,398	4.464398
2015	4,340,376	1.0000	4,340,376	4.340376
2016	2,313,724	1.0000	2,313,724	2.313724
AUGER (1015)				
	REPORTED	DEVELOPMENT	DEVELOPED	PAYROLL
YEAR	PAYROLL	FACTORS	PAYROLL	PER MILLION
	(1)	(2)	(3)	(4)
			$=(1) \times (2)$	=(1)X(2)/1000000
2006	1,066,831	1.0000	1,066,831	1.066831
2007	1,121,156	1.0000	1,121,156	1.121156
2008	2,488,558	1.0000	2,488,558	2.488558
2009	926,163	1.0000	926,163	0.926163
2010	806,696	1.0000	806,696	0.806696
2011	1,176,255	1.0000	1,176,255	1.176255
2012	808,208	1.0000	808,208	0.808208
2013	1,025,399	1.0000	1,025,399	1.025399
2014	806,976	1.0000	806,976	0.806976
2015	582,619	1.0000	582,619	0.582619
2016	372,496	1.0000	372,496	0.372496

Source: (1) Payroll and (2) Development - Exhibit X-E, page 3

ANTHRACITE C	O-GEN (1021)			
	REPORTED	DEVELOPMENT	DEVELOPED	PAYROLL
YEAR	PAYROLL	<b>FACTORS</b>	PAYROLL	PER MILLION
	(1)	(2)	(3)	(4)
			$=(1) \times (2)$	=(1)X(2)/1000000
2006	8,405,393	1.0000	8,405,393	8.405393
2007	9,160,450	1.0000	9,160,450	9.160450
2008	7,958,335	1.0000	7,958,335	7.958335
2009	8,004,644	1.0000	8,004,644	8.004644
2010	8,481,228	1.0000	8,481,228	8.481228
2011	11,720,035	1.0000	11,720,035	11.720035
2012	10,273,004	1.0000	10,273,004	10.273004
2013	8,342,651	1.0000	8,342,651	8.342651
2014	9,060,883	1.0000	9,060,883	9.060883
2015	10,469,089	1.0000	10,469,089	10.469089
2016	10,847,424	1.0000	10,847,424	10.847424

BITUMINOUS CO	O-GEN (1023)			
	REPORTED	DEVELOPMENT		PAYROLL
YEAR	PAYROLL	FACTORS	PAYROLL	PER MILLION
	(1)	(2)	(3)	(4)
			$=(1) \times (2)$	=(1)X(2)/1000000
2006	9,397,580	1.0000	9,397,580	9.397580
2007	10,789,214	1.0000	10,789,214	10.789214
2008	8,468,561	1.0000	8,468,561	8.468561
2009	7,866,413	1.0000	7,866,413	7.866413
2010	8,732,701	1.0000	8,732,701	8.732701
2011	9,102,411	1.0000	9,102,411	9.102411
2012	9,047,745	1.0000	9,047,745	9.047745
2013	10,355,884	1.0000	10,355,884	10.355884
2014	11,721,184	1.0000	11,721,184	11.721184
2015	11,748,205	1.0000	11,748,205	11.748205
2016	11,386,837	1.0000	11,386,837	11.386837

Source: (1) Payroll and (2) Development - Exhibit X-E, page 4

	REPORTED	DEVELOPMENT	DEVELOPED	PAYROLL
YEAR	PAYROLL	FACTORS	PAYROLL	PER MILLION
	(1)	(2)	(3)	(4)
			$=(1) \times (2)$	=(1)X(2)/1000000
2006	4,885,882	1.0000	4,885,882	4.885882
2007	5,756,439	1.0000	5,756,439	5.756439
2008	6,390,767	1.0000	6,390,767	6.390767
2009	6,749,748	1.0000	6,749,748	6.749748
2010	5,762,086	1.0000	5,762,086	5.762086
2011	7,236,583	1.0000	7,236,583	7.236583
2012	8,671,140	1.0000	8,671,140	8.671140
2013	8,265,665	1.0000	8,265,665	8.265665
2014	8,234,771	1.0000	8,234,771	8.234771
2015	7,606,274	1.0000	7,606,274	7.606274
2016	6,971,270	1.0000	6,971,270	6.971270

#### BITUMINOUS PREP PLANT (1027)

	REPORTED	DEVELOPMENT		PAYROLL
YEAR	PAYROLL	FACTORS	PAYROLL	PER MILLION
	(1)	(2)	(3)	(4)
			$=(1) \times (2)$	=(1)X(2)/1000000
2006	17,050,967	1.0000	17,050,967	17.050967
2007	18,895,192	1.0000	18,895,192	18.895192
2008	21,250,256	1.0000	21,250,256	21.250256
2009	19,828,012	1.0000	19,828,012	19.828012
2010	26,313,130	1.0000	26,313,130	26.313130
2011	35,155,068	1.0000	35,155,068	35.155068
2012	34,211,729	1.0000	34,211,729	34.211729
2013	34,253,697	1.0000	34,253,697	34.253697
2014	43,520,040	1.0000	43,520,040	43.520040
2015	33,564,176	1.0000	33,564,176	33.564176
2016	22,065,227	1.0030	22,131,423	22.131423

## PAYROLLS ANTHRACITE UNDERGROUND (1010)

					,	ANTHRACITE U	NDERGROUN	D (1010)					
RPT	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
1ST	530	0	0	0	5,700	110,125	219,407	175,900	258,809	254,336	163,760		
2ND	530	0	0	0	5,700	110,125	219,407	175,900	258,809	254,336			
3RD	530	0	0	0	5,700	110,125	219,407	175,900	258,809				
4TH	530	0	0	0	5,700	110,125	219,407	175,900					
5TH	530	0	0	0	5,700	110,125	219,407						
											5 YEAR		
DEV.	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	<u>AVERAGE</u>		
1-2	1.0000				1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2-3	1.0000				1.0000	1.0000	1.0000	1.0000	1.0000		1.0000	1.0000	1.0000
3-4	1.0000				1.0000	1.0000	1.0000	1.0000			1.0000	1.0000	1.0000
4-5	1.0000				1.0000	1.0000	1.0000				1.0000	1.0000	1.0000
					I	P BITUMINOUS U	AYROLLS NDERGROUN	D (1001)					
RPT	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
1ST	71,756,779	81,366,980	102,595,885	100,337,635	126,269,667	150,087,771	156,022,224	148,858,839	269,946,018	216,498,553	148,894,215		
2ND	71,907,931	81,566,803	103,490,690	102,684,006	126,687,464	149,633,528	154,428,761	149,953,068	271,230,707	216,454,460			
3RD	71,907,931	81,566,803	103,490,690	102,684,006	126,687,464	149,633,528	154,428,761	149,953,068	271,230,707				
4TH	71,907,931	81,566,803	103,490,690	102,684,006	126,687,464	149,633,528	154,428,761	149,953,068					
5TH	71,907,931	81,566,803	103,490,690	102,684,006	126,687,464	149,633,528	154,428,761						
											5 YEAR		
DEV.	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	<u>AVERAGE</u>	ACCUM.	<u>SELECTED</u>
1-2	1.0021	1.0025	1.0087	1.0234	1.0033	0.9970	0.9898	1.0074	1.0048	0.9998	0.9998	0.9998	1.0000
2-3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		1.0000	1.0000	1.0000
3-4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			1.0000	1.0000	1.0000
4-5	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				1.0000	1.0000	1.0000

## PAYROLLS ANTHRACITE SURFACE (1012)

						7 (1111107 (011	L JOHN / CE (1)	012)					
RPT	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
1ST	11,844,081	14,568,659	17,094,165	16,464,925	14,316,712	21,041,889	26,061,126	22,127,846	20,422,650	24,275,156	20,717,621		
2ND	11,946,382	14,555,579	16,999,485	16,445,462	14,302,955	21,034,600	26,295,907	22,449,824	20,466,075	24,218,779			
3RD	11,946,382	14,555,579	16,954,313	16,445,462	14,295,288	21,034,600	26,295,907	22,449,824	20,466,075				
4TH	11,946,382	14,555,579	16,954,313	16,445,462	14,295,288	21,034,600	26,295,907	22,449,824					
5TH	11,946,382	14,555,579	16,954,313	16,445,462	14,295,288	21,034,600	26,295,907						
											5 YEAR		
DEV.	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	<u>AVERAGE</u>	ACCUM.	<u>SELECTED</u>
1ST	1.0086	0.9991	0.9945	0.9988	0.9990	0.9997	1.0090	1.0146	1.0021	0.9977	1.0046	1.0045	1.0045
2-3	1.0000	1.0000	0.9973	1.0000	0.9995	1.0000	1.0000	1.0000	1.0000		0.9999	0.9999	1.0000
3-4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			1.0000	1.0000	1.0000
4-5	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				1.0000	1.0000	1.0000
						P	AYROLLS						
							S SURFACE (10	014)					
						2	0 00.117 1.02 (11	o,					
RPT	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
1ST	63,013,132	62,335,653	72,508,648	62,272,331	72,008,001	84,685,809	77,151,225	63,473,577	54,685,762	41,179,672	28,999,042		
2ND	63,084,439	63,295,774	73,054,482	61,784,394	72,711,558	86,074,064	76,452,811	61,349,745	54,050,731	40,934,048			
3RD	63,008,975	63,295,774	73,054,482	61,784,394	72,711,558	86,074,064	76,452,811	61,349,745	54,050,731				
4TH	63,008,975	63,295,774	73,054,482	61,784,394	72,711,558	86,074,064	76,452,811	61,349,745					
5TH	63,008,975	63,295,774	73,054,482	61,784,394	72,711,558	86,074,064	76,452,811						
											5 YEAR		
DEV.	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015			<u>SELECTED</u>
1-2	1.0011	1.0154	1.0075	0.9922	1.0098	1.0164	0.9909	0.9665	0.9884	0.9940	0.9912	0.9912	1.0000
2-3	0.9988	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		1.0000	1.0000	1.0000
3-4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			1.0000	1.0000	1.0000
4-5	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				1.0000	1.0000	1.0000

#### PAYROLLS COKE (1469)

						, ,						
2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
12,737,394	13,669,925	9,761,146	5,173,552	5,435,658	3,599,086	5,738,105	4,791,910	4,464,398	4,057,561	2,313,724		
12,737,394	13,669,925	9,761,146	5,173,552	5,435,658	3,599,086	5,738,105	4,791,910	4,464,398	4,340,376			
12,737,394	13,669,925	9,761,146	5,173,552	5,435,658	3,599,086	5,738,105	4,791,910	4,464,398				
12,737,394	13,669,925	9,761,146	5,173,552	5,435,658	3,599,086	5,738,105	4,791,910					
12,737,394	13,669,925	9,761,146	5,173,552	5,435,658	3,599,086	5,738,105						
										5 YEAR		
2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	<u>AVERAGE</u>	ACCUM.	<u>SELECTED</u>
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0697	1.0139	1.0139	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				1.0000	1.0000	1.0000
					PA	YROLLS						
						YROLLS ER (1015)						
2006	2007	2008	2009	2010			2013	2014	2015	2016		
2006	2007	2008	2009 935,743	2010 793,313	AUG	ER (1015)	2013	2014 876,196	2015 592,775	2016 372,496		
					AUG 2011	ER (1015) 2012						
1,066,831	1,121,967	2,489,280	935,743	793,313	2011 1,151,902	2012 789,136	1,082,639	876,196	592,775			
1,066,831 1,066,831	1,121,967 1,121,156	2,489,280 2,488,558	935,743 926,163	793,313 806,696	2011 1,151,902 1,176,255	2012 789,136 808,208	1,082,639 1,025,399	876,196 806,976	592,775			
1,066,831 1,066,831 1,066,831	1,121,967 1,121,156 1,121,156	2,489,280 2,488,558 2,488,558	935,743 926,163 926,163	793,313 806,696 806,696	2011 1,151,902 1,176,255 1,176,255	2012 789,136 808,208 808,208	1,082,639 1,025,399 1,025,399	876,196 806,976	592,775			
1,066,831 1,066,831 1,066,831	1,121,967 1,121,156 1,121,156 1,121,156	2,489,280 2,488,558 2,488,558 2,488,558	935,743 926,163 926,163 926,163	793,313 806,696 806,696 806,696	2011 1,151,902 1,176,255 1,176,255 1,176,255	2012 789,136 808,208 808,208 808,208	1,082,639 1,025,399 1,025,399	876,196 806,976	592,775			
1,066,831 1,066,831 1,066,831	1,121,967 1,121,156 1,121,156 1,121,156	2,489,280 2,488,558 2,488,558 2,488,558	935,743 926,163 926,163 926,163	793,313 806,696 806,696 806,696	2011 1,151,902 1,176,255 1,176,255 1,176,255	2012 789,136 808,208 808,208 808,208	1,082,639 1,025,399 1,025,399	876,196 806,976	592,775	372,496 5 YEAR	ACCUM.	SELECTED
1,066,831 1,066,831 1,066,831 1,066,831	1,121,967 1,121,156 1,121,156 1,121,156 1,121,156	2,489,280 2,488,558 2,488,558 2,488,558 2,488,558	935,743 926,163 926,163 926,163 926,163	793,313 806,696 806,696 806,696 806,696	2011 1,151,902 1,176,255 1,176,255 1,176,255 1,176,255	789,136 808,208 808,208 808,208 808,208 808,208	1,082,639 1,025,399 1,025,399 1,025,399	876,196 806,976 806,976	592,775 582,619	372,496 5 YEAR	<u>ACCUM.</u> 0.9793	SELECTED 1.0000
1,066,831 1,066,831 1,066,831 1,066,831 1,066,831	1,121,967 1,121,156 1,121,156 1,121,156 1,121,156	2,489,280 2,488,558 2,488,558 2,488,558 2,488,558 2008	935,743 926,163 926,163 926,163 926,163	793,313 806,696 806,696 806,696 806,696	2011  1,151,902 1,176,255 1,176,255 1,176,255 1,176,255 1,176,255 2011	2012 789,136 808,208 808,208 808,208 808,208 808,208	1,082,639 1,025,399 1,025,399 1,025,399	876,196 806,976 806,976	592,775 582,619 2015	372,496 5 YEAR <u>AVERAGE</u>		
1,066,831 1,066,831 1,066,831 1,066,831 1,066,831 2006 1,0000	1,121,967 1,121,156 1,121,156 1,121,156 1,121,156 2007 0,9993	2,489,280 2,488,558 2,488,558 2,488,558 2,488,558 2008 0,9997	935,743 926,163 926,163 926,163 926,163 2009 0,9898	793,313 806,696 806,696 806,696 806,696 2010 1.0169	2011  1,151,902 1,176,255 1,176,255 1,176,255 1,176,255 1,176,255 2011 1.0211	789,136 808,208 808,208 808,208 808,208 808,208 2012 1.0242	1,082,639 1,025,399 1,025,399 1,025,399 2013 0,9471	876,196 806,976 806,976 2014 0,9210	592,775 582,619 2015	372,496 5 YEAR <u>AVERAGE</u> 0.9793	0.9793	1.0000
	12,737,394 12,737,394 12,737,394 12,737,394 12,737,394 2006 1.0000 1.0000 1.0000	12,737,394 13,669,925 12,737,394 13,669,925 12,737,394 13,669,925 12,737,394 13,669,925 12,737,394 13,669,925 2006 2007 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	12,737,394 13,669,925 9,761,146 12,737,394 13,669,925 9,761,146 12,737,394 13,669,925 9,761,146 12,737,394 13,669,925 9,761,146 12,737,394 13,669,925 9,761,146 2006 2007 2008 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	12,737,394     13,669,925     9,761,146     5,173,552       12,737,394     13,669,925     9,761,146     5,173,552       12,737,394     13,669,925     9,761,146     5,173,552       12,737,394     13,669,925     9,761,146     5,173,552       12,737,394     13,669,925     9,761,146     5,173,552       2006     2007     2008     2009       1.0000     1.0000     1.0000     1.0000       1.0000     1.0000     1.0000     1.0000       1.0000     1.0000     1.0000     1.0000	12,737,394       13,669,925       9,761,146       5,173,552       5,435,658         12,737,394       13,669,925       9,761,146       5,173,552       5,435,658         12,737,394       13,669,925       9,761,146       5,173,552       5,435,658         12,737,394       13,669,925       9,761,146       5,173,552       5,435,658         12,737,394       13,669,925       9,761,146       5,173,552       5,435,658         2006       2007       2008       2009       2010         1.0000       1.0000       1.0000       1.0000       1.0000         1.0000       1.0000       1.0000       1.0000       1.0000         1.0000       1.0000       1.0000       1.0000       1.0000	12,737,394         13,669,925         9,761,146         5,173,552         5,435,658         3,599,086           12,737,394         13,669,925         9,761,146         5,173,552         5,435,658         3,599,086           12,737,394         13,669,925         9,761,146         5,173,552         5,435,658         3,599,086           12,737,394         13,669,925         9,761,146         5,173,552         5,435,658         3,599,086           12,737,394         13,669,925         9,761,146         5,173,552         5,435,658         3,599,086           2006         2007         2008         2009         2010         2011           1.0000         1.0000         1.0000         1.0000         1.0000           1.0000         1.0000         1.0000         1.0000         1.0000           1.0000         1.0000         1.0000         1.0000         1.0000	12,737,394       13,669,925       9,761,146       5,173,552       5,435,658       3,599,086       5,738,105         12,737,394       13,669,925       9,761,146       5,173,552       5,435,658       3,599,086       5,738,105         12,737,394       13,669,925       9,761,146       5,173,552       5,435,658       3,599,086       5,738,105         12,737,394       13,669,925       9,761,146       5,173,552       5,435,658       3,599,086       5,738,105         12,737,394       13,669,925       9,761,146       5,173,552       5,435,658       3,599,086       5,738,105         2006       2007       2008       2009       2010       2011       2012         1.0000       1.0000       1.0000       1.0000       1.0000       1.0000       1.0000         1.0000       1.0000       1.0000       1.0000       1.0000       1.0000       1.0000         1.0000       1.0000       1.0000       1.0000       1.0000       1.0000       1.0000	12,737,394         13,669,925         9,761,146         5,173,552         5,435,658         3,599,086         5,738,105         4,791,910           12,737,394         13,669,925         9,761,146         5,173,552         5,435,658         3,599,086         5,738,105         4,791,910           12,737,394         13,669,925         9,761,146         5,173,552         5,435,658         3,599,086         5,738,105         4,791,910           12,737,394         13,669,925         9,761,146         5,173,552         5,435,658         3,599,086         5,738,105         4,791,910           12,737,394         13,669,925         9,761,146         5,173,552         5,435,658         3,599,086         5,738,105         4,791,910           12,737,394         13,669,925         9,761,146         5,173,552         5,435,658         3,599,086         5,738,105         4,791,910           12,737,394         13,669,925         9,761,146         5,173,552         5,435,658         3,599,086         5,738,105         4,791,910           12,737,394         13,669,925         9,761,146         5,173,552         5,435,658         3,599,086         5,738,105         4,791,910           10,000         1,0000         1,0000         1,0000         1,0000         1,0000<	12,737,394       13,669,925       9,761,146       5,173,552       5,435,658       3,599,086       5,738,105       4,791,910       4,464,398         12,737,394       13,669,925       9,761,146       5,173,552       5,435,658       3,599,086       5,738,105       4,791,910       4,464,398         12,737,394       13,669,925       9,761,146       5,173,552       5,435,658       3,599,086       5,738,105       4,791,910       4,464,398         12,737,394       13,669,925       9,761,146       5,173,552       5,435,658       3,599,086       5,738,105       4,791,910       4,464,398         12,737,394       13,669,925       9,761,146       5,173,552       5,435,658       3,599,086       5,738,105       4,791,910       4,464,398         2006       2007       2008       2009       2010       2011       2012       2013       2014         1.0000	12,737,394       13,669,925       9,761,146       5,173,552       5,435,658       3,599,086       5,738,105       4,791,910       4,464,398       4,057,561         12,737,394       13,669,925       9,761,146       5,173,552       5,435,658       3,599,086       5,738,105       4,791,910       4,464,398       4,340,376         12,737,394       13,669,925       9,761,146       5,173,552       5,435,658       3,599,086       5,738,105       4,791,910       4,464,398         12,737,394       13,669,925       9,761,146       5,173,552       5,435,658       3,599,086       5,738,105       4,791,910       4,464,398         12,737,394       13,669,925       9,761,146       5,173,552       5,435,658       3,599,086       5,738,105       4,791,910       4,464,398         12,737,394       13,669,925       9,761,146       5,173,552       5,435,658       3,599,086       5,738,105       4,791,910       4,464,398         12,737,394       13,669,925       9,761,146       5,173,552       5,435,658       3,599,086       5,738,105       4,791,910         2006       2007       2008       2009       2010       2011       2012       2013       2014       2015         1,0000       1,0000       1,000	12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 4,791,910 4,464,398 4,057,561 2,313,724 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 4,791,910 4,464,398 4,340,376 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 4,791,910 4,464,398 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 4,791,910 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 12,737,394 13,669,925 9,761,146 1,416	2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 4,791,910 4,464,398 4,057,561 2,313,724  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 4,791,910 4,464,398 4,340,376  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 4,791,910 4,464,398  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 4,791,910 4,464,398  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105 4,791,910  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,435,658 3,599,086 5,738,105  12,737,394 13,669,925 9,761,146 5,173,552 5,4

#### PAYROLLS ANTHRACITE CO-GEN (1021)

								,					
RPT	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
1ST	8,378,307	9,157,398	7,974,156	8,083,804	8,455,858	11,710,908	10,377,312	8,678,376	9,279,611	10,646,550	10,847,424		
2ND	8,405,393	9,160,450	7,958,335	8,004,644	8,481,228	11,720,035	10,273,004	8,342,651	9,060,883	10,469,089			
3RD	8,405,393	9,160,450	7,958,335	8,004,644	8,481,228	11,720,035	10,273,004	8,342,651	9,060,883				
4TH	8,405,393	9,160,450	7,958,335	8,004,644	8,481,228	11,720,035	10,273,004	8,342,651					
5TH	8,405,393	9,160,450	7,958,335	8,004,644	8,481,228	11,720,035	10,273,004						
											5 YEAR		
DEV.	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	<u>AVERAGE</u>	ACCUM.	<u>SELECTED</u>
1-2	1.0032	1.0003	0.9980	0.9902	1.0030	1.0008	0.9899	0.9613	0.9764	0.9833	0.9823	0.9823	1.0000
2-3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		1.0000	1.0000	1.0000
3-4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			1.0000	1.0000	1.0000
4-5	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				1.0000	1.0000	1.0000
							AYROLLS S CO-GEN (10	023)					
								,					
RPT	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
1ST	9,292,226	9,873,810	8,469,399	7,861,068	9,236,721	9,015,644	9,057,266	13,079,796	11,451,621	11,723,112	11,386,837		
2ND	9,397,580	10,789,214	8,468,561	7,866,413	8,732,701	9,102,411	9,047,745	10,355,884	11,721,184	11,748,205			
3RD	9,397,580	10,789,214	8,468,561	7,866,413	8,732,701	9,102,411	9,047,745	10,355,884	11,721,184				
4TH	9,397,580	10,789,214	8,468,561	7,866,413	8,732,701	9,102,411	9,047,745	10,355,884					
5TH	9,397,580	10,789,214	8,468,561	7,866,413	8,732,701	9,102,411	9,047,745						
											5 YEAR		
DEV.	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	<u>AVERAGE</u>	ACCUM.	SELECTED
1-2	1.0113	1.0927	0.9999	1.0007	0.9454	1.0096	0.9989	0.7917	1.0235	1.0021	0.9652	0.9652	1.0000
2-3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		1.0000	1.0000	1.0000
3-4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			1.0000	1.0000	1.0000
4-5	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				1.0000	1.0000	1.0000

## PAYROLLS ANTHRACITE PREP PLANT (1025)

						7 (TATTION CITE	111111111111111111111111111111111111111	1020)					
RPT	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
1ST	4,885,882	5,756,521	6,320,163	6,785,937	5,723,658	7,300,075	8,617,327	8,249,896	8,098,851	7,770,095	6,971,270		
2ND	4,885,882	5,756,439	6,390,767	6,749,748	5,762,086	7,236,583	8,671,140	8,265,665	8,234,771	7,606,274			
3RD	4,885,882	5,756,439	6,390,767	6,749,748	5,762,086	7,236,583	8,671,140	8,265,665	8,234,771				
4TH	4,885,882	5,756,439	6,390,767	6,749,748	5,762,086	7,236,583	8,671,140	8,265,665					
5TH	4,885,882	5,756,439	6,390,767	6,749,748	5,762,086	7,236,583	8,671,140						
											5 YEAR		
DEV.	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	<u>AVERAGE</u>	ACCUM.	<u>SELECTED</u>
1-2	1.0000	1.0000	1.0112	0.9947	1.0067	0.9913	1.0062	1.0019	1.0168	0.9789	0.9990	0.9990	1.0000
2-3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		1.0000	1.0000	1.0000
3-4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			1.0000	1.0000	1.0000
4-5	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				1.0000	1.0000	1.0000
						P	AYROLLS						
							PREP PLANT (	1027)					
RPT	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
1ST	17,116,808	18,852,719	20,315,099	19,852,091	25,843,606	34,632,323	34,353,700	33,730,152	43,397,620	34,011,862	22,065,227		
2ND	17,050,967	18,895,192	21,250,256	19,828,012	26,313,130	35,155,068	34,211,729	34,207,489	43,520,040	33,564,176			
3RD	17,050,967	18,895,192	21,250,256	19,828,012	26,313,130	35,155,068	34,211,729	34,253,697	43,520,040				
4TH	17,050,967	18,895,192	21,250,256	19,828,012	26,313,130	35,155,068	34,211,729	34,253,697					
5TH	17,050,967	18,895,192	21,250,256	19,828,012	26,313,130	35,155,068	34,211,729						
											5 YEAR		
DEV.	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	<u>AVERAGE</u>	ACCUM.	<u>SELECTED</u>
1-2	0.9962	1.0023	1.0460	0.9988	1.0182	1.0151	0.9959	1.0142	1.0028	0.9868	1.0030	1.0033	1.0030
2-3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0014	1.0000		1.0003	1.0003	1.0000
3-4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			1.0000	1.0000	1.0000
4-5	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				1.0000	1.0000	1.0000

## COAL MINE COMPENSATION RATING BUREAU OD Frequencies From Approved Filing

		State OD Class Code	State OD Indicated Frequency (Eff. 4/1/2017) (1)	Federal OD Class Code	Fedeal OD Basic Indicated Frequency (Eff. 4/1/2017)	Fedeal OD Excess Indicated Frequency (Eff. 4/1/2017) (3)
Underground:	Anthracite	1011	0.113046	160	0.271970	0.054973
-	Bituminous	1002	0.015482	158	0.014664	0.006156
Surface:	Anthracite	1016	0.036827	153	0.087808	0.015314
	Bituminous	1013	0.003381	156	0.020945	0.001275
	Coke	1017	0.002757	154	0.002421	0.001138
	Auger	1019	0.005664	157	0.009431	0.002379
Co-Gen:	Anthracite	1022	0.006590	181	0.013164	0.002445
	Bituminous	1024	0.009973	182	0.008092	0.003368
Prep Plants:	Anthracite Bituminous	1026 1028	0.048082 0.005100	183 184	0.027242 0.010790	0.021703 0.001986

Source: (1): Exhibit III Column (3) of prior filing.

(2) & (3): Exhibit IV-A Column (3) of prior filing.

File: C:\Clients\Coal Mine\2017 Rate Filing\XL\[2017-10.xlsm]X-F

Run Date: August 30, 2017 - 02:11:40 PM

PAB Effective Date - April 01, 2018 11,846.824166

					Avera	ge Coal Cla	ss Weekly Wa	ges			
		Anthracite	Bituminous	Anthracite	Bituminous		, -	Anthracite	Bituminous	Anthracite	Bituminous
		Underground	Underground	Surface	Surface	Coke	Auger	Co-gen	Co-gen	Prep Plant	Prep Plant
<u>Year</u>		<u>1010</u>	1001	1012	1014	1469	<u>1015</u>	1021	1023	1025	1027
2007		#	999.30	888.96	792.88	865.75	506.05	961.14	1,004.50	709.24	1,059.33
2008		#	1,122.46	933.69	897.20	808.50	362.00	455.00	1,117.25	786.87	980.01
2009		#	1,186.72	889.44	882.89	699.10	450.40	994.20	979.00	1,054.05 670.27	1,006.54
2010 2011		#	1,196.34 1,268.15	875.36 956.16	869.71 965.20	428.37 509.19	559.30 583.00	650.50 638.00	868.00 902.00	709.93	1,056.50 1,168.50
2011		#	1,409.80	1,026.52	1,027.03	307.17	405.00	1,049.67	1,370.33	1,225.08	1,074.90
2013		#	1,450.44	961.94	1,056.17	584.76	556.80	933.53	1,188.00	836.20	1,268.33
2014		#	1,489.37	972.96	988.63	100.00	520.00	843.52	908.00	943.94	1,328.00
2015		#	1,623.05	1,071.78	968.80	564.33	722.00	1,075.00	836.67	1,005.00	1,295.56
2016		#	1,649.95	1,076.47	1,062.83	2,109.00		1,133.39	714.00	1,148.41	1,816.23
				lumber of Wo	age Records Us	ed to Calcul	ate Average	Coal Class V	Veekly Wages	;	
<u>Year</u>		1010	1001	1012	1014	1469	1015	1021	1023	1025	1027
2007		#	87	17	28	11	2	5	2	8	3
2008		#	111	24	32	15	2	1	4	8	5
2009		#	119	21	30	10	2	4		4	6
2010		#	113	24	21	1	2	4	2	5	6
2011		#	106	21	31	3	4	2	2	8	12
2011		#	124	20	29		1	6	3	7	10
2012		#	90	25	29	2	5	7	1	7	9
				23			2		5	6	15
2014		#	216		19	1		3			
2015		#	131	18	10	3	2	3	3	4	8
<u>2016</u>		<u>#</u>	<u>92</u>	<u>20</u>	<u>6</u>	1		<u>7</u>	<u>1</u>	<u>4</u>	<u>9</u>
Total			1189	211	235	47	22	42	23	61	83
			A	Average Coc	al Class Weekly	Wage Indexe	ed to Statewic	de Average	Weekly Wage	1	
Year	SAWW	1010	1001	1012	1014	1469	1015	1021	1023	1025	1027
2007	779	#	1.283	1.141	1.018	1.111	0.650	1.234	1.289	0.910	1.360
2008	807	#	1.391	1.157	1.112	1.002	0.449	0.564	1.384	0.975	1.214
2009	836	#	1.420	1.064	1.056	0.836	0.539	1.189		1.261	1.204
2010	845	#	1.416	1.036	1.029	0.507	0.662	0.770	1.027	0.793	1.250
2011 2012	858 888	#	1.478 1.588	1.114 1.156	1.125 1.157	0.593	0.679 0.456	0.744 1.182	1.051 1.543	0.827 1.380	1.362 1.210
2012	917	#	1.582	1.136	1.152	0.638	0.436	1.102	1.296	0.912	1.383
2014	932	#	1.598	1.044	1.061	0.107	0.558	0.905	0.974	1.013	1.425
2015	951	#	1.707	1.127	1.019	0.593	0.759	1.130	0.880	1.057	1.362
2016	978	<u>#</u>	1.687	1.101	1.087	2.156	0.595	1.159	0.730	1.174	1.857
Average			1.515	1.099	1.082	0.838		0.990	1.130	1.030	1.363
			Average C	oal Class We	ekly Wage Inde	exed to State	wide Averag	e Weekly Wo	age - Classes	Combined	
<u>Year</u>	SAWW		-		Bit. Und. 8	& Prep		-	All Other	Classes	
2007	779				1.28	6			1.0	61	
2008	807				1.38				1.0	83	
2009	836				1.41				1.0		
2010	845				1.40				0.9		
2011	858				1.46				1.0		
2012 2013	888 917				1.56 1.56				1.1		
2013	932				1.58				0.9		
2015	951				1.68				1.0		
2016	978				1.70				1.1		
Average	<u></u>				1.50				1.0		
-	oal Class	Adjt. Factor to	SAWW		1.50				1.0		

 ${\tt Notes: Average \ Coal \ Class \ Weekly \ Wages \ were \ derived \ from \ CMCRB \ database \ for \ Traumatic \ Claims.}$ 

Average Weekly Wages by class exclude years with zero claims.

# Data for Anthracite Underground was too thin for inclusion.

SAWW = Statewide Average Weekly Wage

The number of records with wage histories are very close to, but less than, lost time claim counts due to missing wage records for some lost time accidents.

For these Classes and Years, there isn't any data.

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PAB

#### **SMALL BUSINESS ADVOCATE ASSESSMENT**

1. 2017-2018 Small Business Advocate Assessment \$ 275,000

2. 2016 Insurance Carrier Paid Losses

 CMCRB
 22,134,229

 PCRB
 2,399,639,002

 Total
 2,421,773,231

3. Insurer Assessment Ratio (item 1 divided by item 2) 0.0001

Source: 1. Pa. Dept. of Labor & Industry

2. PCRB3. CMCRB

## COAL MINE COMPENSATION RATING BUREAU EMPLOYER ASSESSMENT FACTOR

PROPOSED EFFECTIVE April 1, 2018

1.	2017	/2018 INSURANCE CARRIER ASSESSMEI	STALLOMA TA
	, 2017		11 / 11/10/01/10

A)	Administrative Fund	62,001,117
B)	Subsequent Injury Fund	143,103
C)	Supersedeas Fund	12,985,783
D)	Uninsured Employers Guaranty Fund	<u>2,422,583</u>
TOTAL		77,552,586

2) 2016 Employer Assessment Premium Base	3,559,252,270
3) 2016 Coal Mine Premium Base	17,568,833
4) Coal Premium percent of Total (3)/(2)	0.494%
5) Assessments to be paid by coal employers	382,807
6) Coal Employer Assessment Factor	0.0218

Sources: 1) Pa. Dept. of Labor & Industry

2) PCRB 3) CMCRB

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#### CATASTROPHE - Spread of Loss Cost to Classes

	(1) 2016	(2)	(3)	(4)	(5)	(6) Actual	(7) Approved	(8)	(9)
<u>Classification</u>	Developed <u>Payrolls</u>	Hazard <u>Weights</u>	Payroll Weight (1)x(2)/1000	Percentage of Exposure	Catastrophe <u>Losses</u> (4)xAverage	Loss Cost <u>Spread</u> [(5)/(1)]x100	Loss Cost Eff 4/1/2017	Selected	Rate <u>Change</u> (8)/(7) - 1
Underground Anthracite Bituminous Total	1010 \$163,760 1001 <u>148,894,215</u> 149,057,975	7	1,043,406	90.9%	271,659	0.18	0.13	0.18	38.5%
Surface Anthracite Bituminous Coke Auger Co-Gen Anth. Co-Gen Bit. Prep Anth. Prep Bit. Total	1012 20,810,850 1014 28,999,042 1469 2,313,724 1015 372,496 1021 10,847,424 1023 11,386,837 1025 6,971,270 1027 22,131,423 103,833,066	1	103,833	9.1%	27,034	0.03	0.02	0.03	50.0%
Grand Total	252,891,041	8	1,147,239	100.0%	298,693	0.12	a-0.08	0.12	50.0%

Source: Payroll - Exhibit X-A (Developed 2016 Payroll)

Hazard Weights - Judgement

Catastrophe Losses, Grand Total - Exhibit XII-B

a - Current Total Loss Cost is based on 2016 Payroll weights

b- Auger = one-third underground & two-thirds surface or \$0.08

# COAL MINE COMPENSATION RATING BUREAU CATASTROPHE CALCULATION TRAUMATIC ON-LEVEL LOSSES IN EXCESS OF \$1,250,000

	Number of	Excess
Acciden	t Excess	Loss
<u>Year</u>	Claims	Dollars
1997	3	817,048
1998		-
1999	1	288,585
2000	-	-
2001	-	-
2002	1	333,922
2003	2	456,392
2004	2	1,174,065
2005	3	673,278
2006		-
2007	1	2,210,109
2008	1	20,469
2009	-	-
2010	-	-
2011	-	-
2012	-	<del>-</del>
2013	-	<del>-</del>
2014	-	<del>-</del>
2015	-	-
2016		<del></del>
	14	5,973,868
	Average over 20 years	298,693
	2016 Payroll from Exhibit XII-A	252,891,041
	Loss Cost	0.12

Source: Claims detail from Exhibit XII-C

5,973,868

298,693

0.12

252,891,041

## COAL MINE COMPENSATION RATING BUREAU CATASTROPHE CALCULATION TRAUMATIC LOSSES OVER \$1,250,000

(1)	(2)	(3)	(4)	(5) Incurred	(6)	(7)	(8)	(9)	(10)	(11) Medical	(12) Loss at	(13)
Key		Accident	Injury	Indemnity	Incurred	Paid	O/S	Act		w/Trend &	Current	Excess
Number	Class	Year	Туре	& Funeral	Medical	Medical	Medical	44 Factor	Trend	Act 44 Factor	Level	Over \$1,250,000
33176	100100	1997	9	173,195	717,420	473,039	244,381	1.0000	1.9170	1,375,294	1,707,309	457,309
33295	100100	1997	1	776,447	11,595	11,595	-	1.0000	1.9170	22,228	1,510,677	260,677
33129	100100	1997	9	117,115	586,621	289,362	297,259	1.0000	1.9170	1,124,552	1,349,062	99,062
34602	100100	1999	9	358,233	512,500	512,500	-	1.0000	1.7670	905,588	1,538,585	288,585
Que Creek	100100	2002	9	892,793	116,396	116,396	-	1.0000	1.5695	182,684	1,583,922	333,922
39990	100100	2003	1	1,015,524	-	-	-	1.0000	1.5393	-	1,563,196	313,196
39840	100100	2003	2	419,207	485,877	270,817	215,060	1.0000	1.5393	747,910	1,393,196	143,196
40926	100100	2004	9	686,414	603,807	450,411	153,396	1.0000	1.5058	909,213	1,942,815	692,815
41102	102700	2004	2	505,991	643,730	643,730	-	1.0000	1.5058	969,329	1,731,250	481,250
41676	100100	2005	2	962,495	125,000	82,740	42,260	1.0000	1.4511	181,388	1,578,064	328,064
41672	100100	2005	2	859,464	200,000	153,475	46,525	1.0000	1.4511	290,220	1,537,388	287,388
41534	101400	2005	1	875,699	25,566	25,566	-	1.0000	1.4511	37,099	1,307,826	57,826
43059	101200	2007	2	594,174	2,000,000	1,576,595	423,405	1.0000	1.3338	2,667,600	3,460,109	2,210,109
43835	100100	2008	1	975,340	11,432	11,432	-	1.0000	1.2875	14,719	1,270,469	20,469

Sources: Columns (2) through (8) from CMCRB Database.

Injury types are as follows: 1 (Death), 2 (Permanent Total), 9 (Permanent Partial).

Column (9): Exhibit VI-B page 1

Column (10): Exhibit XII-D.

Column (11) is equal to Columns [(7) X (9) + (8)] x (10) Column (12) is equal to Columns (5) X (10) + (11) Column (13) is equal to Column (12), minus \$1,250,000

14

Totals

23,473,868

Loss Cost

20 Year Average 2016 Developed Payroll

#### Coal Mine Compensation Rating Bureau Catastrophe Calculation Trend Factors for Medical and Indemnity

	Statewide				Statewide		
	Average	Yearly			Average	Yearly	
	Weekly	Percentage	Trend		Weekly	Percentage	Trend
<u>Year</u>	<u>Wage</u>	<u>Change</u>	<u>Factor</u>	<u>Year</u>	<u>Wage</u>	<u>Change</u>	<u>Factor</u>
1997	542		1.9170				
1998	561	3.5%	1.8520	2008	807	3.6%	1.2875
1999	588	4.8%	1.7670	2009	836	3.6%	1.2428
2000	611	3.9%	1.7005	2010	845	1.1%	1.2296
2001	644	5.4%	1.6134	2011	858	1.5%	1.2110
2002	662	2.8%	1.5695	2012	888	3.5%	1.1700
2003	675	2.0%	1.5393	2013	917	3.3%	1.1330
2004	690	2.2%	1.5058	2014	932	1.6%	1.1148
2005	716	3.8%	1.4511	2015	951	2.0%	1.0925
2006	745	4.1%	1.3946	2016	978	2.8%	1.0624
2007	779	4.6%	1.3338	2017	995	1.7%	1.0442

Average of All Years= 3.09%
Average of last 10 years= 2.48%
Average of last 5 years= 2.30%
Average of last 3 years= 2.21%

Selected= 2.50% (Last Year's Selection was 2.75%)

	Projected	
	<u>Wage</u>	Weight
01-01-2018	1,020.00 a	28.125%
01-01-2019	1,045.00 a	68.750%
01-01-2020	1,072.00 a	3.125%

Average Weekly Wage For Policies effective between 04-01-2018 and 04-01-2020

\$1,039 b

a. Previous year's wage times annual increase of 2.50%

b. Weighted average of projected wage levels from 01-01-2018 to 01-01-2020

Source: Statewide Average Weekly Wage data is from the Pennsylvania Workers'
Compensation Act booklet or the Department of Labor and Industry website.

#### Coal Mine Compensation Rating Bureau Catastrophe Calculation Traumatic Losses by Class

Class <u>Code</u>	<u>Description</u>	Number of <u>Claims</u>	Excess Over \$1,250,000
1010	Underground Anthracite	-	-
1001	Underground Bituminous	11	3,224,683
1012	Surface Anthracite	1	2,210,109
1014	Surface Bituminous	1	57,826
1469	Coke		-
1015	Auger	-	-
1021	Anthracite Co-Gen	-	-
1023	Bituminous Co-Gen	-	-
1025	Anthracite Prep Plant	-	-
1027	Bituminous Prep Plant	1	481,250
	Total	14	\$5,973,868

Sources: Adjusted to On-Level and Post-Act 44 basis in Exhibit XII-C

PAB

2018 plan factors at 50k and 150 k splits:

#### Table A: Ratemaking Factors

rabio / ii iiaioaiiiig / aoioio							
Year:	2016	2015	2014	Average			
Loss Develop.	1.8339	1.2522	1.1266	split by			
Layers:	Split o	Layer					
0- 50	0.66776	0.41578	0.45140	0.51165			
50-150	0.03673	0.22781	0.15997	0.14150			
Over 150	0.29551	0.35641	0.38863	0.34685			
Trend	1.0534	1.0479	1.0219	1.0000			

#### Table C: Unloaded Loss Costs - Traumatic

Clas	sification	Unloaded Loss Cost (1)
1001	Bit deep	5.82
1010	Anth deep	19.20
1012	Anth surf	8.09
1014	Bit surf	2.22
1015	Auger	13.40
1021	Anth Co-gen	3.81
1023	Bit Co-gen	1.13
1025	Anth Prep	4.70
1027	Bit Prep	2.20
1469	Coke	3.47

#### Table B: Payroll Development

	Payroll De-	
Classi	velopment	
1001	Bit deep	1.0000
1010	Anth deep	1.0000
1012	Anth surf	1.0045
1014	Bit surf	1.0000
1015	Auger	1.0000
1021	Anth Co-gen	1.0000
1023	Bit Co-gen	1.0000
1025	Anth Prep	1.0000
1027	Bit Prep	1.0030
1469	Coke	1.0000

#### Table D: Manual Loss Costs - Traumatic

				Loadings				
		Unloaded	Catastrophe	Small Business	Off-	Manual		Off-*
		Loss Cost	Exh. XII-A	Assessment	Balances#	Loss Cost		Balances
Class	ification	(1)	(2)	(3)	(4)	(5)	Merit Rating Exh. XIV-A	1.0002
1001	Bit deep	5.82	0.18	1.0001	1.0151	6.09	Safety Rating Exh XIV-B	1.0149
1010	Anth deep	19.20	0.18	1.0001	1.0151	19.67	Combined	1.0151
1012	Anth surf	8.09	0.03	1.0001	1.0151	8.24		
1014	Bit surf	2.22	0.03	1.0001	1.0151	2.28		
1015	Auger	13.40	0.08	1.0001	1.0151	13.68		
1021	Anth Co-gen	3.81	0.03	1.0001	1.0151	3.90		
1023	Bit Co-gen	1.13	0.03	1.0001	1.0151	1.18		
1025	Anth Prep	4.70	0.03	1.0001	1.0151	4.80		
1027	Bit Prep	2.20	0.03	1.0001	1.0151	2.26		
1469	Coke	3.47	0.03	1.0001	1.0151	3.55		

Table E: Expe	ected Traumatic				2016				·	2015	·			·	2014		
Loss	Costs		All La	iyers	Layer 0-50	Layer 50-150	XS over 150	All La	yers	Layer 0-50	Layer 50-150	XS over 150	All Lo	ayers .	Layer 0-50	Layer 50-150	XS over 150
		Unloaded	De-trended	Undevel-	Split of	total losses by	Layer	De-trended	Undevel-	Split c	f total losses by	Layer	De-trended	Undevel-	Split o	of total losses by	Layer
Clas	sification	Manual	Loss	oped	0.66776	0.03673	0.29551	Loss	oped	0.41578	0.22781	0.35641	Loss	oped	0.45140	0.15997	0.38863
		Loss Cost	Cost*	Losses**	Undevelop	ed Expected Lo	oss Cost***	Cost*	Losses**	Undevelo	oed Expected L	oss Cost***	Cost*	Losses**	Undevelo	ped Expected L	oss Cost***
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1001	Bit deep	5.82	5.52	3.01	2.01	0.11	0.89	5.55	4.43	1.84	1.01	1.58	5.70	5.06	2.28	0.81	1.97
1010	Anth deep	19.20	18.23	9.94	6.64	0.37	2.94	18.32	14.63	6.08	3.33	5.21	18.79	16.68	7.53	2.67	6.48
1012	Anth surf	8.09	7.68	4.19	2.80	0.15	1.24	7.72	6.17	2.57	1.41	2.20	7.92	7.03	3.17	1.12	2.73
1014	Bit surf	2.22	2.11	1.15	0.77	0.04	0.34	2.12	1.69	0.70	0.38	0.60	2.17	1.93	0.87	0.31	0.75
1015	Auger	13.40	12.72	6.94	4.63	0.25	2.05	12.79	10.21	4.25	2.33	3.64	13.11	11.64	5.25	1.86	4.52
1021	Anth Co-gen	3.81	3.62	1.97	1.32	0.07	0.58	3.64	2.91	1.21	0.66	1.04	3.73	3.31	1.49	0.53	1.29
1023	Bit Co-gen	1.13	1.07	0.58	0.39	0.02	0.17	1.08	0.86	0.36	0.20	0.31	1.11	0.99	0.45	0.16	0.38
1025	Anth Prep	4.70	4.46	2.43	1.62	0.09	0.72	4.49	3.59	1.49	0.82	1.28	4.60	4.08	1.84	0.65	1.59
1027	Bit Prep	2.20	2.09	1.14	0.76	0.04	0.34	2.10	1.68	0.70	0.38	0.60	2.15	1.91	0.86	0.31	0.74
1469	Coke	3.47	3.29	1.79	1.20	0.07	0.53	3.31	2.64	1.10	0.60	0.94	3.40	3.02	1.36	0.48	1.17
1	2	.3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	1.8

<sup>\*</sup> Detrended loss costs are calculated by dividing the unloaded manual lost costs (Table C) by the trend factors (table A row 7), and rounding.

<sup>\*\*</sup> The total undeveloped loss costs are calculated by dividing the De-trended loss cost by the Total Limits loss development factor (Table A row 2), and rounding; then the costs are allocated to layers.

<sup>\*\*\*</sup> Detrended, undeveloped loss costs are allocated to layers by the splitting factors (Table A rows 4-6) based on the average shares for the same report age for the latest 6 years, and rounded to 2 decimal places.

### Coal Mine Compensation Rating Bureau of Pennsylvania Experience Rating Plan

Loss Development and Trend Factors by Experience Year

Exhibit XIII-A 50K-150K Page 2

		Reported Losses	<u>LDF</u>	Untrended Developed I Losses	Weight: Percent Indemnity vs <u>Medical</u>	Medical Loss Development	Indemnity Loss Development	Combined Loss Development Weighted by % indemnity vs medical by year
<u>Indemnity</u>	2014	\$11,781,410	1.1090	\$13,065,584	65.09%	1.1594	1.1090	1.1266
	2015	\$9,249,942	1.2879	\$11,913,000	72.06%	1.1600	1.2879	1.2522
	2016	\$4,871,955	2.1106	<u>\$10,282,748</u>	<u>67.19%</u>	1.2672	2.1106	1.8339
				\$35,261,332	67.93%			
<u>Medical</u>	2014	\$6,043,218	1.1594	\$7,006,507	34.91%			
	2015	\$3,981,666	1.1600	\$4,618,733	27.94%			
	2016	\$3,963,291	1.2672	\$5,022,282	32.81%			
				\$16,647,522	32.07%			
	Total			\$51,908,854	1.0000			
						Medical /	Indemnity/	
						HB 1846	Protz Adj.	Combined Trend
				Years of		Trend at	Trend at	Weighted by % indemnity
				<u>Trend</u>		<u>-2.0%</u>	<u>-0.9%</u>	vs medical by year
	Average Exp (	date AY 2014	7/1/2014	4.75		0.9021	1.0861	1.0219
	Average Exp (	date AY 2015	7/1/2015	3.75		0.9242	1.0959	1.0479
	Average Exp (		7/1/2016	2.75		0.9460	1.1058	1.0534
	Average Date	of Accident	4/1/2019					

Source: Loss Development - Exhibit V-C

Trend - Exhibit V-F

Reported Losses - Exhibit V-B page 1

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#### 2018 Credibility Tables

	PCRB sh	ape		
	Equivalent			Credibility Zp or Ze
Expected	Modified			= $(S*Payroll+I*G)/(J*S*Payroll+K*G)$
Losses	Payroll at	Primary	Excess	[where S adjusts Payroll to Expected Losses]
Greater than	\$4.95 *	Credibility	Credibility	
				Variable Layer I Layer 2
14,394	300,000	0.30	0.06	Av Claim G N/A 11,512
17,632	356,207	0.31	0.06	S N/A 0.054
21,218	428,646	0.32	0.06	I N/A 43.50
23,729	479,379	0.33	0.06	J N/A 2.4000
25,895	523,131	0.34	0.07	K N/A 700.00
28,223	570,167	0.35	0.07	
31,724	640,889	0.36	0.07	
33,340	673,525	0.37	0.07	
36,148	730,263	0.38	0.07	
39,261	793,143	0.39	0.07	
42,723	863,096	0.40	0.07	
46,173	932,780	0.41	0.07	
50,260	1,015,348	0.42	0.07	
54,480	1,100,597	0.43	0.07	
58,930	1,190,500	0.44	0.07	
64,137	1,295,703	0.45	0.07	
69,460	1,403,230	0.46	0.07	
72,885	1,472,422	0.47	0.07	
75,602	1,527,304	0.48	0.07	
78,457	1,584,994	0.49	0.07	
81,395	1,644,337	0.50	0.07	
84,414	1,705,335	0.51	0.07	
87,590	1,769,503	0.52	0.07	
90,840	1,835,148	0.53	0.07	
94,219	1,903,418	0.54	0.07	
97,737	1,974,490	0.55	0.07	
101,336	2,047,189	0.56	0.07	
105,125	2,123,730	0.57	0.07	
109,027	2,202,556	0.58	0.07	
113,042	2,283,667	0.59	0.07	
117,273	2,369,141	0.60	0.08	
121,605	2,456,669	0.61	0.08	
126,119	2,547,856	0.62	0.08	
130,628	2,638,957	0.63	0.08	
135,136	2,730,020	0.64	0.08	
146,976	2,969,215	0.65	0.08	
159,790	3,228,089	0.66	0.08	
174,343	3,522,088	0.67	0.08	
190,774	3,854,026	0.68	0.08	
208,366	4,209,421	0.69	0.08	
228,292	4,611,957	0.70	0.09	
249,705	5,044,545	0.71	0.09	
274,047	5,536,309	0.72	0.09	
302,119	6,103,414	0.73	0.09	
333,210	6,731,515	0.74	0.10	
366,752	7,409,121	0.75	0.10	
407,662	8,235,596	0.76	0.10	
450,677	9,104,579	0.77	0.11	
498,112	10,062,869	0.78	0.11	
558,410	11,281,017	0.79	0.12	
624,012	12,606,300	0.80	0.12	
697,648	14,093,899	0.81	0.13	
788,985	15,939,091	0.82	0.13	
894,945	18,079,697	0.83	0.14	
1,018,370	20,573,131	0.84	0.15	
1,157,231	23,378,407	0.85	0.16	
1,321,831	26,703,653	0.86	0.17	
1,528,079	30,870,286	0.87	0.18	
1,795,880	36,280,396	0.88	0.19	
1,795,880	39,562,251	0.88	0.20	
2,120,319	42,834,727	0.89	0.21	
2,505,663	50,619,455	0.90	0.22	
2,505,663	55,913,525	0.90	0.23	
3,000,680	60,619,791	0.91	0.24	
3,000,680	70,084,630	0.91	0.25	
3,851,016	77,798,296	0.92	0.26	
4,547,151	91,861,636	0.93	0.27	
4,547,151	99,118,112	0.93	0.28	
4,547,151	111,852,096	0.93	0.29	
6,019,437	121,604,791	0.94	0.30	
6,019,437	144,482,928	0.94	0.31	
6,019,437	165,861,750	0.94	0.32	
6,019,437	192,174,145	0.94	0.33	
6,019,437	225,350,644	0.94	0.34	
6,019,437	268,480,093	0.94	0.35	
6,019,437	326,831,699	0.94	0.36	
6,019,437	410,191,138	0.94	0.37	

<sup>\*</sup> The average unloaded loss cost underlying the proposed filing is \$4.95, the table was updated to reflect this change.

			Proposed		
	Proposed	Proposed	Experience		Change
	Manual	2018	Rated	2017	in Mod
<u>File</u>	<u>Premium</u>	Mod	Premium	Mod	<u>Factor</u>
2	2,965	0.832	2,467	0.850	-0.018
37	94,750	0.902	85,465	1.030	-0.128
52	2,246	0.807	1,813	0.785	0.022
55	431,497	0.620	267,528	0.610	0.010
66	4,599	0.971	4,466	0.889	0.082
99	13,894	0.817	11,351	0.821	-0.004
119	96,384	1.077	103,806	1.382	-0.305
121	176,460	0.643	113,464	0.651	-0.008
124	16,412	0.743	12,194	0.740	0.003
214	13,669	0.715	9,773	0.698	0.017
283	33,430	0.626	20,927	0.635	-0.009
288	2,425	0.830	2,013	0.818	0.012
306	75,715	0.964	72,989	0.742	0.222
316	3,013	0.832	2,507	0.837	-0.005
322	11,448	1.189	13,612	1.174	0.015
325	23,019	0.766	17,633	0.768	-0.002
342	4,489	0.799	3,587	1.400	-0.601
352	8,998	1.931	17,375	0.765	1.166
354	15,697	4.981	78,187	2.523	2.458
360	2,717	0.837	2,274	0.833	0.004
370	3,011	0.833	2,508	0.849	-0.016
403 418	127	0.829	105	1.362	-0.533
421	3,442 2,831	0.780 0.784	2,685 2,220	0.729 0.743	0.051 0.041
426	69,894	1.209	84,502	2.177	-0.968
426	1,403	0.762	1,069	0.677	0.085
457	4,590	0.762	3,718	0.877	-0.006
491	20,785	0.786	16,337	0.925	-0.139
652	332,020	1.074	356,589	1.050	0.024
690	23,304	1.607	37,450	0.874	0.733
722	6,402	0.781	5,000	0.769	0.012
910	1,891	0.936	1,770	0.950	-0.014
954	16,507	0.731	12,067	0.715	0.016
1016	5,741	0.847	4,863	0.822	0.025
1037	24,403	1.115	27,209	1.029	0.086
1361	3,482	0.830	2,890	0.850	-0.020
1444	324,163	1.184	383,809	1.237	-0.053
1700	26,994	0.707	19,085	0.975	-0.268
2065	889	1.300	1,156	1.392	-0.092
2265	0	0.837	0	0.796	0.041
2353	13,631	0.790	10,768	1.400	-0.610
2687	36,274	1.111	40,300	1.004	0.107
2839	25,365	0.708	17,958	0.973	-0.265
3157	18,541	0.798	14,796	0.791	0.007
3190	9,148	0.746	6,824	0.700	0.046

			Proposed		
	Proposed	Proposed	Experience		Change
	Manual	2018	Rated	2017	in Mod
<u>File</u>	<u>Premium</u>	Mod	<u>Premium</u>	Mod	<u>Factor</u>
3194	7,828	0.828	6,482	1.300	-0.472
3506	2,065	0.831	1,716	0.829	0.002
3552	10,118	0.767	7,761	0.770	-0.003
3614	37,998	2.177	82,722	1.462	0.715
3619	30,217	0.811	24,506	0.828	-0.017
3629	22,255	0.903	20,096	0.889	0.014
3691	54,625	0.857	46,814	0.651	0.206
3798	3,968	0.817	3,242	0.818	-0.001
3804	11,588	0.817	9,467	0.783	0.034
3932	6,833	0.770	5,261	0.747	0.023
3952	195	0.846	165	0.950	-0.104
3970	0	0.838	0	0.925	-0.087
3972	2,621	1.280	3,355	1.220	0.060
3973	73,266	1.025	75,098	0.963	0.062
3977	47,375	0.668	31,647	0.877	-0.209
3978	5,023	0.772	3,878	0.719	0.053
3981	3,528	0.813	2,868	0.802	0.011
3982	5,516	0.754	4,159	0.716	0.038
3988	8,035	1.043	8,381	1.028	0.015
3994	13,594	0.827	11,242	0.829	-0.002
3997	3,886	0.813	3,159	0.801	0.012
4001 4011	80,898 16,386	0.612 0.683	49,510 11,192	0.877 0.689	-0.265 -0.006
4011	32,839	2.004	65,809	2.001	0.003
4016	28,496	1.190	33,910	1.331	-0.141
4024	5,033	0.871	4,384	0.892	-0.141
4023	8,228	2.207	18,159	1.118	1.089
4031	34,205	1.119	38,275	0.776	0.343
4042	71,609	0.642	45,973	0.614	0.028
4044	96,981	1.291	125,202	1.052	0.239
4054	5,816	1.200	6,979	1.200	0.000
4056	0	0.843	0	0.808	0.035
4058	13,593	1.028	13,974	1.019	0.009
4060	10,694	0.888	9,496	0.889	-0.001
4061	4,772	0.845	4,032	0.835	0.010
4062	6,422	1.400	8,991	1.475	-0.075
4063	6,760	0.786	5,313	0.787	-0.001
4065	0	0.754	0	0.690	0.064
4072	333,133	0.954	317,809	0.834	0.120
4074	13,093	0.874	11,443	0.902	-0.028
4077	134,668	0.988	133,052	0.995	-0.007
4078	62,227	0.678	42,190	0.649	0.029
4081	5,182	0.806	4,177	0.835	-0.029
4088	1,157	0.815	943	0.799	0.016
4089	26,395	1.309	34,551	1.438	-0.129

			Proposed		
	Proposed	Proposed	Experience		Change
	Manual	2018	Rated	2017	in Mod
<u>File</u>	<u>Premium</u>	Mod	<u>Premium</u>	<u>Mod</u>	<u>Factor</u>
4094	15,975	0.799	12,764	1.200	-0.401
4096	3,788	0.826	3,129	0.817	0.009
4100	3,511,136	1.030	3,616,470	0.944	0.086
4101	17,007	1.229	20,902	1.243	-0.014
4103	16,751	0.829	13,887	n/a	n/a
4104	1,265,902	1.102	1,395,024	1.114	-0.012
4109	6,687	1.955	13,073	2.177	-0.222
4110	13,081	0.796	10,412	n/a	n/a
4111	0	1.133	0	1.180	-0.047
4114	17,421	0.759	13,223	0.765	-0.006
999011	9,320	1.093	10,187	1.025	0.068
999013	0	2.500	0	2.906	-0.406
999019	380,508	0.787	299,460	0.952	-0.165
999020	18,526	1.262	23,380	1.492	-0.230
999024	5,880	0.826	4,857	0.819	0.007
999038	48,398	0.646	31,265	1.107	-0.461
999039	99,744	1.439	143,532	1.616	-0.177
999051	381,330	1.085	413,743	0.924	0.161
999052	18,544	1.400	25,962	1.400	0.000
999053	9,962	2.958	29,468	3.068	-0.110
999061	1,934,652	0.835	1,615,434	0.790	0.045
999063	1,713,784	1.090	1,868,025	1.018	0.072
999065	4,138	0.812	3,360	1.300	-0.488
999075	43,372	1.898	82,320	1.493	0.405
999077	30,601	1.022	31,274	0.950	0.072

The following files have indicated increases or decreases in their Experience Mods of greater than 0.35 as displayed on Exhibit XIII-B, pages 1-3. This list includes all files with increases or decreases of this magnitude. It is proposed that the indicated increases or decreases be limited to a maximum of 0.35. Below are the affected files, their current mod and their proposed mod. If approved, the below stated limited mod would apply to the respective file number.

#### Experience Mod Caps (plus or minus 0.35)

		Proposed	
	2017	2018	Limited
File	Mod	Mod	Mod
342	1.400	0.799	1.050
352	0.765	1.931	1.115
354	2.523	4.981	2.873
403	1.362	0.829	1.012
426	2.177	1.209	1.827
690	0.874	1.607	1.224
2353	1.400	0.790	1.050
3194	1.300	0.828	0.950
3614	1.462	2.177	1.812
4030	1.118	2.207	1.468
4094	1.200	0.799	0.850
999013	2.906	2.500	2.556
999038	1.107	0.646	0.757
999065	1.300	0.812	0.950
999075	1.493	1.898	1.843

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Run Date: November 08, 2017 - 09:43:04 AM

Effective Date - April 01, 2018

PAB

MERIT RATING PLAN OFF-BALANCE CALCULATION					
	(1)	(2)	(3)	(4)	
	2016	Traumatic Proposed			
	Developed	Unloaded	Credits/	Loss Cost	
<u>Class</u>	<u>Payroll</u>	Loss Cost	<u>Surcharge</u>	<u>Premium</u>	Off-Balance
Underground Anthracite (1010)					
Total	\$163,760	19.20		\$31,442	
Credit	39,700	19.20	-5.00%	(381)	
Surcharge	0	19.20	5.00%	0	
Underground Bituminous (1001)	<b>*</b> 1.40.00.4.01.5			<b>*</b> 0 **= **0	
Total	\$148,894,215	5.82	F 000	\$8,665,643	
Credit Surcharge	0	5.82 5.82	-5.00% 5.00%	0	
_	U	3.02	3.00%	U	
Surface Anthracite (1012)	¢00 010 050	0.00		¢1 /02 500	
Total Credit	\$20,810,850 109,533	8.09 8.09	-5.00%	\$1,683,598	
Surcharge	107,333	8.09	-3.00% 5.00%	(443) 0	
_	O	0.07	3.0070	O	
Surface Bituminous (1014)	¢00,000,040	2.22		¢/42.770	
Total Credit	\$28,999,042 683,751	2.22 2.22	-5.00%	\$643,779 (759)	
Surcharge	0	2.22	5.00%	(737)	
_	Ŭ	2.22	0.0070	O	
Coke (1469) Total	¢0 212 704	3.47		\$00.007	
Credit	\$2,313,724 0	3.47	-5.00%	\$80,286 0	
Surcharge	0	3.47	5.00%	0	
_	Ŭ	0.17	0.0070	O	
Auger (1015) Total	\$372,496	13.40		\$49,914	
Credit	42,654	13.40	-5.00%	(286)	
Surcharge	0	13.40	5.00%	0	
Anthracite Co-Gen (1021)	v		0.0070	· ·	
Total	\$10,847,424	3.81		\$413,287	
Credit	118,603	3.81	-5.00%	(226)	
Surcharge	0	3.81	5.00%	0	
Bituminous Co-Gen (1023)					
Total	\$11,386,837	1.13		\$128,671	
Credit	ψ11,300,037 0	1.13	-5.00%	φ120,071 0	
Surcharge	0	1.13	5.00%	0	
Anthracite Prep Plant (1025)					
Total	\$6,971,270	4.70		\$327,650	
Credit	62,776	4.70	-5.00%	(148)	
Surcharge	0	4.70	5.00%	0	
_					
Bituminous Prep Plant (1027) Total	\$22,131,423	2.20		\$486,891	
Credit	ψ22,131,423 0	2.20	-5.00%	ψ <del>4</del> 00,071	
Surcharge	0	2.20	5.00%	0	
55.5590	Ť		2.20,0	ŭ	
All Classes Combined					
Total	\$252,891,041			\$12,511,161	
Credit	1,057,017		-5.00%	(\$2,243)	
Surcharge	0		5.00%	\$0	1.0000
				\$12,508,918	1.0002

Source: (1) Exhibit XIV-A Page2

(2) Exhibit II (4)=(1)\*(2)\*(3)

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Run Date: November 02, 2017 - 02:28:35 PM

#### 2016 PAYROLL BY CLASS

2010 I ATROLL DT CLASS				
	2016	2016	2016	
	Total	Experience	Merit	2016
	Developed	Rated	Rated	Manual
Class	<u>Payroll</u>	<u>Payroll</u>	<u>Payroll</u>	<u>Payroll</u>
Underground Anthracite (1010)	\$163,760	\$124,060	\$39,700	\$0
Underground Bituminous(1001)	148,894,215	148,425,268	0	468,947
Surface Anthracite (1012)	20,810,850	20,278,932	109,533	422,385
Surface Bituminous (1014)	28,999,042	27,189,764	683,751	1,125,527
Coke (1469)	2,313,724	2,313,724	0	0
Auger (1015)	372,496	329,842	42,654	0
Anthracite Co-Gen (1021)	10,847,424	10,652,873	118,603	75,948
Bituminous Co-Gen (1023)	11,386,837	11,312,609	0	74,228
Anthracite Prep Plant(1025)	6,971,270	6,866,894	62,776	41,600
Bituminous Prep Plant(1027)	22,131,423	21,360,570	<u>O</u>	<u>770,853</u>
TOTAL	\$252,891,041	\$248,854,536	\$1,057,017	\$2,979,488

#### MERIT PAYROLL - CREDIT/SURCHARGE

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2016 2016		2016	2016	
	Merit	Merit	Merit	Merit	
	Rated	Credit	No Adjustment	Surcharge	
Class	<u>Payroll</u>	<u>Payroll</u>	<u>Payroll</u>	<u>Payroll</u>	
Underground Anthracite (1010)	\$39,700	\$39,700	\$0	\$0	
Underground Bituminous(1001)	0	0	0	0	
Surface Anthracite (1012)	109,533	109,533	0	0	
Surface Bituminous (1014)	683,751	683,751	0	0	
Coke (1469)	0	0	0	0	
Auger (1015)	42,654	42,654	0	0	
Anthracite Co-Gen (1021)	118,603	118,603	0	0	
Bituminous Co-Gen (1023)	0	0	0	0	
Anthracite Prep Plant(1025)	62,776	62,776	0	0	
Bituminous Prep Plant(1027)	0	0	0	0	
TOTAL	\$1,057,017	\$1,057,017	\$0	\$0	

Source: Exhibit X-A and CMCRB database as of 4/30/2017

	(1)	(2)	(3)	(4)	
	2016	Traumatic Proposed		Loss Cost	
CLASS	Developed <u>Payroll</u>	Unloaded <u>Loss Cost</u>	Credit	<u>Premium</u>	Off-Balance
Underground Anthracite(1010)	<b>*</b> 1.40 <b>7</b> 40	<b>*</b> 10.00		401.440	
Total Safety Committee	\$163,760 0	\$19.20 19.20	-5.00%	\$31,442 0	
Underground Bituminous(1001)					
Total Safety Committee	148,894,215 36,363,132	5.82 5.82	-5.00%	\$8,665,643 (105,817)	
Surface Anthracite(1012)					
Total Safety Committee	20,810,850 11,751,097	8.09 8.09	-5.00%	\$1,683,598 (47,533)	
Surface Bituminous(1014)					
Total	28,999,042	2.22	5.00%	\$643,779	
Safety Committee	3,352,469	2.22	-5.00%	(3,721)	
Coke(1469)					
Total	2,313,724	3.47	5.00%	\$80,286	
Safety Committee	0	3.47	-5.00%	0	
Auger(1015)					
Total	372,496	13.40		\$49,914	
Safety Committee	0	13.40	-5.00%	0	
Anthracite Co-gen(1021)					
Total	10,847,424	3.81		\$413,287	
Safety Committee	3,067,891	3.81	-5.00%	(5,844)	
Bituminous Co-gen(1023)					
Total	11,386,837	1.13		\$128,671	
Safety Committee	0	1.13	-5.00%	0	
Anthracite Prep Plant(1025)					
Total	6,971,270	4.70		\$327,650	
Safety Committee	3,385,921	4.70	-5.00%	(7,957)	
Bituminous Prep Plant(1027)					
Total	22,131,423	2.20		\$486,891	
Safety Committee	11,247,235	2.20	-5.00%	(12,372)	
All Classes Combined					
Total	252,891,041			12,511,161	
Safety Committee	69,167,745			(183,244)	
·				12,327,917	1.0149

Source: (1) Exhibit X-A and CMCRB Database as of 4-30-2017

(2) Exhibit II (4)=(1)\*(2)\*(3)

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