COAL MINE COMPENSATION RATING BUREAU
OF PENNSYLVANIA

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November 26, 2014

The Honorable Michael F. Consedine
Insurance Commissioner
Pennsylvania Insurance Department
1311 Strawberry Square
Harrisburg, PA 17120

Attention: Mark Lersch, Director Bureau of Property & Casualty

RE: Proposal CM-3-2014
Revised Loss Costs for Traumatic, State Occupational Disease
And Federal Occupational Disease
To Be Effective: April 1, 2015

Dear Commissioner Consedine:

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 +7.1%. By coverage, the proposal requests a change of +6.9% for Traumatic, a change of +6.3% for State Occupational Disease ("SOD") and a change of +8.9% for Federal Occupational Disease ("FOD").

The Proposed Traumatic Loss Costs are increasing overall by $0.29 ($4.50 – $4.21). The overall increase is being driven by the following considerations:

- Indemnity Loss Development Factors increased for Accident Years 2011 (+0.9%), 2012 (+2.8%) and 2013 (+4.3%).
- Indemnity Loss Trend Annual Factor increased from -2.6% to +0.3%. Consequently, Indemnity Loss Trend Factors changed from +8.4% for Accident Year 2013 to +20.7% for Accident Year 2009.
- Medical Loss Trend Annual Factor increased from +1.5% to +1.6%. Consequently, Medical Loss Trend Factors generally increased modestly between +0.3% and +0.6%.
- Loss experience for Accident Year 2013 indicates a higher loss cost than the loss experience of Accident Year 2008 that it replaced.
- Reported losses for Accident Years 2010 and 2012 increased more than anticipated.

The Proposed SOD Loss Costs are increasing overall by $0.04 ($0.67 – $0.63). The overall increase is being driven by the loss experience of the Bituminous Underground classification.

- For all classes combined, claim frequency changed by +6.5%. Excluding Bituminous Underground, claim frequency changed by -10.5% for the remaining classes combined.

- For all classes combined, claim severity changed by +9.1%. Excluding Bituminous Underground, claim severity changed by +4.6% for the remaining classes combined.
- For all classes combined, excluding Bituminous Underground, the overall change for the remaining classes combined is a change of -7.0%.
- However, because the Indicated Change for the Bituminous Underground Loss Cost of +44.4% is capped at +25.0%, the net change in Proposed Loss Costs is less than the product of the frequency change and severity change.

The Proposed FOD Loss Costs are increasing overall by $0.07 ($0.86 – $0.79). The overall increase is being driven by the loss experience of the Bituminous Underground classification.

- For all classes combined, Basic claim frequency changed by +3.9%.
- For all classes combined, Excess claim frequency changed by +2.6%.
- For all classes combined, Basic claim severity changed by +6.8%.
- For all classes combined, Excess claim severity changed by -7.3%.
- Excluding Bituminous Underground, the change for the remaining classes is -1.1%.

This Proposal consists of this cover letter, the enclosed Actuarial Report and Filing Exhibits. The Filing Exhibits were prepared for the Bureau by Mr. Peter A. Bennett who has extensive experience in this regard.

The Bureau notes that the Actuarial Report has been significantly re-written from versions of this report included with previous annual filings to more clearly and concisely describe the methods and assumptions used in the Filing Exhibits. However, the Bureau notes that the organization of the Filing Exhibits is unchanged from previous annual filings, 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, 2015. 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

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, 2015 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, 2015 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, 2015.

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:

- Executive Summary – This section 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).

- Summary of Significant Changes – This section identifies and briefly discusses the significant changes in methods and assumptions from the CMCRB's prior loss cost filing.

- Discussion of Filing Exhibits – This section addresses the content of all of the Filing Exhibits and is arranged in Filing Exhibit order.

- Disclosures – This 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.

Sincerely,

Charles A. Romberger, ACAS, MAAA, CPCU, ARM
Executive Director, CMCRB

Executive Summary

This report and the associated filing exhibits provide the CMCRB's proposal for loss costs to be effective on April 1, 2015, 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	$ 4.21	$ 4.50	+6.9%
SOD	0.63	0.67	+6.3%
FOD (Basic & Excess)	0.79	0.86	+8.9%
Total	$5.63	$6.03	+7.1%

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 $4.21 (based on 2013 payroll distribution). The Proposed level is $4.50 or a change of +6.9%.

The key drivers of the change to Traumatic Loss Costs can be identified by comparing Exhibit V-B Page 1 for the April 1, 2015 filing to the April 1, 2014 filing. These drivers include:

- Indemnity Loss Development Factors decreased for Accident Years 2009 (-0.4%) and 2010 (-1.1%), but increased for Accident Years 2011 (+0.9%), 2012 (+2.8%) and 2013 (+4.3%).
- Medical Loss Development Factors slightly decreased for all years (e.g., by about -1.2% for Accident Year 2009 and -2.0% for Accident Year 2013).
- Indemnity Loss Trend Annual Factor increased from -2.6% to +0.3%. Consequently, Indemnity Loss Trend Factors increased from 8.4% for Accident Year 2013 to 20.7 % for Accident Year 2009.
- Medical Loss Trend Annual Factor increased from +1.5% to +1.6%. Consequently, Medical Loss Trend Factors generally increased modestly between +0.3% and +0.6%.
- The replacement of Accident Year 2008 experience with Accident Year 2013 experience.
- Unanticipated increases in reported losses for Accident Years 2010 and 2012.

These drivers impact the Indemnity indications more than the Medical indications. The Indemnity indication changed by +21.0%, from $2.10 to $2.54; while the Medical indication

changed by +2.2%, from $1.83 to $1.87. The Total Traumatic indication changed by +12.5%, from $3.92 to $4.41. (The Total indication does 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) to be +7.3%. This includes capping the changes to the Anthracite Surface and the Anthracite Co-Gen Classes at +25.0%.

State Occupational Disease (SOD) Loss Costs

The Current State Occupational Disease Loss Cost (for all classes combined) is $0.63 (based on 2013 payroll distribution). The Proposed level is $0.67 or a change of +6.3%.

The key drivers of this change can be identified by comparing Exhibit III for the April 1, 2015 filing to the April 1, 2014 filing. These drivers include:

- For all classes combined, claim frequency changed by +6.5%.
  - Excluding Bituminous Underground, claim frequency changed by -10.5% for the remaining classes combined.
- For all classes combined, claim severity changed by +9.1%.
  - Excluding Bituminous Underground, claim severity changed by +4.6% for the remaining classes combined.
- For all classes combined, excluding Bituminous Underground, the overall change for the remaining classes combined is a change of -7.0%.
- Also, because the Indicated Change for the Bituminous Underground Loss Cost of +44.4% is capped at +25.0%, the net change in Proposed Loss Costs is less than the product of the frequency change and severity change.

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

The Current Federal Occupational Disease Basic/Excess Loss Cost (for all classes combined) is $0.79 (based on 2013 payroll distribution). The Proposed level is $0.86 or a change of +8.9%.

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

	Current Loss Cost	Proposed Loss Cost	Change in Loss Costs
Basic	$ 0.69	$ 0.75	+8.7%
Excess	0.10	0.11	+10.0%
Total	$0.79	$0.86	+8.9%

The Proposed Loss Costs are shown in Column (5) of Exhibit IV-A separately for Basic and Excess and in Total. The Current (or 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, 2015 filing to the April 1, 2014 filing. These drivers include:

- For all classes combined, Basic claim frequency changed by +3.9%.
- For all classes combined, Excess claim frequency changed by +2.6%.
- For all classes combined, Basic claim severity changed by +6.8%.
- For all classes combined, Excess claim severity changed by -7.3%.
- Both Bituminous Underground and Bituminous Surface classes indicate the need for large increases.
- For all classes combined, excluding Bituminous Underground, the overall change for the remaining classes combined is a change of -1.1%.

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 1.96% (or 0.0196) to 1.65% (or 0.0165). (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 $0.14 to $0.13. (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 1.0066 to 0.9980. (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 changes from 1.0004 to 1.0005. (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 1.0177 to 1.0184. (See Exhibit XIV-B.) This amount is loaded into the CMCRB's Manual Loss Costs.

Summary of Significant Changes from Last Year's Filing

The Exhibit V-I "Estimates" pages were condensed to present the filing more efficiently. For the April 1, 2015 filing, six (6) estimates (i.e., Estimates 01 through 06 or Estimates 07 through 12) are now shown on each page. Also, the graphs were deleted from the "Estimates" pages. In last year's filing, pairs of estimates (i.e., Estimates 01 & 02, 03 & 04, 05 & 06, 07 & 08, 09 & 10 and 11 & 12) were shown on each page with a graph of the data. The same twelve (12) estimates are calculated and displayed.

On Exhibit VII-B-2 Page 1, the Award Ratios were changed for the Anthracite Underground and Bituminous Surface Classifications. The Award Ratio for the Four Standard Classes was assigned to both classes.

- The prior Award Ratio for Anthracite Underground (Class 1011) was 0.330. Since the 4/1/2011 filing when the data for this class got too thin, this class was given its own prior Award Ratio (0.330) because its class-specific ratio was different from the Grand Total Award Ratio.
- The prior Award Ratio for Bituminous Surface (Class 1013) was 0.652. Since the 4/1/2009 filing when the data for this class got too thin, this class was given the Grand Total Award Ratio (0.652) which was close to the previous class-specific ratio (0.571).

On Exhibit X-G, the classification groupings were changed. Bituminous Co-Gen was added to the Bituminous Underground & Prep Plant grouping and was removed from the All Other Classes grouping.

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 Filing Exhibits, the footnotes were modified by replacing:

- "Filing Date – (followed by the date that the CMCRB anticipated submitting the filing to the Pennsylvania Insurance Department)" with
- "Effective Date – (followed by the requested and anticipated effective date 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 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 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 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.

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 Developed 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. The pages include a footnote that indicates such a limitation and a page that supports this limitation follows each such page.

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 20th report level.

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

- 1:2 (1st report to ultimate) +4.3%,
- 2:3 (2nd report to ultimate) +2.8%,
- 3:4 (3rd report to ultimate) +0.9%,
- 4:5 (4th report to ultimate) -1.1% and
- 5th report to ultimate and beyond in the range of -0.4% to 0.0%.

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

- 1:2 (1st report to ultimate) -2.0%,
- 2:3 (2nd report to ultimate) -1.4%,
- 3:4 (3rd report to ultimate) -1.3%,
- 4:5 (4th report to ultimate) -1.2% and
- 5th report to ultimate and beyond in the range of -1.2% to -0.8%.

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 15.01330, producing an average of 1.00089.
- 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 1.00089, so
  y (12) = 1.00089.
- 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) = 1.00089 = x - (a) (12) and
  y (29) = 1.0001 = x - (a) (29).
- The solution for this system of equations was found to be:
  a = 0.000046 and
  x = 1.001442.
- Given these values, y (5) is determined to be 1.0012 = 1.001442 – (0.000046)(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 0.000046.
- 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 1.0068145. (There are 17 factors from t=3 to t=19 so the geometric mean is (1.0177 x 1.0046 x …. x 1.0035) ^ (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 39th report level and beyond. Development factors beyond 38th report are assumed to be 1.0000. The development factor for period 38 is assumed to be 1.0001. It is widely understood by those familiar with workers' compensation claims practices that reserves for medical costs associated with compensation claims tend to be deficient. Also, there are many serious claims in workers compensation that are not resolved for many years.
- 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 1.1224.
- 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) = 1.0068145.
- These conditions result in the following system of equations:

  $$y(11) = 1.0068145 = (x)(a^{8}) \text{ and}$$
  $$y(38) = 1.0001 = (x)(a^{35}).$$
- The solution for this system of equations was found to be:

  a = 0.9997522 and
  x = 1.0088150.
- At this point, the value 1.0088 is entered on Line 3 (for Period 3) of Column 6. The Factor for Period 4 is obtained as (1.0088) times (0.9997522). 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 1.1224 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-G. 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. (A Frequency Adjustment Factor is also displayed and applied. The derivation and need for this Factor is covered in the discussion for Exhibit V-K Supplemental.)

G. This page provides a summary of the various Traumatic Annual Trend Factor components (i.e., severity and frequency) and estimates that were considered and the selected Traumatic Annual Trend Factors separately for Indemnity and Medical losses. Exhibit V-G is a summary of Exhibit V-K. (If needed, the Selected Final Trend is capped at +/- 3 points from the Selected Final Trend in the most recently approved filing.)

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. (The CMCRB used to calculate Trended Loss Ratio indications on these pages, but discontinued these indications a few years ago.)

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:
     - Estimates 01 & 02 are based on the ten (10) most recent Accident Years.
     - Estimates 03 & 04 are based on the nine (9) most recent Accident Years.
     - 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:
     - Estimates 07 & 08 are based on the nine (9) most recent Accident Years before the most recent Accident Year.
     - Estimates 09 & 10 are based on the eight (8) most recent Accident Years before the most recent Accident Year.

- 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.

Additionally, see Exhibit V-K Supplement for a discussion about Traumatic Indemnity Claim Frequency Trend considerations.

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

   Page 1 shows data for a large claim for Accident Year 2004 that was limited in prior filings. This claim is not limited for this filing to be effective April 1, 2015, since the Total Developed Losses for this claim fall under the threshold ($1,250,000) at this evaluation.

   Pages 2 and 3 show data for large claims for Accident Years 2007 and 2012 that are limited in the current filing.

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.

   Exhibit V-K Supplemental provides the supplemental Traumatic Indemnity Claim Frequency analysis that the CMCRB performed. Considering Exhibit V-I, Page 4, the CMCRB noted that Claim Frequencies indicated that three (3) eras exist in the data for Accident Year 2004 through 2013: (1) 2004 to 2005, (2) 2006 to 2009 and (3) 2010 to 2013. Since the CMCRB believes that it is not appropriate to apply customary trend estimation techniques that assume data continuity to data that behaves in a step-wise fashion, the CMCRB chose to analyze Adjusted Claim Frequencies for 2006 through 2013. The CMCRB determined the Selected Frequency Trend from this supplemental analysis. (For the filing effective April 1, 2014, the CMCRB notes that it chose to analyze Adjusted Claim Frequencies for 2006 through 2012 and that it based its Selected Frequency Trend on this supplemental analysis.)

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). The first three report-to-report factors changed by +1.5% to +2.0%. The remaining factors changed by less than +/-1.0%; most factors changed by less than +/-0.2%.

   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.

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). These factors changed by -0.7% to +0.7%; most factors changed by less than +/-0.2%.

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.

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.

   For this filing (effective April 1, 2015), a formula correction was made on pages 3 and 4 (for Accident Years 1993 and 1992 respectively) that modestly changed the Smoothed Factors on these pages, even though the remaining data did not change, at the thousandths and ten-thousandths decimal place.

F. 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 Standard 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, and now also Co-Gen) 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.

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. 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 Standard 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. Reserved for Future Use

G. Page 1 displays the Smoothed Average Weekly Wages for the Four Standard 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 Standard 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 2013 (the most recent year that data is available) is then smoothed for use in the indexation process in Exhibit VII-G.

I. 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. 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 below.

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
  - The Reopened Ratio of 5% applies to the post-2000 years.
  - A Reopened Ratio of 15% applies to the pre-2001 years.
- Denied Awarded
  - The Award Ratio of 100% applies to the post-2000 years.
  - 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-2001years 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 Standard Classes, the Four Standard Classes Combined, the Other Classes Combined and All Classes Combined.

B-1. 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, and now also Co-Gen) 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.)

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 with one exception. 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. 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 re-opened 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 Standard 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 2013. 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. For this scenario, Commuted, Compromised, and Widow Only claims are unchanged from the Base Scenario, but all other claims are re-evaluated with 630 weeks of State payments. 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 1.4962% to 1.4338%. 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 Standard 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, 2015 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, de-trended, 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 0.9980. 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 Principles 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 of future events that are subject to a variety of potential sources of variation. These sources include, but are not necessarily 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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Coal Mine Compensation Rating Bureau
Current and Proposed Loss Costs
Manual Including Loadings

	2013 Developed Payroll	(1) Approved Loss Cost Manual	(2) Proposed Loss Cost Manual	(3) Percent Change
Underground Anthracite:				
Traumatic (1010)	$175,900	$20.04	$20.37	1.6%
State O.D. (1011)	382,329	4.58	5.10	11.4%
*Federal Basic/Ex (0160)	382,329	12.15	12.68	4.4%
Total	xx	36.77	38.15	3.8%
Underground Bituminous:				
Traumatic (1001)	$146,145,680	$5.68	$5.81	2.3%
State O.D. (1002)	145,939,251	0.54	0.68	25.0%
*Federal Basic/Ex (0158)	141,449,556	0.66	0.81	22.7%
Total	xx	6.88	7.30	6.1%
Surface Anthracite:				
Traumatic (1012)	$22,127,846	$7.38	$9.21	24.8%
State O.D. (1016)	22,127,846	2.57	2.29	-10.9%
*Federal Basic/Ex (0153)	20,261,498	3.70	3.31	-10.5%
Total	xx	13.65	14.81	8.5%
Surface Bituminous:				
Traumatic (1014)	$63,507,517	$1.85	$2.22	20.0%
State O.D. (1013)	63,507,517	0.16	0.15	-6.3%
*Federal Basic/Ex (0156)	64,837,518	0.40	0.50	25.0%
Total	xx	2.41	2.87	19.1%
Four Standard Classifications:				
Traumatic	$231,956,943	$4.80	$5.16	7.5%
State O.D.	231,956,943	0.64	0.70	9.4%
*Federal Basic/Ex	226,930,901	0.88	0.96	9.1%
Total	xx	6.32	6.82	7.9%

*Federal Basic and Excess are after the Federal Administrative / Law Change

Sources: Payroll from Exhibit X-A
Column (1) Loss Costs (Approved 4/1/2014) - 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
Manual Including Loadings

		2013 Developed Payroll	(1) Approved Loss Cost Manual	(2) Proposed Loss Cost Manual	(3) Percent Change
Coke:					
	Traumatic (1469)	$4,791,910	$6.40	$5.84	-8.8%
	State O.D. (1017)	4,791,910	0.12	0.12	0.0%
	*Federal Basic/Ex (0154)	4,791,910	0.11	0.11	0.0%
	Total	xx	6.63	6.07	-8.4%
Auger:					
	Traumatic (1015)	$1,093,790	$14.75	$15.98	8.3%
	State O.D. (1019)	1,093,790	0.25	0.25	0.0%
	*Federal Basic/Ex (0157)	1,093,790	0.39	0.40	2.6%
	Total	xx	15.39	16.63	8.1%
Co-Gen Anthracite:					
	Traumatic (1021)	$8,678,376	$1.98	$2.46	24.2%
	State O.D. (1022)	8,678,376	0.40	0.37	-7.5%
	*Federal Basic/Ex (0181)	7,958,314	0.54	0.49	-9.3%
	Total	xx	2.92	3.32	13.7%
Co-Gen Bituminous:					
	Traumatic (1023)	$13,133,423	$1.07	$1.10	2.8%
	State O.D. (1024)	13,133,423	0.38	0.40	5.3%
	*Federal Basic/Ex (0182)	13,133,423	0.33	0.35	6.1%
	Total	xx	1.78	1.85	3.9%
Prep Plant Anthracite:					
	Traumatic (1025)	$8,266,396	$5.49	$4.91	-10.6%
	State O.D. (1026)	8,266,396	2.67	2.69	0.7%
	*Federal Basic/Ex (0183)	7,053,691	1.30	1.17	-10.0%
	Total	xx	9.46	8.77	-7.3%
Prep Plant Bituminous:					
	Traumatic (1027)	$33,935,906	$1.00	$1.18	18.0%
	State O.D. (1028)	33,935,906	0.29	0.29	0.0%
	*Federal Basic/Ex (0184)	33,303,121	0.44	0.45	2.3%
	Total	xx	1.73	1.92	11.0%
Other Classifications:					
	Traumatic	$69,899,801	$2.25	$2.31	2.7%
	State O.D.	69,899,801	0.59	0.59	0.0%
	*Federal Basic/Ex	67,334,249	0.50	0.49	-2.0%
	Total	xx	3.34	3.39	1.5%
Grand Total:					
	Traumatic	$301,856,744	$4.21	$4.50	6.9%
	State O.D.	301,856,744	0.63	0.67	6.3%
	*Federal Basic/Ex	294,265,150	0.79	0.86	8.9%
	Total	xx	5.63	6.03	7.1%

*Federal Basic and Excess are after the Federal Administrative / Law Change

Sources: Payroll from Exhibit X-A
Column (1) Loss Costs (Approved 4/1/2014) - 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

	2013 Developed Payroll	(1) Approved Unloaded Manual	(2) Indicated Unloaded Manual	(3) Proposed Unloaded Manual	(4) Percent Change
Underground Anthracite:					
Traumatic (1010)	$175,900	$19.43	$20.45	$19.76	1.7%
State O.D. (1011)	382,329	4.58	5.10	5.10	11.4%
*Federal Basic/Ex (0160)	382,329	12.15	12.68	12.68	4.4%
Total	xx	36.16	38.23	37.54	3.8%
Underground Bituminous:					
Traumatic (1001)	$146,145,680	$5.33	$5.47	$5.47	2.6%
State O.D. (1002)	145,939,251	0.54	0.78	0.68	25.0%
*Federal Basic/Ex (0158)	141,449,556	0.66	0.81	0.81	22.7%
Total	xx	6.53	7.06	6.96	6.6%
Surface Anthracite:					
Traumatic (1012)	$22,127,846	$7.21	$9.81	$9.01	25.0%
State O.D. (1016)	22,127,846	2.57	2.29	2.29	-10.9%
*Federal Basic/Ex (0153)	20,261,498	3.70	3.31	3.31	-10.5%
Total	xx	13.48	15.41	14.61	8.4%
Surface Bituminous:					
Traumatic (1014)	$63,507,517	$1.78	$2.15	$2.15	20.8%
State O.D. (1013)	63,507,517	0.16	0.15	0.15	-6.3%
*Federal Basic/Ex (0156)	64,837,518	0.40	0.52	0.50	25.0%
Total	xx	2.34	2.82	2.80	19.7%
Four Standard Classifications:					
Traumatic	$231,956,943	$4.55	$4.99	$4.91	7.9%
State O.D.	231,956,943	0.64	0.76	0.70	9.4%
*Federal Basic/Ex	226,930,901	0.88	0.97	0.96	9.1%
Total	xx	6.07	6.72	6.57	8.2%

*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

		2013 Developed Payroll	(1) Approved Unloaded Manual	(2) Indicated Unloaded Manual	(3) Proposed Unloaded Manual	(4) Percent Change
Coke:						
	Traumatic (1469)	$4,791,910	$6.25	$5.70	$5.70	-8.8%
	State O.D. (1017)	4,791,910	0.12	0.12	0.12	0.0%
	*Federal Basic/Ex (0154)	4,791,910	0.11	0.11	0.11	0.0%
	Total	xx	6.48	5.93	5.93	-8.5%
Auger:						
	Traumatic (1015)	$1,093,790	$14.38	$15.58	$15.58	8.3%
	State O.D. (1019)	1,093,790	0.25	0.25	0.25	0.0%
	*Federal Basic/Ex (0157)	1,093,790	0.39	0.40	0.40	2.6%
	Total	xx	15.02	16.23	16.23	8.1%
Co-Gen Anthracite:						
	Traumatic (1021)	$8,678,376	$1.90	$2.96	$2.38	25.0%
	State O.D. (1022)	8,678,376	0.40	0.37	0.37	-7.5%
	*Federal Basic/Ex (0181)	7,958,314	0.54	0.49	0.49	-9.3%
	Total	xx	2.84	3.82	3.24	14.1%
Co-Gen Bituminous:						
	Traumatic (1023)	$13,133,423	$1.01	$1.05	$1.05	4.0%
	State O.D. (1024)	13,133,423	0.38	0.40	0.40	5.3%
	*Federal Basic/Ex (0182)	13,133,423	0.33	0.35	0.35	6.1%
	Total	xx	1.72	1.80	1.80	4.7%
Prep Plant Anthracite:						
	Traumatic (1025)	$8,266,396	$5.35	$4.79	$4.79	-10.5%
	State O.D. (1026)	8,266,396	2.67	2.69	2.69	0.7%
	*Federal Basic/Ex (0183)	7,053,691	1.30	1.17	1.17	-10.0%
	Total	xx	9.32	8.65	8.65	-7.2%
Prep Plant Bituminous:						
	Traumatic (1027)	$33,935,906	$0.94	$1.13	$1.13	20.2%
	State O.D. (1028)	33,935,906	0.29	0.29	0.29	0.0%
	*Federal Basic/Ex (0184)	33,303,121	0.44	0.45	0.45	2.3%
	Total	xx	1.67	1.87	1.87	12.0%
Other Classifications:						
	Traumatic	$69,899,801	$2.17	$2.31	$2.24	3.2%
	State O.D.	69,899,801	0.59	0.59	0.59	0.0%
	*Federal Basic/Ex	67,334,249	0.50	0.49	0.49	-2.0%
	Total	xx	3.26	3.39	3.32	1.8%
Grand Total:						
	Traumatic	$301,856,744	$4.00	$4.37	$4.29	7.3%
	State O.D.	301,856,744	0.63	0.72	0.67	6.3%
	*Federal Basic/Ex	294,265,150	0.79	0.86	0.86	8.9%
	Total	xx	5.42	5.95	5.82	7.4%

*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 loss cost.
*Federal O.D. (0160)	Basic/Ex	Indicated loss cost.

Underground Bituminous

Traumatic (1001)		Indicated loss cost.
State O.D. (1002)		Indicated unloaded loss cost limited to 25% (Exhibit III).
*Federal O.D. (0158)	Basic/Ex	Indicated loss cost.

Surface Anthracite

Traumatic (1012)		Indicated unloaded loss cost limited to 25% (Exhibit II).
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 unloaded loss cost limited to 25% (Exhibit IV-A).

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% (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 loss cost.
*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 loss cost.
State O.D. (1028)		Indicated loss cost.
*Federal O.D. (0184)	Basic/Ex	Indicated loss cost.

*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 4-1-2015

	2013 Developed Payroll	(1) Proposed Loss Cost Before Loading	(2) Catastrophe Loss Cost	(3) Loss Cost Including Catastrophe	(4) Loss Cost Including Off-Balance[a]	(5) Loss Cost Inc. Off-Balance[a] & Assessment[b]
Underground Anthracite:						
Traumatic (1010)	$175,900	$19.76	$0.23	$19.99	$20.37	$20.37
State O.D. (1011)	382,329	5.10				5.10
*Federal Basic/Ex (0160)	382,329	12.68				12.68
Total	xx	37.54				38.15
Underground Bituminous:						
Traumatic (1001)	$146,145,680	$5.47	$0.23	$5.70	$5.81	$5.81
State O.D. (1002)	145,939,251	0.68				0.68
*Federal Basic/Ex (0158)	141,449,556	0.81				0.81
Total	xx	6.96				7.30
Surface Anthracite:						
Traumatic (1012)	$22,127,846	$9.01	$0.03	$9.04	$9.21	$9.21
State O.D. (1016)	22,127,846	2.29				2.29
*Federal Basic/Ex (0153)	20,261,498	3.31				3.31
Total	xx	14.61				14.81
Surface Bituminous:						
Traumatic (1014)	$63,507,517	$2.15	$0.03	$2.18	$2.22	$2.22
State O.D. (1013)	63,507,517	0.15				0.15
*Federal Basic/Ex (0156)	64,837,518	0.50				0.50
Total	xx	2.80				2.87
Four Standard Classifications:						
Traumatic	$231,956,943	$4.91	$0.16	$5.07	$5.16	$5.16
State O.D.	231,956,943	0.70				0.70
*Federal Basic/Ex	226,930,901	0.96				0.96
Total	xx	6.57				6.82

*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

	Exper. Rating	1.0000
Exhibit XIV-A	Merit Rating	1.0005
Exhibit XIV-B	Safety Rating	1.0184
	Combined	1.0189

(5)(b) Loss-based Assessment factor in present rates
applied to Traumatic & State OD loss costs =1.0001

Coal Mine Compensation Rating Bureau
Manual Loss Cost Loaded (after Capping)
For Catastrophe, Off-Balances, and Assessment
Proposed to Become Effective 4-1-2015

	2013 Developed Payroll	(1) Proposed Loss Cost Before Loading	(2) Catastrophe Loss Cost	(3) Loss Cost Including Catastrophe	(4) Loss Cost Including Off-Balance[a]	(5) Loss Cost Inc. Off-Balance[a] & Assessment[b]
Coke:						
Traumatic (1469)	$4,791,910	$5.70	$0.03	$5.73	$5.84	$5.84
State O.D. (1017)	4,791,910	0.12				0.12
*Federal Basic/Ex (0154)	4,791,910	0.11				0.11
Total	xx	5.93				6.07
Auger:						
Traumatic (1015)	$1,093,790	$15.58	$0.10	$15.68	$15.98	$15.98
State O.D. (1019)	1,093,790	0.25				0.25
*Federal Basic/Ex (0157)	1,093,790	0.40				0.40
Total	xx	16.23				16.63
Co-Gen Anthracite:						
Traumatic (1021)	$8,678,376	$2.38	$0.03	$2.41	$2.46	$2.46
State O.D. (1022)	8,678,376	0.37				0.37
*Federal Basic/Ex (0181)	7,958,314	0.49				0.49
Total	xx	3.24				3.32
Co-Gen Bituminous:						
Traumatic (1023)	$13,133,423	$1.05	$0.03	$1.08	$1.10	$1.10
State O.D. (1024)	13,133,423	0.40				0.40
*Federal Basic/Ex (0182)	13,133,423	0.35				0.35
Total	xx	1.80				1.85
Prep Plant Anthracite:						
Traumatic (1025)	$8,266,396	$4.79	$0.03	$4.82	$4.91	$4.91
State O.D. (1026)	8,266,396	2.69				2.69
*Federal Basic/Ex (0183)	7,053,691	1.17				1.17
Total	xx	8.65				8.77
Prep Plant Bituminous:						
Traumatic (1027)	$33,935,906	$1.13	$0.03	$1.16	$1.18	$1.18
State O.D. (1028)	33,935,906	0.29				0.29
*Federal Basic/Ex (0184)	33,303,121	0.45				0.45
Total	xx	1.87				1.92
Other Classifications:						
Traumatic	$69,899,801	$2.24	$0.03	$2.27	$2.31	$2.31
State O.D.	69,899,801	0.59				0.59
*Federal Basic/Ex	67,334,249	0.49				0.49
Total	xx	3.32				3.39
Grand Total:						
Traumatic	$301,856,744	$4.29	$0.13	$4.42	$4.50	$4.50
State O.D.	301,856,744	0.67				0.67
*Federal Basic/Ex	294,265,150	0.86				0.86
Total	xx	5.82				6.03

*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	1.0005
Exhibit XIV-B	Safety Rating	1.0184
	Combined	1.0189

(5)(b) Loss-based Assessment factor in present rates
applied to Traumatic & State OD loss costs =1.0001

PAB

COAL MINE COMPENSATION RATING BUREAU **Exhibit II**

TRAUMATIC LOSS COST INDICATIONS

Proposed Unloaded Loss Costs

Classification		Code	(1) 2013 Developed Payroll	(2) Approved Unloaded Loss Cost (Eff 4/01/2014)	(3) Indicated Unloaded Loss Cost	(4) Proposed Unloaded Loss Cost (Exh V-A-1)	(5) Percent Change
Underground:	Anthracite	1010	$175,900	19.43	20.45	19.76	1.7%
	Bituminous	1001	146,145,680	5.33	5.47	5.47	2.6%
Surface:	Anthracite	1012	22,127,846	7.21	9.81	9.01	25.0%
	Bituminous	1014	63,507,517	1.78	2.15	2.15	20.8%
Four Standard Classes			231,956,943	4.55	4.99	4.91	7.9%
Other Classes	Coke	1469	4,791,910	6.25	5.70	5.70	-8.8%
	Auger	1015	1,093,790	14.38	15.58	15.58	8.3%
Co-Gen:	Anthracite	1021	8,678,376	1.90	2.96	2.38	25.0%
	Bituminous	1023	13,133,423	1.01	1.05	1.05	4.0%
Prep Plants:	Anthracite	1025	8,266,396	5.35	4.79	4.79	-10.5%
	Bituminous	1027	33,935,906	0.94	1.13	1.13	20.2%
Other Classes			69,899,801	2.17	2.31	2.24	3.2%
All Classes Combined			301,856,744	4.00	4.37	4.29	7.3%

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)

COAL MINE COMPENSATION RATING BUREAU
STATE OCCUPATIONAL DISEASE LOSS COST

Exhibit III

Classification	(1) 2013 Developed Payroll	(2) Approved Unloaded Loss Cost	(3) Indicated Average Freq. per $1 mill.	(4) Indicated Average Severity	(5) Indicated Loss Cost (Rate)	(6) Indicated Change	(7) Proposed Change	(8) Proposed Loss Cost
Underground								
1011 Anthracite	$382,329	$4.58	0.068774	$741,066	$5.10	11.4%	11.4%	$5.10
1002 Bituminous	$145,939,251	$0.54	0.020580	$377,792	0.78	44.4%	25.0%	0.68
Surface								
1016 Anthracite	$22,127,846	$2.57	0.052897	$432,698	2.29	-10.9%	-10.9%	2.29
1013 Bituminous	$63,507,517	0.16	0.003739	$394,607	0.15	-6.3%	-6.3%	0.15
Four Standard Classes	$231,956,943	$0.64			$0.76	18.8%	9.4%	$0.70
1017 Coke	$4,791,910	0.12	0.003069	394,607	0.12	0.0%	0.0%	0.12
1019 Auger	$1,093,790	0.25	0.006267	394,607	0.25	0.0%	0.0%	0.25
Co-Gen								
1022 Anthracite	$8,678,376	0.40	0.008528	432,698	0.37	-7.5%	-7.5%	0.37
1024 Bituminous	$13,133,423	0.38	0.010134	394,607	0.40	5.3%	5.3%	0.40
Prep Plant								
1026 Anthracite	$8,266,396	2.67	0.062180	432,698	2.69	0.7%	0.7%	2.69
1028 Bituminous	$33,935,906	0.29	0.007380	394,607	0.29	0.0%	0.0%	0.29
Other Classes	$69,899,801	$0.59			$0.59	0.0%	0.0%	$0.59
All Classes Combined	$301,856,744	$0.63			$0.72	14.3%	6.3%	$0.67

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.

COAL MINE COMPENSATION RATING BUREAU
FEDERAL OCCUPATIONAL DISEASE LOSS COST INDICATION

Classification		(1) 2013 Developed Payroll	(2) Approved Unloaded Loss Cost	(3) Indicated Average Freq. per $1 mill.	(4) Indicated Average Severity	(5) Loss Cost (Rate)	(6) Indicated Change	(7) Loss Cost w/ Limitation 25%	(8) % Change w/Limitation 25%
Underground									
Anthracite:	Basic			0.334437	373,301	12.48			
	Excess			0.044829	43,870	0.20			
	Total	$382,329	$12.15			12.68	4.4%	$ 12.68	4.4%
Bituminous:	Basic			0.017906	357,210	0.64			
	Excess			0.007590	221,987	0.17			
	Total	$141,449,556	$0.66			0.81	22.7%	$ 0.81	22.7%
Surface									
Anthracite:	Basic			0.107978	294,904	3.18			
	Excess			0.020712	61,134	0.13			
	Total	$20,261,498	$3.70			3.31	-10.5%	$ 3.31	-10.5%
Bituminous:	Basic			0.014194	342,281	0.49			
	Excess			0.001572	176,880	0.03			
	Total	$64,837,518	$0.40			0.52	30.0%	$ 0.50	25.0%
Four Standard Classes	Basic					0.84			
	Excess					0.13			
	Total	$226,930,901	$0.88			0.97	10.2%	$ 0.96	9.6%
Coke	Basic			0.002493	342,281	0.09			
	Excess			0.001308	176,880	0.02			
	Total	$4,791,910	$0.11			0.11	0.0%	$ 0.11	0.0%
Auger	Basic			0.010230	342,281	0.35			
	Excess			0.002667	176,880	0.05			
	Total	$1,093,790	$0.39			0.40	2.6%	$ 0.40	2.6%
Co-Gen									
Anthracite:	Basic			0.016029	294,904	0.47			
	Excess			0.003152	61,134	0.02			
	Total	$7,958,314	$0.54			0.49	-9.3%	$ 0.49	-9.3%
Bituminous:	Basic			0.008382	342,281	0.29			
	Excess			0.003523	176,880	0.06			
	Total	$13,133,423	$0.33			0.35	6.1%	$ 0.35	6.1%
Prep Plants									
Anthracite:	Basic			0.033842	294,904	1.00			
	Excess			0.028047	61,134	0.17			
	Total	$7,053,691	$1.30			1.17	-10.0%	$ 1.17	-10.0%
Bituminous:	Basic			0.011804	342,281	0.40			
	Excess			0.002893	176,880	0.05			
	Total	$33,303,121	$0.44			0.45	2.3%	$ 0.45	2.3%
Other Classes	Basic					0.43			
	Excess					0.06			
	Total	$67,334,249	$0.50			0.49	-2.0%	$ 0.49	-2.0%
All Classes Combined	Basic					0.75			
	Excess					0.11			
	Total	$294,265,150	$0.79			0.86	8.9%	$ 0.86	8.9%

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%

COAL MINE COMPENSATION RATING BUREAU

Federal Basic Occupational Disease Classification Frequency (Basic)

Classification		Class Code	(1) Estimated Miner Years 2004-2013	(2) Claim Frequency Per 100 Miner Years Approved (Eff 4/1/2014)	(3) Trended to 4/1/2015	(4) Indicated (Eff 4/1/2015)	(5) Credibility Expected Awarded Claims	(6) Credibility Factor	(7) Claim Frequency Indicated w/ Credibility	(8) Change in Indication After Cred.	(9) Payroll 2004-2013	(10) Frequency Per $1M Payroll
Underground:	Anthracite	0160	310.8	1.296254	1.296254	1.792361	4.029	0.274	1.432187	10.5%	13,309,650	0.334437
	Bituminous	0158	16,884.3	0.089115	0.089115	0.128020	15.046	0.529	0.109696	23.1%	1,034,353,003	0.017906
Surface:	Anthracite	0153	3,652.3	0.521583	0.521583	0.446908	19.050	0.596	0.477077	-8.5%	161,369,102	0.107978
	Bituminous	0156	15,842.8	0.051331	0.051331	0.078818	8.132	0.389	0.062024	20.8%	692,297,572	0.014194
Four Standard Classifications			36,690.2	0.126075	0.126075	0.152617	46.257		0.136885		1,901,329,327	0.026415
	Coke	0154	2,044.3	0.010088	0.010088	0.016191	0.206	0.062	0.010467	3.8%	85,816,881	0.002493
	Auger	0157	268.4	0.044870	0.044870	0.033536	0.120	0.047	0.044337	-1.2%	11,632,793	0.010230
Co-Gen:	Anthracite	0181	1,929.1	0.075126	0.075126	0.042978	1.449	0.164	0.069854	-7.0%	84,071,987	0.016029
	Bituminous	0182	1,524.9	0.049226	0.049226	0.058365	0.751	0.118	0.050304	2.2%	91,516,531	0.008382
Prep Plants:	Anthracite	0183	1,318.2	0.159389	0.159389	0.105138	2.101	0.198	0.148647	-6.7%	57,900,944	0.033842
	Bituminous	0184	3,867.5	0.072117	0.072117	0.071752	2.789	0.228	0.072034	-0.1%	236,015,983	0.011804
Other Classes			10,952.4	0.067718	0.067718	0.057531	7.416		0.065675		566,955,119	0.012687
Total			47,642.6	0.112660	0.112660	0.130758	53.673		0.120515		2,468,284,446	0.023262

Source: Column (1) 2004-2013 Miner Years; Exhibit VIII-B-2, pgs 1-3
Column (2) Approved Claim Frequency (Eff 4/1/2014) converted to Miner Years.
-See Exhibit IV-B-4, Col.(10)
Column (3) Approved claim freqency trended to 4/1/2015@ 0.0%
Column (4) Indicated Freqency - Exhibit IV-B-3, col.(5)
Column (5) Expected Awarded Claims = (1) x (2) / 100
Column (6) Factor Z = [(5) divided by 53.673]^(0.5)
Column (7) =(4)*(6)+((3)*(1-(6))
Column (8) =(7)/(2)-1
Column (9) 2004-2013 Payrolls Exhibit X-A
Column (10) = (7) X (1) / [(9) * 10,000]

Columns (2),(3),(4) & (7) totals and subtotals are weighted with 10 year estimated miner years.

COAL MINE COMPENSATION RATING BUREAU

Federal Excess Occupational Disease Classification Frequency (Excess)

Classification		Class Code	(1) Estimated Miner Years 2004-2013	(2) Claim Frequency Per 100 Miner Years: Approved (Eff 4/1/2014)	(3) Trended to 4/1/2015	(4) Indicated (Eff 4/1/2015)	(5) Credibility: Expected Awarded Claims	(6) Factor	(7) Claim Frequency Indicated w/ Credibility	(8) Change in Indication After Cred.	(9) Payroll 2004-2013	(10) Claim Freq. Per $1M Payroll
Underground:	Anthracite	0160	310.8	0.207643	0.207643	0.131203	0.645	0.205	0.191973	-7.5%	13,309,650	0.044829
	Bituminous	0158	16,884.3	0.038155	0.038155	0.051026	6.442	0.648	0.046495	21.9%	1,034,353,003	0.007590
Surface:	Anthracite	0153	3,652.3	0.104811	0.104811	0.078215	3.828	0.500	0.091513	-12.7%	161,369,102	0.020712
	Bituminous	0156	15,842.8	0.007641	0.007641	0.004890	1.211	0.281	0.006868	-10.1%	692,297,572	0.001572
Four Standard Classifications			36,690.2	0.033050	0.033050	0.034490	12.126		0.035098		1,901,329,327	0.006773
	Coke	0154	2,044.3	0.005696	0.005696	0.003350	0.116	0.087	0.005492	-3.6%	85,816,881	0.001308
	Auger	0157	268.4	0.011950	0.011950	0.003469	0.032	0.046	0.011560	-3.3%	11,632,793	0.002667
Co-Gen:	Anthracite	0181	1,929.1	0.015313	0.015313	0.003973	0.295	0.139	0.013737	-10.3%	84,071,987	0.003152
	Bituminous	0182	1,524.9	0.020763	0.020763	0.023417	0.317	0.144	0.021145	1.8%	91,516,531	0.003523
Prep Plants:	Anthracite	0183	1,318.2	0.129427	0.129427	0.110765	1.706	0.334	0.123194	-4.8%	57,900,944	0.028047
	Bituminous	0184	3,867.5	0.018899	0.018899	0.013186	0.731	0.218	0.017654	-6.6%	236,015,983	0.002893
Other Classes			10,952.4	0.029195	0.029195	0.022658	3.197		0.027733		566,955,119	0.005357
Total			47,642.6	0.032164	0.032164	0.031770	15.323		0.033405		2,468,284,446	0.006448

Source: Column (1) 2004-2013 Miner Years; Exhibit VIII-B-2, pgs 1-3
Column (2) Approved Claim Frequency (Eff 4/1/2014) converted to Miner Years.
-See Exhibit IV-B-6, Col.(10)
Column (3) Approved claim freqency trended to 4/1/2015 @ 0.0%
Column (4) Indicated Freqency - Exhibit IV-B-5 col.(5)
Column (5) Expected Awarded Claims = (1) x (3) / 100
Column (6) Factor Z = [(5) / 15.323]^(.5)
Column (7) = (4)*(6)+((3)*(1-(6))
Column (8) =(7)/(2)-1
Column (9) 2004-2013 Payrolls Exhibit X-A
Column (10) = (7) X (1) / [(9) * 10,000]

Columns (2),(3),(4) & (7) totals and subtotals are weighted with 10 year estimated miner years.

PAB

File: C:\Clients\Coal Mine\2014 Rate Filing\[04-B.xlsm]IV-B-2

Effective Date - April 01, 2015

Run Date: 10/02/14 11:17

Checksum:7,405,038,411.601560

Coal Mine Compensation Rating Bureau

Federal Basic Occupational Disease Classification Frequency

Classification		Class Code	(1) Estimated Miner Years Year 2013	(2) Approved Basic Freq. Equivalent Per 100 Miner Years 4/1/2014	(3) Modeled Indication	(4) Experience Indication	(5) Weighted Average of Cols. (3) & (4)	(6) Percent Change
Underground:	Anthracite	0160	7.7	1.296254	0.972283	2.065720	1.792361	38.27%
	Bituminous	0158	2,080.2	0.089115	0.217780	0.098100	0.128020	43.66%
Surface:	Anthracite	0153	408.2	0.521583	0.370221	0.472470	0.446908	-14.32%
	Bituminous	0156	1,306.2	0.051331	0.107101	0.069390	0.078818	53.55%
Four Standard Classifications			3,802.3	0.125008	0.197652	0.132413	0.148723	
	Coke	0154	96.5	0.010088	0.016522	0.016080	0.016191	60.49%
	Auger	0157	22.0	0.044870	0.037695	0.032150	0.033536	-25.26%
Co-Gen:	Anthracite	0181	160.3	0.075126	0.051403	0.040170	0.042978	-42.79%
	Bituminous	0182	193.1	0.049226	0.068400	0.055020	0.058365	18.57%
Prep Plants:	Anthracite	0183	142.1	0.159389	0.123552	0.099000	0.105138	-34.04%
	Bituminous	0184	489.8	0.072117	0.088828	0.066060	0.071752	-0.51%
	Other Classes		1,103.8	0.073818	0.076949	0.059564	0.063910	
		Total	4,906.1	0.113491	0.170496	0.116023	0.129641	14.23%

Source: Column (1) 2013 Estimated Miner Years Exhibit VIII-B-2
Column (2) Approved 4/1/2014 Exhibit IV-B-4 Col(10)
Column (3) From Model Exhibit VIII-F Pages 1-13
Column (4) Experience Exhibit VIII-B-2, page 1,2&3
Column (5) = (0.25)*Col.(3)+ (0.75)*Col.(4)
Column (6) Percentage (5)/(2) -1

Totals and subtotals are weighted by Miner Years.

COAL MINE COMPENSATION RATING BUREAU

Federal Basic Occupational Disease Classification Frequency

Classification		Class Code	(1) Approved Claim Freq. 4/1/2014	(2) Payroll 000,000's 2003-2012	(3) Estimated Awarded Claims 2003-2012 (1) x (2)	(4) Estimated Miner Years 2004-2013	(5) Estimated Miner Years 2013	(6) Adjustment Factor	(7) Average Weekly Wage 2003	(8) Payroll 000,000's 2003	(9) Estimated Miner Years 2003-2012	(10) Approved Frequency Equivalent Per 100 Miner Years
Underground:	Anthracite	0160	0.308746	14.281586	4.409383	310.8	7.7	1.041	675	1.354265	340.2	1.296254
	Bituminous	0158	0.014894	929.401853	13.842511	16,884.3	2,080.2	1.426	675	36.498406	15,533.3	0.089115
Surface:	Anthracite	0153	0.121693	153.035813	18.623387	3,652.3	408.2	1.041	675	11.928209	3,570.6	0.521583
	Bituminous	0156	0.012045	675.333794	8.134396	15,842.8	1,306.2	1.041	675	47.873740	15,846.8	0.051331
Four Standard Classifications				1,772.053046		36,690.2	3,802.3			97.654620	35,290.8	
	Coke	0154	0.002467	92.559051	0.228343	2,044.3	96.5	1.041	675	11.534080	2,263.5	0.010088
	Auger	0157	0.010660	11.641226	0.124095	268.4	22.0	1.041	675	1.102223	276.6	0.044870
Co-Gen:	Anthracite	0181	0.017720	83.123292	1.472945	1,929.1	160.3	1.041	675	7.009619	1,960.6	0.075126
	Bituminous	0182	0.008419	81.435631	0.685607	1,524.9	193.1	1.426	675	3.052523	1,392.8	0.049226
Prep Plants:	Anthracite	0183	0.037291	54.255251	2.023233	1,318.2	142.1	1.041	675	3.407998	1,269.4	0.159389
	Bituminous	0184	0.012131	212.908068	2.582788	3,867.5	489.8	1.426	675	10.195206	3,581.4	0.072117
Other Classes				535.922519		10,952.4	1,103.8			36.301649	10,744.2	
Total				2,307.975565		47,642.6	4,906.1			133.956269	46,035.0	

Source:
(1) From Approved Filing Eff. 4/1/2014 See Exhibit X-F
(2) Exhibit X-A-1 (Federal OD payroll)
(3) = (1)x(2)
(4) Exhibit VIII-B-2
(5) Exhibit VIII-B-2
(6) Exhibit X-G
(7) Exhibit XII-D
(8) Exhibit X-A-1 (Federal OD payroll)
(9) =(4)-(5)+(8)/((6)x(7)x52) x 1,000,000
(10) = {(3)/(9)}x100

Coal Mine Compensation Rating Bureau

Federal Excess Occupational Disease Classification Frequency

Classification		Class Code	(1) Estimated Miner Years 2013	(2) Approved Frequency Per 100 Miner Years 4/1/2014	(3) Modeled Indication	(4) Experience Indication	(5) Weighted Average of Cols. (3) & (4)	(6) Percent Change
Underground:	Anthracite	0160	7.7	0.207643	0.005474	0.173112	0.131203	-36.81%
	Bituminous	0158	2,080.2	0.038155	0.035958	0.056048	0.051026	33.73%
Surface:	Anthracite	0153	408.2	0.104811	0.071149	0.080570	0.078215	-25.38%
	Bituminous	0156	1,306.2	0.007641	0.003702	0.005286	0.004890	-36.00%
Four Standard Classifications			3,802.3	0.035172	0.028594	0.041479	0.038258	8.77%
	Coke	0154	96.5	0.005696	0.000204	0.004398	0.003350	-41.20%
	Auger	0157	22.0	0.011950	0.000677	0.004399	0.003469	-70.97%
Co-Gen:	Anthracite	0181	160.3	0.015313	0.002711	0.004394	0.003973	-74.05%
	Bituminous	0182	193.1	0.020763	0.005076	0.029531	0.023417	12.79%
Prep Plants:	Anthracite	0183	142.1	0.129427	0.125257	0.105934	0.110765	-14.42%
	Bituminous	0184	489.8	0.018899	0.002811	0.016644	0.013186	-30.23%
	Other Classes		1,103.8	0.031640	0.018685	0.027300	0.025146	-20.52%
		Total	4,906.1	0.034377	0.026365	0.038289	0.035308	2.71%

Source: Column (1) 2013 Estimated Miner Years Exhibit VIII-B-2 pp. 1-3
Column (2) Approved 4/1/2014 Exhibit IV-B-6 Col(10)
Column (3) From Model Exhibit VII-L Pages 1-13
Column (4) Exhibit VII-B-2, page 1,2&3 (Federal Excess Frequency)
Column (5) = (.25)*Col.(3)+ (.75)*Col.(4)
Column (6) Percentage (5)/(2) -1

Totals and subtotals are weighted with Miner Years

COAL MINE COMPENSATION RATING BUREAU

Federal Excess Occupational Disease Classification Frequency

Classification		Class Code	(1) Approved Claim Freq. Per $1M Payroll 4/1/2014	(2) Payroll 000,000's 2003-2012	(3) Estimated Awarded Claims 2003-2012 (1) x (2)	(4) Estimated Miner Years 2004-2013	(5) Estimated Miner Years 2013	(6) Adjustment Factor	(7) Average Weekly Wage 2003	(8) Payroll 000,000's 2003	(9) Estimated Miner Years 2003-2012	(10) Frequency Per 100 Miner Years
Underground:	Anthracite	0160	0.049457	14.281586	0.706324	310.8	7.7	1.041	675	1.354265	340.2	0.207643
	Bituminous	0158	0.006377	929.401853	5.926796	16,884.3	2,080.2	1.426	675	36.498406	15,533.3	0.038155
Surface:	Anthracite	0153	0.024454	153.035813	3.742338	3,652.3	408.2	1.041	675	11.928209	3,570.6	0.104811
	Bituminous	0156	0.001793	675.333794	1.210873	15,842.8	1,306.2	1.041	675	47.873740	15,846.8	0.007641
Four Standard Classifications				1,772.053046		36,690.2	3,802.3			97.654620	35,290.8	
	Coke	0154	0.001393	92.559051	0.128935	2,044.3	96.5	1.041	675	11.534080	2,263.5	0.005696
	Auger	0157	0.002839	11.641226	0.033049	268.4	22.0	1.041	675	1.102223	276.6	0.011950
Co-Gen:	Anthracite	0181	0.003612	83.123292	0.300241	1,929.1	160.3	1.041	675	7.009619	1,960.6	0.015313
	Bituminous	0182	0.003551	81.435631	0.289178	1,524.9	193.1	1.426	675	3.052523	1,392.8	0.020763
Prep Plants:	Anthracite	0183	0.030281	54.255251	1.642903	1,318.2	142.1	1.041	675	3.407998	1,269.4	0.129427
	Bituminous	0184	0.003179	212.908068	0.676835	3,867.5	489.8	1.426	675	10.195206	3,581.4	0.018899
Other Classes				535.922519		10,952.4	1,103.8			36.301649	10,744.2	
Total				2,307.975565		47,642.6	4,906.1			133.956269	46,035.0	

Source:
(1) From Approved Filing Eff. 4/1/2014 See Exhibit X-F
(2) Exhibit X-A-1
(3) = (1)x(2)
(4) Exhibit VIII-B-2
(5) Exhibit VIII-B-2
(6) CMCRB data, last 10 years. See Exhibit X-G
(7) Exhibit XII-D
(8) Exhibit X-A-1
(9) =(4)-(5)+(8)/((6)x(7)x52) x 1,000,000
(10) = {(1)x(2)/(9)}x100

COAL MINE COMPENSATION RATING BUREAU
Traumatic Loss and Classification Credibility

Classification		Code	(1) 5 Year Payroll	2013 Payroll	(2) Loss Cost/Unloaded Approved (Eff 4/01/2014)	(3) Loss Cost/Unloaded Approved on Level	(4) Loss Cost/Unloaded Indicated (Eff 04/01/2015)	(5) Credibility Five Year Expected Losses	(6) Credibility Credibility Factor	(7) Indicated w/ Credibility Indicated Loss Cost	(8) Indicated w/ Credibility Indicated Change	(9) Proposed Change after Limitation	(10) Proposed Loss Cost	(11) Proposed Change Excluding Trend
Underground:	Bituminous	1001	$679,562,718	$146,145,680	$5.33	$5.38	5.47	36,220,693	1.00	5.47	2.6%	2.6%	5.47	1.7%
Surface:	Anthracite	1012	$100,199,103	22,127,846	7.21	7.27	9.81	7,224,355	1.00	9.81	36.1%	25.0%	9.01	23.9%
	Bituminous	1014	$360,510,834	63,507,517	1.78	1.80	2.15	6,417,093	1.00	2.15	20.8%	20.8%	2.15	19.7%
Three Major Classifications			1,140,272,655	231,781,043	4.37	4.41	4.80	49,862,141						
	Coke	1469	$24,738,311	4,791,910	6.25	6.31	5.07	1,546,144	0.49	5.70	-8.8%	-8.8%	5.70	-9.6%
Co-Gen:	Anthracite	1021	$47,157,287	8,678,376	1.90	1.92	4.72	895,988	0.37	2.96	55.8%	25.0%	2.38	24.1%
	Bituminous	1023	$47,882,693	13,133,423	1.01	1.02	1.12	483,615	0.27	1.05	4.0%	4.0%	1.05	3.0%
Prep Plants:	Anthracite	1025	$36,685,953	8,266,396	5.35	5.40	4.29	1,962,698	0.55	4.79	-10.5%	-10.5%	4.79	-11.3%
	Bituminous	1027	$149,443,845	33,935,906	0.94	0.95	1.34	1,404,772	0.47	1.13	20.2%	20.2%	1.13	19.1%
	Auger	1015	$4,811,112	1,093,790	14.38	14.51	17.74	691,838	0.33	15.58	8.3%	8.3%	15.58	7.4%
Subtotal (6)			310,719,201	69,899,801	2.25	2.27	2.72	6,985,055					2.33	
Underground:	Anthracite	1010	$511,132	175,900	19.43	19.60	21.30 [a]	99,313	0.12	20.45 [b]	5.2%	1.7%	19.76 [c]	0.8%
Subtotal (7)			311,230,333	70,075,701	2.28		2.75	7,084,368						
Total (Based on 5-year Payroll)			$1,451,502,988		3.92		4.36	$56,946,509		4.30				
Total (Based on 2013 Payroll, see Exhibit II)				$301,856,744	4.00					4.37		7.3%	4.29	

Source: (1) Exhibit V-B
(2) Unloaded Loss Cost Current (Eff 4/01/2014) Exhibit X-B page 2
(3) = (2) X Trend =(2) X(1.009)
1.009=Weighted average of 1.016 and 1.003
Weights derived from 5 year Medical (27,182,552) and Indemnity (36,855,591) reported losses. Exhibit V-B, pg. 1
(4) Exhibit V-B except Underground Anthracite for which see Ex V-A-2
(5) Expected Losses = Column (1) times Column (2) divided by 100
(6) Factor Z = [(5) divided by 6,417,093]^(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) Col.(2) x (1.0 +Col.(9))
(11) Col.(10)/1.009/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

Calculation of Anthracite Underground Loss Cost

	Indicated	Proposed
Multiplicative Method (Anthracite: Underground vs. Surface)		
Differential Factor from Study	2.66	2.66
Indicated Anthracite Surface Loss Cost	9.81 *	9.01 *
Indicated Anthracite Underground Loss Cost	26.09	23.97
Comparative Hazard Method #1 (Anthracite vs. Bituminous)		
Differential Factor from Study	2.41	2.41
Indicated Bituminous Underground Loss Cost:	5.47 *	5.47 *
Indicated Anthracite Underground Loss Cost	13.18	13.18
Comparative Hazard Method #2 (Surface vs. Underground)		
Differential Factor from Study	2.51	2.51
Indicated Anthracite Surface Loss Cost:	9.81 *	9.01 *
Indicated Anthracite Underground Loss Cost	24.62	22.62
Average	21.30	19.92

* Souce: Exhibit V-A-1

Coal Mine Compensation Rating Bureau
Traumatic Loss Cost Indication
All Classifications Combined (10 Classes)

Accident Year	(1) Reported Losses	(2) Loss Development	(3) Trend Factor	(4) Ultimate Losses	(5) Loss Cost
Indemnity					
2009	5,433,501	1.0186	0.7255	4,015,326	1.75
2010	6,918,124	1.0428	1.0174	7,339,747	2.73
2011	8,225,491	1.1058	1.0143	9,225,817	2.84
2012	6,826,563	1.3155	1.0113	9,057,414 *	2.78
2013	3,407,539	2.1006	1.0083	7,217,287	2.39
5 Years	$30,811,218			$36,855,591	2.54
Medical					
2009	2,983,393	1.1706	0.7914	2,763,854	1.20
2010	4,413,176	1.1806	1.0956	5,708,290	2.12
2011	5,633,374	1.1910	1.0783	7,234,690	2.23
2012	5,258,148	1.2222	1.0613	6,770,001 *	2.08
2013	3,352,536	1.3437	1.0446	4,705,717	1.56
5 Years	$21,640,627			$27,182,552	1.87

Indemnity & Medical	(6) Developed Payroll				
2009	229,462,394			6,779,180	2.95
2010	269,231,509			13,048,037	4.85
2011	324,841,755			16,460,507	5.07
2012	326,110,586			15,827,415	4.86
2013	301,856,744			11,923,004	3.95
5 Years	$1,451,502,988			$64,038,143	4.41

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

* Claim 46135 has been capped at $1,250,000. See V-B, page 3b

PAB

Coal Mine Compensation Rating Bureau
Traumatic Loss Cost Indication
Three 100% Credibility Classifications (3 Classes)

Accident Year	(1) Reported Losses	(2) Loss Development	(3) Trend Factor	(4) Ultimate Losses	(5) Loss Cost
Indemnity					
2009	4,603,228	1.0186	0.7255	3,401,760	1.88
2010	6,124,322	1.0428	1.0174	6,497,566	3.04
2011	7,306,924	1.1058	1.0143	8,195,540	3.19
2012	5,851,278	1.3155	1.0113	7,759,929 *	3.02
2013	2,969,600	2.1006	1.0083	6,289,717	2.71
5 Years	$26,855,352			$32,144,512	2.82
Medical					
2009	2,400,546	1.1706	0.7914	2,223,897	1.23
2010	3,811,779	1.1806	1.0956	4,930,404	2.31
2011	4,626,472	1.1910	1.0783	5,941,571	2.31
2012	4,474,907	1.2222	1.0613	5,754,042 *	2.24
2013	2,656,770	1.3437	1.0446	3,729,120	1.61
5 Years	$17,970,474			$22,579,034	1.98

Indemnity & Medical	(6) Developed Payroll				
2009	180,913,862			5,625,657	3.11
2010	213,694,310			11,427,970	5.35
2011	256,742,192			14,137,111	5.50
2012	257,141,248			13,513,971	5.26
2013	231,781,043			10,018,837	4.32
5 Years	$1,140,272,655			$54,723,546	4.80

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

* Claim 46135 has been capped at $1,250,000. See V-B, page 3b

PAB

Coal Mine Compensation Rating Bureau
Traumatic Loss Cost Indication
Underground Bituminous 1001

Accident Year	(1) Reported Losses	(2) Loss Development	(3) Trend Factor	(4) Ultimate Losses	(5) Loss Cost
Indemnity					
2009	3,149,591	1.0186	0.7255	2,327,530	2.27
2010	4,640,360	1.0428	1.0174	4,923,165	3.89
2011	4,751,042	1.1058	1.0143	5,328,830	3.56
2012	3,905,837	1.3155	1.0113	5,171,782 *	3.35
2013	1,689,000	2.1006	1.0083	3,577,361	2.45
5 Years	$18,135,830			$21,328,668	3.14
Medical					
2009	1,757,519	1.1706	0.7914	1,628,188	1.59
2010	2,944,231	1.1806	1.0956	3,808,261	3.01
2011	2,826,654	1.1910	1.0783	3,630,145	2.43
2012	3,449,599	1.2222	1.0613	4,424,093 *	2.87
2013	1,652,477	1.3437	1.0446	2,319,465	1.59
5 Years	$12,630,480			$15,810,152	2.33

Indemnity & Medical	(6) Developed Payroll				
2009	102,684,006			3,955,718	3.85
2010	126,687,464			8,731,426	6.89
2011	149,633,528			8,958,975	5.99
2012	154,412,040			9,595,875	6.22
2013	146,145,680			5,896,826	4.04
5 Years	$679,562,718			$37,138,820	5.47

Source: (1) CMCRB Database as of 04-30-2014
(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

* Claim 46135 has been capped at $1,250,000. See V-B, page 3b

Adjustment for Large Claim 46135 (Accident Year 2012)

	Indemnity	Medical	Total
Uncapped Claim 46135 as of 04-30-2014	246,748	768,314	1,015,062
Percent of Total	24.3%	75.7%	100.00%
Percent x 1,250,000	303,858	946,142	1,250,000

Total Reported Loss as of 04-30-2014	3,905,837	3,449,599
Uncapped Claim 46135	246,748	768,314
Reported Loss ex. Claim 46135	3,659,089	2,681,285
Loss Development Factor	1.3155	1.2222
Trend Factor	1.0113	1.0613
Dev & Trended Loss ex. Claim 46135	4,867,924	3,477,951
Claim 46135 Capped at $1,250,000	303,858	946,142
Dev & Trended Loss w/Claim 46135 Capped	5,171,782	4,424,093

Reported losses do not need to be adjusted for capping because reported total loss on Claim 46135 is less than 1,250,000

Coal Mine Compensation Rating Bureau
Traumatic Loss Cost Indication
Surface Anthracite 1012

Accident Year	(1) Reported Losses	(2) Loss Development	(3) Trend Factor	(4) Ultimate Losses	(5) Loss Cost
Indemnity					
2009	905,379	1.0186	0.7255	669,070	4.07
2010	1,192,855	1.0428	1.0174	1,265,553	8.85
2011	1,122,561	1.1058	1.0143	1,259,079	5.99
2012	1,116,922	1.3155	1.0113	1,485,914	5.65
2013	917,895	2.1006	1.0083	1,944,134	8.79
5 Years	$5,255,612			$6,623,750	6.61
Medical					
2009	265,184	1.1706	0.7914	245,670	1.49
2010	364,153	1.1806	1.0956	471,019	3.29
2011	735,982	1.1910	1.0783	945,189	4.49
2012	538,588	1.2222	1.0613	698,614	2.66
2013	604,221	1.3437	1.0446	848,102	3.83
5 Years	$2,508,128			$3,208,594	3.20

Indemnity & Medical	(6) Developed Payroll				
2009	16,445,462			914,740	5.56
2010	14,295,288			1,736,572	12.14
2011	21,034,600			2,204,268	10.48
2012	26,295,907			2,184,528	8.31
2013	22,127,846			2,792,236	12.62
5 Years	$100,199,103			$9,832,344	9.81

Source: (1) CMCRB Database as of 04-30-2014
(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

Coal Mine Compensation Rating Bureau
Traumatic Loss Cost Indication
Surface Bituminous 1014

Accident Year	(1) Reported Losses	(2) Loss Development	(3) Trend Factor	(4) Ultimate Losses	(5) Loss Cost
Indemnity					
2009	548,258	1.0186	0.7255	405,160	0.66
2010	291,107	1.0428	1.0174	308,848	0.42
2011	1,433,321	1.1058	1.0143	1,607,631	1.87
2012	828,519	1.3155	1.0113	1,102,233	1.44
2013	362,705	2.1006	1.0083	768,222	1.21
5 Years	$3,463,910			$4,192,094	1.16
Medical					
2009	377,843	1.1706	0.7914	350,039	0.57
2010	503,395	1.1806	1.0956	651,124	0.90
2011	1,063,836	1.1910	1.0783	1,366,237	1.59
2012	486,720	1.2222	1.0613	631,335	0.83
2013	400,072	1.3437	1.0446	561,553	0.88
5 Years	$2,831,866			$3,560,288	0.99

Indemnity & Medical	(6) Developed Payroll				
2009	61,784,394			755,199	1.22
2010	72,711,558			959,972	1.32
2011	86,074,064			2,973,868	3.46
2012	76,433,301			1,733,568	2.27
2013	63,507,517			1,329,775	2.09
5 Years	$360,510,834			$7,752,382	2.15

Source: (1) CMCRB Database as of 04-30-2014
(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

Coal Mine Compensation Rating Bureau
Traumatic Loss Cost Indication
Seven Less Than 100% Credibility Classifications (7 Classes)

Accident Year	(1) Reported Losses	(2) Loss Development	(3) Trend Factor	(4) Ultimate Losses	(5) Loss Cost
Indemnity					
2009	830,273	1.0186	0.7255	613,568	1.26
2010	793,802	1.0428	1.0174	842,180	1.52
2011	918,567	1.1058	1.0143	1,030,276	1.51
2012	975,285	1.3155	1.0113	1,297,485	1.88
2013	437,939	2.1006	1.0083	927,570	1.32
5 Years	$3,955,866			$4,711,079	1.51
Medical					
2009	582,847	1.1706	0.7914	539,957	1.11
2010	601,397	1.1806	1.0956	777,885	1.40
2011	1,006,902	1.1910	1.0783	1,293,120	1.90
2012	783,241	1.2222	1.0613	1,015,959	1.47
2013	695,766	1.3437	1.0446	976,597	1.39
5 Years	$3,670,153			$4,603,518	1.48

Indemnity & Medical	(6) Developed Payroll				
2009	48,548,532			1,153,525	2.38
2010	55,537,199			1,620,065	2.92
2011	68,099,563			2,323,396	3.41
2012	68,969,338			2,313,444	3.35
2013	70,075,701			1,904,167	2.71
5 Years	$311,230,333			$9,314,597	2.99

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

Coal Mine Compensation Rating Bureau
Traumatic Loss Cost Indication
Coke 1469

Accident Year	(1) Reported Losses	(2) Loss Development	(3) Trend Factor	(4) Ultimate Losses	(5) Loss Cost
Indemnity					
2009	273,129	1.0186	0.7255	201,841	3.90
2010	19,717	1.0428	1.0174	20,919	0.38
2011	282,589	1.1058	1.0143	316,955	8.81
2012	0	1.3155	1.0113	0	0.00
2013	23,842	2.1006	1.0083	50,498	1.05
5 Years	$599,277			$590,213	2.39
Medical					
2009	226,547	1.1706	0.7914	209,876	4.06
2010	62,830	1.1806	1.0956	81,268	1.50
2011	251,564	1.1910	1.0783	323,072	8.98
2012	2,816	1.2222	1.0613	3,653	0.06
2013	33,020	1.3437	1.0446	46,348	0.97
5 Years	$576,777			$664,217	2.68

Indemnity & Medical	(6) Developed Payroll				
2009	5,173,552			411,717	7.96
2010	5,435,658			102,187	1.88
2011	3,599,086			640,027	17.79
2012	5,738,105			3,653	0.06
2013	4,791,910			96,846	2.02
5 Years	$24,738,311			$1,254,430	5.07

Source: (1) CMCRB Database as of 04-30-2014
(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

PAB

Coal Mine Compensation Rating Bureau
Traumatic Loss Cost Indication
Auger 1015

Accident Year	(1) Reported Losses	(2) Loss Development	(3) Trend Factor	(4) Ultimate Losses	(5) Loss Cost
Indemnity					
2009	96,212	1.0186	0.7255	71,100	7.68
2010	195,903	1.0428	1.0174	207,842	25.76
2011	84,253	1.1058	1.0143	94,499	8.03
2012	38,979	1.3155	1.0113	51,856	6.42
2013	21,273	2.1006	1.0083	45,057	4.12
5 Years	$436,620			$470,354	9.78
Medical					
2009	61,677	1.1706	0.7914	57,138	6.17
2010	134,579	1.1806	1.0956	174,073	21.58
2011	30,464	1.1910	1.0783	39,124	3.33
2012	66,406	1.2222	1.0613	86,137	10.66
2013	19,114	1.3437	1.0446	26,829	2.45
5 Years	$312,240			$383,301	7.97

Indemnity & Medical	(6) Developed Payroll				
2009	926,163			128,238	13.85
2010	806,696			381,915	47.34
2011	1,176,255			133,623	11.36
2012	808,208			137,993	17.08
2013	1,093,790			71,886	6.57
5 Years	$4,811,112			$853,655	17.74

Source: (1) CMCRB Database as of 04-30-2014
(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

PAB

Coal Mine Compensation Rating Bureau
Traumatic Loss Cost Indication
Co-Gen Anthracite 1021

Accident Year	(1) Reported Losses	(2) Loss Development	(3) Trend Factor	(4) Ultimate Losses	(5) Loss Cost
Indemnity					
2009	389,242	1.0186	0.7255	287,648	3.59
2010	131,153	1.0428	1.0174	139,146	1.64
2011	37,158	1.1058	1.0143	41,677	0.36
2012	483,273	1.3155	1.0113	642,930	6.26
2013	147,650	2.1006	1.0083	312,728	3.60
5 Years	$1,188,476			$1,424,129	3.02
Medical					
2009	175,798	1.1706	0.7914	162,862	2.03
2010	54,777	1.1806	1.0956	70,852	0.84
2011	13,608	1.1910	1.0783	17,476	0.15
2012	194,695	1.2222	1.0613	252,543	2.46
2013	212,289	1.3437	1.0446	297,975	3.43
5 Years	$651,167			$801,708	1.70

Indemnity & Medical	(6) Developed Payroll				
2009	8,004,644			450,510	5.63
2010	8,481,228			209,998	2.48
2011	11,720,035			59,153	0.51
2012	10,273,004			895,473	8.72
2013	8,678,376			610,703	7.03
5 Years	$47,157,287			$2,225,837	4.72

Source: (1) CMCRB Database as of 04-30-2014
(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

Coal Mine Compensation Rating Bureau
Traumatic Loss Cost Indication
Co-Gen Bituminous 1023

Accident Year	(1) Reported Losses	(2) Loss Development	(3) Trend Factor	(4) Ultimate Losses	(5) Loss Cost
Indemnity					
2009	0	1.0186	0.7255	0	0.00
2010	12,131	1.0428	1.0174	12,870	0.15
2011	6,299	1.1058	1.0143	7,065	0.08
2012	65,117	1.3155	1.0113	86,629	0.96
2013	31,686	2.1006	1.0083	67,112	0.51
5 Years	$115,233			$173,676	0.36
Medical					
2009	13,188	1.1706	0.7914	12,218	0.16
2010	31,159	1.1806	1.0956	40,303	0.46
2011	40,514	1.1910	1.0783	52,030	0.57
2012	133,047	1.2222	1.0613	172,578	1.91
2013	59,868	1.3437	1.0446	84,032	0.64
5 Years	$277,776			$361,161	0.75

Indemnity & Medical	(6) Developed Payroll				
2009	7,866,413			12,218	0.16
2010	8,732,701			53,173	0.61
2011	9,102,411			59,095	0.65
2012	9,047,745			259,207	2.87
2013	13,133,423			151,144	1.15
5 Years	$47,882,693			$534,837	1.12

Source: (1) CMCRB Database as of 04-30-2014
(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

Coal Mine Compensation Rating Bureau
Traumatic Loss Cost Indication
Prep Plants Anthracite 1025

Accident Year	(1) Reported Losses	(2) Loss Development	(3) Trend Factor	(4) Ultimate Losses	(5) Loss Cost
Indemnity					
2009	35,973	1.0186	0.7255	26,584	0.39
2010	274,952	1.0428	1.0174	291,709	5.06
2011	163,586	1.1058	1.0143	183,480	2.54
2012	113,881	1.3155	1.0113	151,503	1.75
2013	87,877	2.1006	1.0083	186,127	2.25
5 Years	$676,269			$839,403	2.29
Medical					
2009	32,649	1.1706	0.7914	30,246	0.45
2010	187,366	1.1806	1.0956	242,351	4.21
2011	97,784	1.1910	1.0783	125,580	1.74
2012	72,640	1.2222	1.0613	94,223	1.09
2013	172,391	1.3437	1.0446	241,973	2.93
5 Years	$562,830			$734,373	2.00

Indemnity & Medical	(6) Developed Payroll				
2009	6,749,748			56,830	0.84
2010	5,762,086			534,060	9.27
2011	7,236,583			309,060	4.28
2012	8,671,140			245,726	2.84
2013	8,266,396			428,100	5.18
5 Years	$36,685,953			$1,573,776	4.29

Source: (1) CMCRB Database as of 04-30-2014
(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

Coal Mine Compensation Rating Bureau
Traumatic Loss Cost Indication
Prep Plants Bituminous 1027

Accident Year	(1) Reported Losses	(2) Loss Development	(3) Trend Factor	(4) Ultimate Losses	(5) Loss Cost
Indemnity					
2009	35,717	1.0186	0.7255	26,395	0.13
2010	159,946	1.0428	1.0174	169,694	0.64
2011	138,975	1.1058	1.0143	155,876	0.44
2012	274,035	1.3155	1.0113	364,567	1.07
2013	125,611	2.1006	1.0083	266,048	0.78
5 Years	$734,284			$982,580	0.66
Medical					
2009	72,988	1.1706	0.7914	67,617	0.34
2010	130,686	1.1806	1.0956	169,038	0.64
2011	72,968	1.1910	1.0783	93,710	0.27
2012	313,637	1.2222	1.0613	406,825	1.19
2013	199,084	1.3437	1.0446	279,440	0.82
5 Years	$789,363			$1,016,630	0.68

Indemnity & Medical	(6) Developed Payroll				
2009	19,828,012			94,012	0.47
2010	26,313,130			338,732	1.28
2011	35,155,068			249,586	0.71
2012	34,211,729			771,392	2.26
2013	33,935,906			545,488	1.60
5 Years	$149,443,845			$1,999,210	1.34

Source: (1) CMCRB Database as of 04-30-2014
(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

Coal Mine Compensation Rating Bureau
Traumatic Loss Cost Indication
Underground Anthracite - 1010

Accident Year	(1) Reported Losses	(2) Loss Development	(3) Trend Factor	(4) Ultimate Losses	(5) Loss Cost
Indemnity					
2009	0	1.0186	0.7255	0	0.00
2010	0	1.0428	1.0174	0	0.00
2011	205,707	1.1058	1.0143	230,724	209.51
2012	0	1.3155	1.0113	0	0.00
2013	0	2.1006	1.0083	0	0.00
5 Years	$205,707			$230,724	45.14
Medical					
2009	0	1.1706	0.7914	0	0.00
2010	0	1.1806	1.0956	0	0.00
2011	500,000	1.1910	1.0783	642,128	583.09
2012	0	1.2222	1.0613	0	0.00
2013	0	1.3437	1.0446	0	0.00
5 Years	$500,000			$642,128	125.63

Indemnity & Medical	(6) Developed Payroll				
2009	0			0	0.00
2010	5,700			0	0.00
2011	110,125			872,852	792.60
2012	219,407			0	0.00
2013	175,900			0	0.00
5 Years	$511,132			$872,852	170.77

Source: (1) CMCRB Database as of 04-30-2014
(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

PAB

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

Accident Year	(1) Reported Losses	(2) Loss Development	(3) Trend Factor	(4) Ultimate Losses	(5) Loss Cost
Indemnity					
2009	734,061	1.0186	0.7255	542,467	1.14
2010	597,899	1.0428	1.0174	634,338	1.16
2011	628,607	1.1058	1.0143	705,053	1.06
2012	936,306	1.3155	1.0113	1,245,629	1.83
2013	416,666	2.1006	1.0083	882,513	1.28
5 Years	$3,313,539			$4,010,000	1.31
Medical					
2009	521,170	1.1706	0.7914	482,819	1.01
2010	466,818	1.1806	1.0956	603,813	1.10
2011	476,438	1.1910	1.0783	611,868	0.92
2012	716,835	1.2222	1.0613	929,822	1.37
2013	676,652	1.3437	1.0446	949,768	1.38
5 Years	$2,857,913			$3,578,090	1.17

Indemnity & Medical	(6) Developed Payroll				
2009	47,622,369			1,025,286	2.15
2010	54,724,803			1,238,151	2.26
2011	66,813,183			1,316,921	1.98
2012	67,941,723			2,175,451	3.20
2013	68,806,011			1,832,281	2.66
5 Years	$305,908,089			$7,588,090	2.48

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)

PAB

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

(1) Development Period	(2) Average of Middle Four	(3) PCRB Factor	(4) CMCRB vs. PCRB Comparison	(5) Derived Development Factor	(6) Selected Factor	(7) Differences Average vs Selected	(8) Accumulated Selected Factor
1:2	1.5968	1.4152	0.1816	1.5968	1.5968	0.0000	2.1006
2:3	1.1896	1.1005	0.0891	1.1896	1.1896	0.0000	1.3155
3:4	1.0604	1.0275	0.0329	1.0604	1.0604	0.0000	1.1058
4:5	1.0238	1.0104	0.0134	1.0238	1.0238	0.0000	1.0428
5:6	0.9956	1.0073	-0.0117	1.0012	1.0012	-0.0056	1.0186
6:7	1.0033	1.0084	-0.0051	1.0012	1.0012	0.0021	1.0174
7:8	0.9946	1.0088	-0.0142	1.0011	1.0011	-0.0065	1.0162
8:9	0.9940	1.0064	-0.0124	1.0011	1.0011	-0.0071	1.0151
9:10	1.0046	1.0013	0.0033	1.0010	1.0010	0.0036	1.0140
10:11	0.9997	1.0033	-0.0036	1.0010	1.0010	-0.0013	1.0130
11:12	1.0057	1.0019	0.0038	1.0009	1.0009	0.0048	1.0120
12:13	1.0022	1.0009	0.0013	1.0009	1.0009	0.0013	1.0111
13:14	1.0043	0.9998	0.0045	1.0008	1.0008	0.0035	1.0102
14:15	1.0041	1.0013	0.0028	1.0008	1.0008	0.0033	1.0094
15:16	1.0026	1.0016	0.0010	1.0007	1.0007	0.0019	1.0086
16:17	0.9980	1.0017	-0.0037	1.0007	1.0007	-0.0027	1.0079
17:18	1.0005	1.0017	-0.0012	1.0006	1.0006	-0.0001	1.0072
18:19	1.0018	1.0010	0.0008	1.0006	1.0006	0.0012	1.0065
19:20	1.0023	1.0017	0.0006	1.0006	1.0006	0.0017	1.0059
					Sum	0.0001	
20:Ult	xx	1.0076	xx	1.0053	1.0053		1.0053

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
- (6) Selected equal to Col.(5)
- (7) Col.(2) - Col.(6)
- (8) Upward accumulation of Col.(6)

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

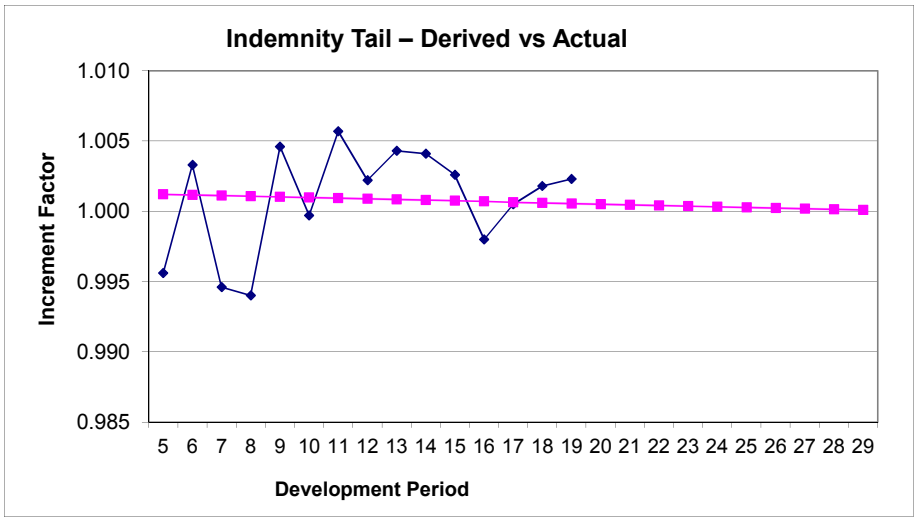
(1) Development Period	(2) Average of Middle Four	(3) PCRB Factor	(4) CMCRB vs. PCRB Comparison	(5) Derived Development Factor	(6) Selected Factor	(7) Differences Average vs Selected	(8) Accumulated Selected Factor
1:2	1.0994	1.0819	0.0175	1.0994	1.0994	0.0000	1.3437
2:3	1.0262	1.0322	-0.0060	1.0262	1.0262	0.0000	1.2222
3:4	1.0177	1.0095	0.0082	1.0088	1.0088	0.0089	1.1910
4:5	1.0046	1.0043	0.0003	1.0086	1.0086	-0.0040	1.1806
5:6	1.0098	1.0095	0.0003	1.0083	1.0083	0.0015	1.1706
6:7	1.0047	1.0042	0.0005	1.0081	1.0081	-0.0034	1.1609
7:8	1.0044	1.0067	-0.0023	1.0078	1.0078	-0.0034	1.1516
8:9	1.0033	1.0136	-0.0103	1.0076	1.0076	-0.0043	1.1427
9:10	1.0150	1.0069	0.0081	1.0073	1.0073	0.0077	1.1341
10:11	1.0094	1.0038	0.0056	1.0071	1.0071	0.0023	1.1259
11:12	1.0073	1.0110	-0.0037	1.0068	1.0068	0.0005	1.1180
12:13	1.0031	0.9967	0.0064	1.0066	1.0066	-0.0035	1.1104
13:14	1.0005	1.0095	-0.0090	1.0063	1.0063	-0.0058	1.1032
14:15	1.0049	1.0082	-0.0033	1.0061	1.0061	-0.0012	1.0963
15:16	1.0038	1.0079	-0.0041	1.0058	1.0058	-0.0020	1.0897
16:17	1.0010	1.0103	-0.0093	1.0056	1.0056	-0.0046	1.0834
17:18	1.0071	1.0131	-0.0060	1.0053	1.0053	0.0018	1.0774
18:19	0.9992	1.0092	-0.0100	1.0051	1.0051	-0.0059	1.0717
19:20	1.0018	1.0052	-0.0034	1.0048	1.0048	-0.0030	1.0663
					Sum	-0.0184	
20:Ult.		1.0770		1.0612	1.0612		1.0612

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

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

Coal Mine Compensation Rating Bureau
Indemnity Tail – Derived vs Actual

(1) Development Period	(2) Age-to-Age Factor	(3) Derived Factor	(4) Accumulated Age-to-Age Fac.	(5) Model Factors	(6) Accumulated Model Factors	(7) Derived Factor	(8) Accumulated Derived Factor	(9) Tail Devel. Period	(10) Model Factors	(11) Accumulated Model Factors
1	1.5968	1.5968	2.0896	1.5968	xx	xx	xx			
2	1.1896	1.1896	1.3086	1.1896	xx	xx	xx			
3	1.0604	1.0604	1.1001	1.0604	xx	xx	xx			
4	1.0238	1.0238	1.0374	1.0238	xx	xx	xx			
5	0.9956	1.0012	1.0133	1.0012	1.0133	1.0012	1.0133			
6	1.0033	1.0012	1.0178	1.0012	1.0120	1.0012	1.0120			
7	0.9946	1.0011	1.0144	1.0011	1.0109	1.0011	1.0109			
8	0.9940	1.0011	1.0199	1.0011	1.0098	1.0011	1.0098			
9	1.0046	1.0010	1.0261	1.0010	1.0087	1.0010	1.0087			
10	0.9997	1.0010	1.0214	1.0010	1.0077	1.0010	1.0077			
11	1.0057	1.0009	1.0217	1.0009	1.0067	1.0009	1.0067			
12	1.0022	1.0009	1.0159	1.0009	1.0058	1.0009	1.0058			
13	1.0043	1.0008	1.0137	1.0008	1.0049	1.0008	1.0049			
14	1.0041	1.0008	1.0093	1.0008	1.0040	1.0008	1.0040			
15	1.0026	1.0007	1.0052	1.0007	1.0032	1.0007	1.0032			
16	0.9980	1.0007	1.0026	1.0007	1.0025	1.0007	1.0025			
17	1.0005	1.0006	1.0046	1.0006	1.0018	1.0006	1.0018			
18	1.0018	1.0006	1.0041	1.0006	1.0012	1.0006	1.0012			
19	1.0023	1.0006	1.0023	1.0006	1.0006	1.0006	1.0006			
20		1.0005						20	1.0005	1.0030
21		1.0005						21	1.0005	1.0025
22		1.0004						22	1.0004	1.0021
23		1.0004						23	1.0004	1.0016
24		1.0003						24	1.0003	1.0013
25		1.0003						25	1.0003	1.0009
26		1.0002						26	1.0002	1.0007
27		1.0002						27	1.0002	1.0004
28		1.0001						28	1.0001	1.0002
29		1.0001						29	1.0001	1.0001



CMCRB tail factor	1.0030
PCRB tail factor	1.0076
Selected Tail Factor	1.0053

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)

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

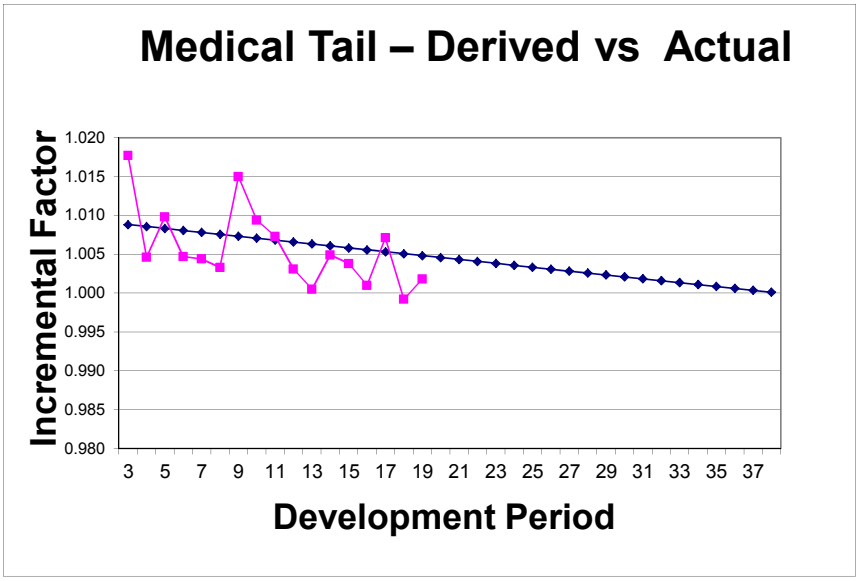
(1) Span of Maturities	(2) Age-to-Age Incurred Loss Factors	(3) Span of Maturities	(4) Cumulative Incurred Loss Factors
1 to 2	1.4152	1 to Ult	1.7075
2 to 3	1.1005	2 to Ult	1.2066
3 to 4	1.0275	3 to Ult	1.0964
4 to 5	1.0104	4 to Ult	1.0670
5 to 6	1.0073	5 to Ult	1.0560
6 to 7	1.0084	6 to Ult	1.0484
7 to 8	1.0088	7 to Ult	1.0397
8 to 9	1.0064	8 to Ult	1.0306
9 to 10	1.0013	9 to Ult	1.0240
10 to 11	1.0033	10 to Ult	1.0227
11 to 12	1.0019	11 to Ult	1.0193
12 to 13	1.0009	12 to Ult	1.0174
13 to 14	0.9998	13 to Ult	1.0165
14 to 15	1.0013	14 to Ult	1.0167
15 to 16	1.0016	15 to Ult	1.0154
16 to 17	1.0017	16 to Ult	1.0138
17 to 18	1.0017	17 to Ult	1.0120
18 to 19	1.0010	18 to Ult	1.0103
19 to 20	1.0017	19 to Ult	1.0093
20 to Ult	1.0076	20 to Ult	1.0076

Source:
PCRB Loss Cost Filing effective April 1, 2014 - Exhibit 6, page 6.2
* 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) Development Period	(2) Average Age-toAge Factor	(3) PCRB Factors	(4) Adjusted Age-to-Age Factor	(5) Accumulated Adjusted Age-to-Age Factor	(6) Derived Development Factor	(7) Accumulated Derived Factor	(8) Tail Development Period	(9) Derived Development Factor	(10) Accumulation of Derived Subsequent Factors
1	1.0994		1.0994	1.2663	1.0994	1.2663	20	1.0046	1.0453
2	1.0262		1.0262	1.1518	1.0262	1.1518	21	1.0043	1.0406
3	1.0177		1.0177	1.1224	1.0088	1.1224	22	1.0041	1.0361
4	1.0046		1.0046	1.1029	1.0086	1.1126	23	1.0038	1.0319
5	1.0098		1.0098	1.0978	1.0083	1.1032	24	1.0036	1.0279
6	1.0047		1.0047	1.0872	1.0081	1.0941	25	1.0033	1.0243
7	1.0044		1.0044	1.0821	1.0078	1.0853	26	1.0031	1.0209
8	1.0033		1.0033	1.0773	1.0076	1.0769	27	1.0028	1.0177
9	1.0150		1.0150	1.0738	1.0073	1.0688	28	1.0026	1.0149
10	1.0094	1.0038	1.0066	1.0579	1.0071	1.0611	29	1.0023	1.0122
11	1.0073	1.0110	1.0092	1.0510	1.0068	1.0536	30	1.0021	1.0099
12	1.0031	0.9967	0.9999	1.0415	1.0066	1.0465	31	1.0018	1.0078
13	1.0005	1.0095	1.0050	1.0416	1.0063	1.0396	32	1.0016	1.0059
14	1.0049	1.0082	1.0066	1.0364	1.0061	1.0331	33	1.0013	1.0043
15	1.0038	1.0079	1.0059	1.0296	1.0058	1.0269	34	1.0011	1.0030
16	1.0010	1.0103	1.0057	1.0236	1.0056	1.0209	35	1.0008	1.0019
17	1.0071	1.0131	1.0101	1.0179	1.0053	1.0153	36	1.0006	1.0011
18	0.9992	1.0092	1.0042	1.0077	1.0051	1.0099	37	1.0004	1.0005
19	1.0018	1.0052	1.0035	1.0035	1.0048	1.0048	38	1.0001	1.0001



CMCRB derived tail factor	1.0453
PCRB tail factor	1.0770
Selected	1.0612

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) Span of Maturities	(2) Age-to-Age Incurred Loss Factors	(3) Span of Maturities	(4) Cumulative Incurred Loss Factors
1 to 2	1.0819	1 to Ult.	1.3683
2 to 3	1.0322	2 to Ult.	1.2647
3 to 4	1.0095	3 to Ult.	1.2253
4 to 5	1.0043	4 to Ult.	1.2137
5 to 6	1.0095	5 to Ult.	1.2085
6 to 7	1.0042	6 to Ult.	1.1972
7 to 8	1.0067	7 to Ult.	1.1922
8 to 9	1.0136	8 to Ult.	1.1842
9 to 10	1.0069	9 to Ult.	1.1683
10 to 11	1.0038	10 to Ult.	1.1603
11 to 12	1.0110	11 to Ult.	1.1559
12 to 13	0.9967	12 to Ult.	1.1434
13 to 14	1.0095	13 to Ult.	1.1471
14 to 15	1.0082	14 to Ult.	1.1364
15 to 16	1.0079	15 to Ult.	1.1271
16 to 17	1.0103	16 to Ult.	1.1183
17 to 18	1.0131	17 to Ult.	1.1069
18 to 19	1.0092	18 to Ult.	1.0926
19 to 20	1.0052	19 to Ult.	1.0826
20 to Ult.	1.0770	20 to Ult.	1.0770

Source:
PCRB Loss Cost Filing effective April 1, 2014 - Exhibit 6, page 6.14
* The 20:Ult Factor is the product of PCRB factors beyond 19:20.

Coal Mine Compensation Rating Bureau

Summary

Traumatic Loss Trend

Indemnity, Funeral and Medical for All Classes Combined

Trend Factors

Indemnity and Funeral

Annual Percentage Change: 0.3%

Accident Year	Trend Period - Years		Annual Percentage Change	Formula	Trend Factor	Frequency Adjustment Factor	Adjusted Trend Factor
2009	7-1-09 to 4-1-2016	6.75	0.3%	(1 + 0.003) ^ 6.75	1.0204	0.711	0.7255
2010	7-1-10 to 4-1-2016	5.75	0.3%	(1 + 0.003) ^ 5.75	1.0174	1.000	1.0174
2011	7-1-11 to 4-1-2016	4.75	0.3%	(1 + 0.003) ^ 4.75	1.0143	1.000	1.0143
2012	7-1-12 to 4-1-2016	3.75	0.3%	(1 + 0.003) ^ 3.75	1.0113	1.000	1.0113
2013	7-1-13 to 4-1-2016	2.75	0.3%	(1 + 0.003) ^ 2.75	1.0083	1.000	1.0083

Medical and Medical Only

Annual Percentage Change: 1.6%

Accident Year	Trend Period - Years		Annual Percentage Change	Formula	Trend Factor	Frequency Adjustment Factor	Adjusted Trend Factor
2009	7-1-09 to 4-1-2016	6.75	1.6%	(1 + 0.016) ^ 6.75	1.1131	0.711	0.7914
2010	7-1-10 to 4-1-2016	5.75	1.6%	(1 + 0.016) ^ 5.75	1.0956	1.000	1.0956
2011	7-1-11 to 4-1-2016	4.75	1.6%	(1 + 0.016) ^ 4.75	1.0783	1.000	1.0783
2012	7-1-12 to 4-1-2016	3.75	1.6%	(1 + 0.016) ^ 3.75	1.0613	1.000	1.0613
2013	7-1-13 to 4-1-2016	2.75	1.6%	(1 + 0.016) ^ 2.75	1.0446	1.000	1.0446

Source: Annual Percentage Change - Exhibit V-K

Frequency adjustment factor is from V-K Supplemental

Coal Mine Compensation Rating Bureau

Summary

Traumatic Loss Trend
Indemnity, Funeral and Medical for All Classes Combined
Trend Factor Selections

	Indemnity	Medical	
Exh. V-I Combined Trend			
a. Severity			
Indemnity -page 1	1.023	---	Weight
Total Medical - page 2	---	1.027	*50%*
Medical Only - page 3	---	1.042	*10%*
Lost Time Medical - page 6	---	1.047	*40%*
Weighted Average	1.023	1.037	
Selected Severity Trend	1.023	1.037	
b.Frequency			
Combined Freq. And Wage - page 4	0.916	0.916	
Frequency- page 5	0.943	0.943	
Wage Inflation Exh. XII-D	1.030	1.030	
Combined(Freq./Wage)	0.916	0.916	
Average	0.916	0.916	
Selected Frequency Trend	0.980	0.980	
c. Total(Freq. And Sev. Combined)	1.003	1.016	
Approved Filing(Effective 04-01-2014)	0.974	1.015	
Selected Final Trend (Effective 04-01-2015) *	1.003	1.016	

Source:
Combined Trend: Exhibit V-I,pp.1-6
* Trend Change Limited to +/- 3.0 points, when necessary.

Traumatic Loss Trend
Indemnity and Funeral losses for All Classes Combined

Year	(1) Indemnity Case Incurred Losses	(2) Loss Development Factors	(3) Ultimate Losses	(4) Loss Cost Premium
2004	7,586,354	1.0130	7,684,977	7,312,532
2005	12,600,820	1.0140	12,777,231	7,884,214
2006	5,251,578	1.0151	5,330,877	7,810,062
2007	6,471,573	1.0162	6,301,021 *	8,720,217
2008	9,432,764	1.0174	9,596,894	10,284,327
2009	5,433,501	1.0186	5,534,564	9,468,358
2010	6,918,124	1.0428	7,214,220	10,904,854
2011	8,225,491	1.1058	9,095,748	13,148,108
2012	6,826,563	1.3155	8,959,497 *	13,774,056
2013	3,407,539	2.1006	7,157,876	12,717,809

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 the years 2007 & 2012 reflect limitations on large claims, see Exhibits V-J pp. 2 & 3.

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

Year	(1) Medical Case Incurred Losses	(2) Loss Development Factors	(3) Ultimate Losses	(4) Loss Cost Premium
2004	4,206,298	1.1259	4,735,871	7,312,532
2005	4,403,570	1.1341	4,994,089	7,884,214
2006	3,382,185	1.1427	3,864,823	7,810,062
2007	5,841,539	1.1516	5,412,666 *	8,720,217
2008	3,842,096	1.1609	4,460,289	10,284,327
2009	2,983,393	1.1706	3,492,360	9,468,358
2010	4,413,176	1.1806	5,210,196	10,904,854
2011	5,633,374	1.1910	6,709,348	13,148,108
2012	5,258,148	1.2222	6,433,725 *	13,774,056
2013	3,352,536	1.3437	4,504,803	12,717,809

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 the years 2007 & 2012 reflect limitations on large claims, see Exhibits V-J pp. 2 & 3.

Traumatic Loss Trend

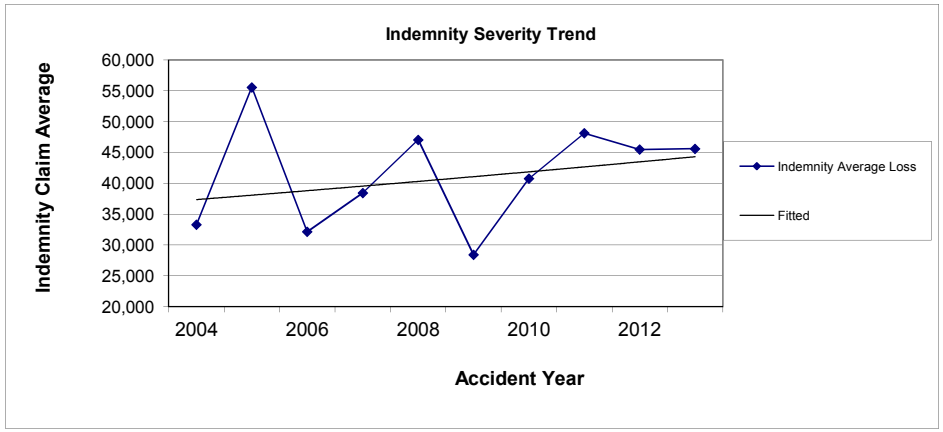
Indemnity and Funeral losses for All Classes Combined

Severity Trend

Year	(1) Ultimate Losses	(2) Claim Counts	(3) Average Loss	(4) Annual Average Loss Change
2004	7,684,977	231	33,268	
2005	12,777,231	230	55,553	67.0%
2006	5,330,877	166	32,114	-42.2%
2007	6,301,021 *	164	38,421	19.6%
2008	9,596,894	204	47,044	22.4%
2009	5,534,564	195	28,382	-39.7%
2010	7,214,220	177	40,758	43.6%
2011	9,095,748	189	48,126	18.1%
2012	8,959,497 *	197	45,480	-5.5%
2013	7,157,876	157	45,592	0.2%

Indemnity Severity Trend Factor: 1.023
Source: Summary Exhibit (V-K)

Fitted=36641.2050 x e^(0.0190*(YEAR-2003))



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 the years 2007 & 2012 reflect limitations on large claims, see Exhibits V-J pp. 2 & 3.

Traumatic Loss Trend

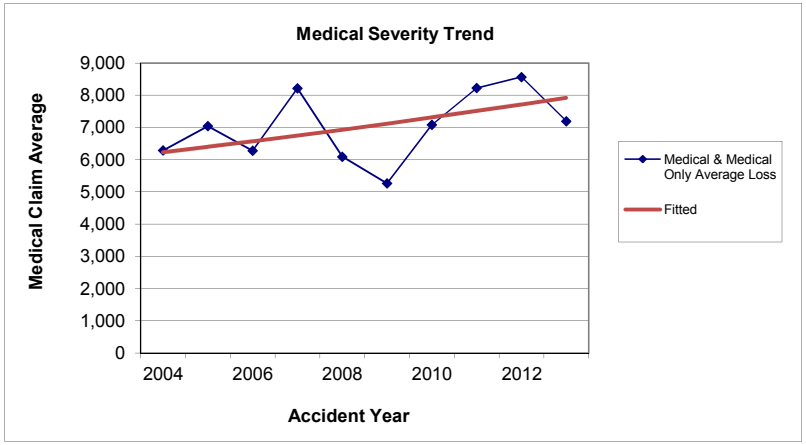
Medical and Medical Only Losses for All Classes Combined

Severity Trend

Year	(1) Ultimate Losses	(2) Claim Counts	(3) Average Loss	(4) Annual Average Loss Change
2004	4,735,871	753	6,289	
2005	4,994,089	709	7,044	12.0%
2006	3,864,823	616	6,274	-10.9%
2007	5,412,666 *	659	8,213	30.9%
2008	4,460,289	732	6,093	-25.8%
2009	3,492,360	664	5,260	-13.7%
2010	5,210,196	736	7,079	34.6%
2011	6,709,348	816	8,222	16.1%
2012	6,433,725 *	751	8,567	4.2%
2013	4,504,803	626	7,196	-16.0%

Medical Severity Trend Factor: 1.027
Source: Summary Exhibit (V-K)

Fitted=6216.3286 x e^(0.0203*(YEAR-2003))



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

* Note: Ultimate losses for the years 2007 & 2012 reflect limitations on large claims, see Exhibits V-J pp. 2 & 3.

Traumatic Loss Trend

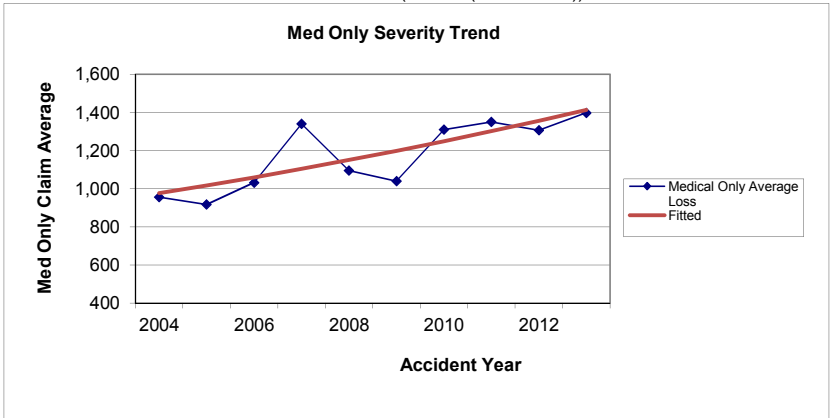
Medical Only Losses for All Classes Combined

Severity Trend

Year	(1) Ultimate Claim Counts	(2) Ultimate Incurred Losses	(3) Average Loss	(4) Annual Average Loss Change
2004	522	499,182	956	
2005	479	439,393	917	-4.1%
2006	450	464,210	1,032	12.5%
2007	495	663,201	1,340	29.8%
2008	528	578,077	1,095	-18.3%
2009	469	487,454	1,039	-5.1%
2010	559	732,324	1,310	26.1%
2011	627	846,540	1,350	3.1%
2012	554	723,464	1,306	-3.3%
2013	469	655,641	1,398	7.0%

Med. Only Severity Trend Factor: 1.042
Source: Summary Exhibit (V-K)

Fitted=915.8450 x e^(0.0431*(YEAR-2003))



Sources:
(1) Exhibit VI-C-2
(2) Exhibit VI-C-3
(4) (Current Avg. Loss / Prior Avg. Loss -1.0) x 100

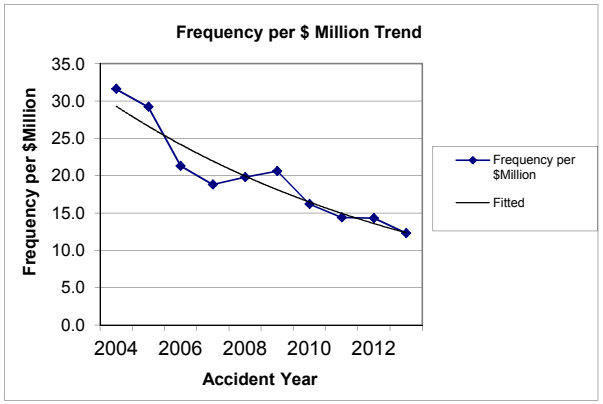
Traumatic Loss Trend
Indemnity and Funeral losses for All Classes Combined

Frequency Trend

Year	(1) Ultimate Claim Counts	(2) Loss Cost Premium	(3) Frequency per($M)	(4) Annual Average Loss Change
2004	231	7,312,532	31.6	
2005	230	7,884,214	29.2	-7.6%
2006	166	7,810,062	21.3	-27.1%
2007	164	8,720,217	18.8	-11.7%
2008	204	10,284,327	19.8	5.3%
2009	195	9,468,358	20.6	4.0%
2010	177	10,904,854	16.2	-21.4%
2011	189	13,148,108	14.4	-11.1%
2012	197	13,774,056	14.3	-0.7%
2013	157	12,717,809	12.3	-14.0%

Frequency per $Million Trend: 0.916
Source: Summary Exhibit (V-K)

Fitted=32.2576 x e^(-0.0961*(YEAR-2003))



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'

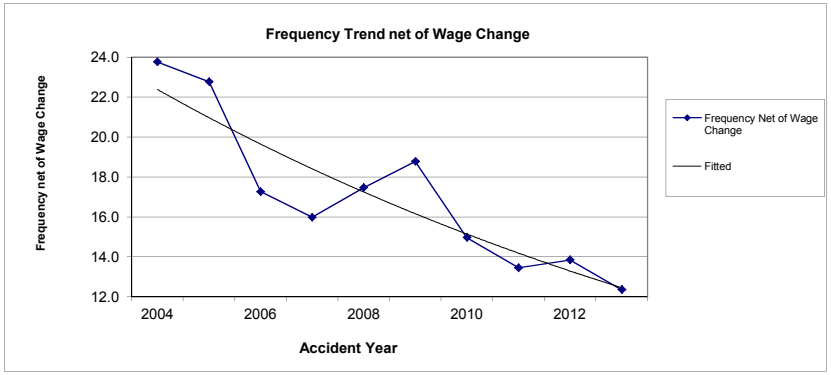
Traumatic Loss Trend
Indemnity and Funeral losses for All Classes Combined

Frequency Trend Net of Wage Trend

Year	(1) Loss Cost Premium	(2) Statewide Average Weekly Wage	(3) On 2013 Level	(4) Loss Cost Premium on 2013 Level	(5) Claim Count	(6) Adjusted Frequency per($M)	(7) Annual Frequency Change
2004	7,312,532	690	1.329	9,718,355	231	23.8	
2005	7,884,214	716	1.281	10,099,678	230	22.8	-4.2%
2006	7,810,062	745	1.231	9,614,186	166	17.3	-24.2%
2007	8,720,217	779	1.177	10,263,695	164	16.0	-7.5%
2008	10,284,327	807	1.136	11,682,995	204	17.5	9.3%
2009	9,468,358	836	1.097	10,386,789	195	18.8	7.5%
2010	10,904,854	845	1.085	11,831,767	177	15.0	-20.3%
2011	13,148,108	858	1.069	14,055,327	189	13.4	-10.1%
2012	13,774,056	888	1.033	14,228,600	197	13.8	3.0%
2013	12,717,809	917	1.000	12,717,809	157	12.3	-10.8%

Frequency net of Wage Change Trend: 0.943
Source: Summary Exhibit (V-K)

Fitted=23.8950 x e^(-0.0652*(YEAR-2003))



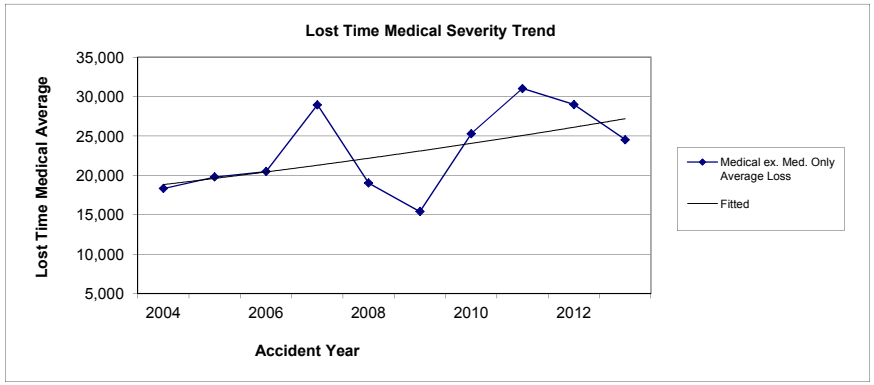
Soures:
(1) Exhibit X-B
(2) Exhibit XII-D
(3) 2013 is 1.000. Values for other years divided into 2013 value to determine factor
(4) (1) x (3)
(5) Exhibit VI-C-1
(6) (5) / (4) * 1,000,000
(7) (Current Freq./Prior Freq.-1.0)x100

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

Year	(1) Ultimate Medical Losses Incurred		(2) Med. Only Ultimate Incurred Losses	(3) Ult. Med. On Lost Time Claims	(4) Claim Counts	(5) Average Loss	(6) Annual Average Loss Change
2004	4,735,871		499,182	4,236,689	231	18,341	
2005	4,994,089		439,393	4,554,696	230	19,803	8.0%
2006	3,864,823		464,210	3,400,613	166	20,486	3.4%
2007	5,412,666	*	663,201	4,749,465	164	28,960	41.4%
2008	4,460,289		578,077	3,882,212	204	19,030	-34.3%
2009	3,492,360		487,454	3,004,906	195	15,410	-19.0%
2010	5,210,196		732,324	4,477,872	177	25,299	64.2%
2011	6,709,348		846,540	5,862,808	189	31,020	22.6%
2012	6,433,725	*	723,464	5,710,261	197	28,986	-6.6%
2013	4,504,803		655,641	3,849,162	157	24,517	-15.4%

Lost Time Medical Trend 1.047
Source: Summary Exhibit (V-K)

Fitted=18079.1697 x e^(0.0408*(YEAR-2003))



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

* Note: Ultimate losses for the years 2007 & 2012 reflect limitations on large claims, see Exhibits V-J pp. 2 & 3.

Allocation of Claim 41102 Between Indemnity and Medical
Accident Year 2004

	Reported Incurred	Percent Distribution	Loss Development Factor	Developed Losses
Indemnity	505,991	44.0%	1.0130	512,569
Medical	643,730	56.0%	1.1259	724,776
Total	1,149,721	100.0%		1,237,345

Developed Incurred is less than catastrophe limit so capping and allocation is not necessary.

Allocation of Claim 43059 Between Indemnity and Medical
Accident Year 2007

	Reported Incurred	Percent Distribution	Loss Development Factor	Developed Losses
Indemnity	528,086	20.9%	1.0162	536,641
Medical	2,000,000	79.1%	1.1516	2,303,200
Total	2,528,086	100.0%		2,839,841

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

Total Reported Indemnity (2007) = 6,471,573

	(1) Incurred	(2) LDF	(3) = (1)x(2)
Total	6,471,573	1.0162	6,576,412
This claim	528,086	1.0162	536,641
	Total excluding this claim =		6,039,771

Maximum Claim Size	% Indemnity	Limited Indemnity
1,250,000	20.9%	261,250

Total Indemnity including this limited claim = 6,301,021

Total Reported Medical (2007) = 5,841,539

	(1) Incurred	(2) LDF	(3) = (1)x(2)
Total	5,841,539	1.1516	6,727,116
This claim	2,000,000	1.1516	2,303,200
	Total excluding this claim =		4,423,916

Maximum Claim Size	% Medical	Limited Medical
1,250,000	79.1%	988,750

Total Medical including this limited claim = 5,412,666

Allocation Of Claim 46135 Between Indemnity and Medical
Accident Year 2012

	Reported Incurred	Percent Distribution	Loss Development Factor	Developed Losses
Indemnity	246,748	24.3%	1.3155	324,597
Medical	768,314	75.7%	1.2222	939,033
Total	1,015,062	100.0%		1,263,630

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

Total Reported Indemnity (2012) = 6,826,563

	(1) Incurred	(2) LDF	(3) = (1)x(2)
Total	6,826,563	1.3155	8,980,344
This Claim	246,748	1.3155	324,597
	Total excluding this claim =		8,655,747

Maximum Claim Size	% Indemnity	Limited Indemnity
1,250,000	24.3%	303,750

Total Indemnity including this limited claim = 8,959,497

Total Reported Medical (2012) = 5,258,148

	(1) Incurred	(2) LDF	(3) = (1)x(2)
Total	5,258,148	1.2222	6,426,508
This Claim	768,314	1.2222	939,033
	Total excluding this claim =		5,487,475

Maximum Claim Size	% Medical	Limited Medical
1,250,000	75.7%	946,250

Total Medical including this limited claim = 6,433,725

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	Trad	Indm	102.7%	99.2%	104.8%	102.8%	98.8%	105.5%	*102.3%*	Severity
	MA	Indm	102.0%	101.7%	103.4%	101.8%	101.3%	103.4%	*102.3%*	Severity
									102.3%	*Average*
V-I-2	Trad	Med	101.8%	101.1%	102.4%	103.2%	102.7%	104.6%	*102.6%*	Severity
	MA	Med	102.9%	101.8%	103.1%	103.3%	102.1%	103.8%	*102.8%*	Severity
									102.7%	*Average*
V-I-3	Trad	Med	104.4%	104.9%	104.0%	104.2%	104.8%	103.6%	*104.3%*	Severity
	MA	Med	104.9%	103.5%	103.2%	105.3%	103.8%	103.4%	*104.0%*	Severity
									104.2%	*Average*
V-I-4	Trad	Frequency	90.4%	90.6%	92.6%	90.7%	91.0%	93.5%	*91.5%*	Frequency
	MA	Frequency	90.6%	91.6%	92.7%	90.4%	91.7%	93.0%	*91.7%*	Frequency
									91.6%	*Average*
V-I-5	Trad	Frequency	93.3%	93.3%	95.2%	93.6%	93.7%	96.1%	*94.2%*	Frequency
	MA	Frequency	93.4%	94.3%	95.1%	93.3%	94.5%	95.5%	*94.3%*	Frequency
									94.3%	*Average*
V-I-6	Trad	Med	103.7%	103.3%	103.3%	105.5%	105.3%	105.7%	*104.5%*	Severity
	MA	Med	105.4%	103.4%	104.3%	106.4%	104.3%	105.6%	*104.9%*	Severity
									104.7%	*Average*
				Average Frequency Indication						
	Trad	Trad Freq	90.5%	90.6%	92.5%	90.8%	91.0%	93.4%	*91.5%*	
	MA	MA Freq	90.6%	91.6%	92.5%	90.5%	91.7%	92.9%	*91.6%*	
									91.6%	

Indicated Frequency from "Exh. V-K Supplemental" analysis*
98.0% =1 - 2.0%

Selected Frequency Increase/Decrease *98.0%* *

	Indemnity	Medical
Selected Freq Factor	*98.0%*	*98.0%*
Selected Sev. Factor	*102.3%*	*103.7%* **
Composite Trend Factor	*100.3%*	*101.6%*
Approved 4-01-14	*97.4%*	*101.5%*
Selected 4-01-15	*100.3%* ***	*101.6%* ***

* Selected Frequency based on Exh. V-K Supplemental

** The Medical Sev. Trend factor is the Weighted average of Exhs. V-I-2,V-I-3 & V-I-6.
The respective weights are 50%,10%,& 40%.

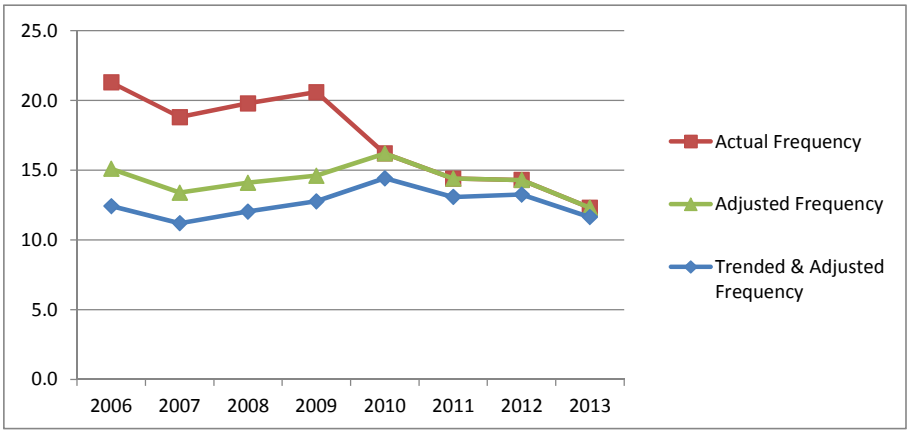
*** Limited to a maximum change of +-3.0 points, when necessary.

Coal Mine Compensation Rating Bureau
Traumatic - Indemnity and Medical - Frequency Trend

Supplemental

Year	(1) Actual Frequency	(2) Frequency Adjustment Factor	(3) Adjusted Frequency	(4) Change from Prior Year	(5) Trend Period	(6) Trended & Adjusted Frequency
2006	21.3	0.711	15.1		9.75	12.4
2007	18.8	0.711	13.4	0.887	8.75	11.2
2008	19.8	0.711	14.1	1.052	7.75	12.0
2009	20.6	0.711	14.6	1.035	6.75	12.8
2010	16.2	1.000	16.2	1.110	5.75	14.4
2011	14.4	1.000	14.4	0.889	4.75	13.1
2012	14.3	1.000	14.3	0.993	3.75	13.3
2013	12.3	1.000	12.3	0.860	2.75	11.6

A) Geometric Mean (2006 - 2013) of Column 4	-2.9%
B) Regression (2006 - 2013) of Column 3	-1.1%
Average of (A) & (B)	-2.0%
Selected Frequency Trend	-2.0%



The data for years 2006 through 2013 appears to have two eras - the first from 2006 to 2009 and the second from 2010 to 2013. Neither era is of sufficient length to be used to produce a reliable estimate of trend. To remedy this, it was decided to adjust the data so that all points would be from the same era. This was accomplished by adjusting the data from 2006 - 2009 so that it would have the same average value as that of the period 2010-2013. The ratio of the second period to the first period was found to be 0.711=14.3 / 20.1.

Source: Column 1: Column (3) of Exhibit V-I Page 4 Summary
Column 2: For 2006 - 2009, 0.711 = 14.3 / 20.1
For 2010 - 2013, 1.000 = 14.3 / 14.3
Column 3: Column (1) times Column (2)
Column 4: Current Column (3) value divided by Prior Column (3) value
Column 5: Trend Period from each Accident Year to the Project Average Accident Date
Column 6: Column (3) times [(1 + Selected Frequency Trend)^Column (5)]

Traumatic Loss Trend
Indemnity and Funeral losses for All Classes Combined

Severity Trend

Year	(1) Ultimate Losses	(2) Claim Counts	(3) Average Loss	(4) Annual Average Loss Change	(5) 3-Year Moving Average	(6) Annual Mov. Avg. Change
2004	7,684,977	231	33,268			
2005	12,777,231	230	55,553	67.0%		
2006	5,330,877	166	32,114	-42.2%	40,312	
2007	6,301,021 *	164	38,421	19.6%	42,029	4.3%
2008	9,596,894	204	47,044	22.4%	39,193	-6.7%
2009	5,534,564	195	28,382	-39.7%	37,949	-3.2%
2010	7,214,220	177	40,758	43.6%	38,728	2.1%
2011	9,095,748	189	48,126	18.1%	39,089	0.9%
2012	8,959,497 *	197	45,480	-5.5%	44,788	14.6%
2013	7,157,876	157	45,592	0.2%	46,399	3.6%

Analysis performed on data for 2004 through 2013.	Geometric Average:	3.6%	2.0%	Ests.
	Regression Indication:	1.9%		1 & 2
	Selected:	2.7%	2.0%	
Analysis performed on data for 2005 through 2013.	Geometric Average:	-2.4%	1.7%	Ests.
	Regression Indication:	0.9%		3 & 4
	Selected:	-0.8%	1.7%	
Analysis performed on data for 2006 through 2013.	Geometric Average:	5.1%	3.4%	Ests.
	Regression Indication:	4.5%		5 & 6
	Selected:	4.8%	3.4%	

* Note: Ultimate losses for the years 2007 & 2012 reflect limitations on large claims, see Exhibits V-J pp. 2 & 3.

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

Severity Trend

Year	(1) Ultimate Losses	(2) Claim Counts	(3) Average Loss	(4) Annual Average Loss Change	(5) 3-Year Moving Average	(6) Annual Mov. Avg. Change
2004	4,735,871	753	6,289			
2005	4,994,089	709	7,044	12.0%		
2006	3,864,823	616	6,274	-10.9%	6,536	
2007	5,412,666 *	659	8,213	30.9%	7,177	9.8%
2008	4,460,289	732	6,093	-25.8%	6,860	-4.4%
2009	3,492,360	664	5,260	-13.7%	6,522	-4.9%
2010	5,210,196	736	7,079	34.6%	6,144	-5.8%
2011	6,709,348	816	8,222	16.1%	6,854	11.6%
2012	6,433,725 *	751	8,567	4.2%	7,956	16.1%
2013	4,504,803	626	7,196	-16.0%	7,995	0.5%

Analysis performed on data for 2004 through 2013.	Geometric Average:	1.5%	2.9%	Ests.
	Regression Indication:	2.0%		1 & 2
	Selected:	1.8%	2.9%	
Analysis performed on data for 2005 through 2013.	Geometric Average:	0.3%	1.8%	Ests.
	Regression Indication:	2.0%		3 & 4
	Selected:	1.1%	1.8%	
Analysis performed on data for 2006 through 2013.	Geometric Average:	2.0%	3.1%	Ests.
	Regression Indication:	2.9%		5 & 6
	Selected:	2.4%	3.1%	

* Note: Ultimate losses for the years 2007 & 2012 reflect limitations on large claims, see Exhibits V-J pp. 2 & 3.

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

Severity Trend

Year	(1) Ultimate Claim Counts	(2) Ultimate Incurred Losses	(3) Average Loss	(4) Annual Average Loss Change	(5) 3-Year Moving Average	(6) Annual Mov. Avg. Change
2004	522	499,182	956			
2005	479	439,393	917	-4.1%		
2006	450	464,210	1,032	12.5%	968	
2007	495	663,201	1,340	29.9%	1,096	13.2%
2008	528	578,077	1,095	-18.3%	1,155	5.4%
2009	469	487,454	1,039	-5.1%	1,158	0.2%
2010	559	732,324	1,310	26.0%	1,148	-0.9%
2011	627	846,540	1,350	3.1%	1,233	7.4%
2012	554	723,464	1,306	-3.3%	1,322	7.2%
2013	469	655,641	1,398	7.0%	1,351	2.2%

Analysis performed on data for 2004 through 2013.	Geometric Average:	4.3%	4.9%	Ests.
	Regression Indication:	4.4%		1 & 2
	Selected:	4.4%	4.9%	
Analysis performed on data for 2005 through 2013.	Geometric Average:	5.4%	3.5%	Ests.
	Regression Indication:	4.4%		3 & 4
	Selected:	4.9%	3.5%	
Analysis performed on data for 2006 through 2013.	Geometric Average:	4.4%	3.2%	Ests.
	Regression Indication:	3.5%		5 & 6
	Selected:	4.0%	3.2%	

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

Frequency Trend

Year	(1) Ultimate Claim Counts	(2) Loss Cost Premium	(3) Frequency per($M)	(4) Annual Average Loss Change	(5) 3-Year Moving Average	(6) Annual Mov. Avg. Change
2004	231	7,312,532	31.6			
2005	230	7,884,214	29.2	-7.6%		
2006	166	7,810,062	21.3	-27.1%	27.4	
2007	164	8,720,217	18.8	-11.7%	23.1	-15.6%
2008	204	10,284,327	19.8	5.3%	20.0	-13.6%
2009	195	9,468,358	20.6	4.0%	19.7	-1.2%
2010	177	10,904,854	16.2	-21.4%	18.9	-4.4%
2011	189	13,148,108	14.4	-11.1%	17.1	-9.5%
2012	197	13,774,056	14.3	-0.7%	15.0	-12.3%
2013	157	12,717,809	12.3	-14.0%	13.7	-8.7%

Analysis performed on data for 2004 through 2013.	Geometric Average:	-10.0%	-9.4%	Ests. 1 & 2
	Regression Indication:	-9.2%		
	Selected:	-9.6%	-9.4%	
Analysis performed on data for 2005 through 2013.	Geometric Average:	-10.2%	-8.4%	Ests. 3 & 4
	Regression Indication:	-8.6%		
	Selected:	-9.4%	-8.4%	
Analysis performed on data for 2006 through 2013.	Geometric Average:	-7.5%	-7.3%	Ests. 5 & 6
	Regression Indication:	-7.3%		
	Selected:	-7.4%	-7.3%	

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

Frequency Trend Net of Wage Trend

Year	(1) Loss Cost Premium	(2) Statewide Average Weekly Wage	(3) On 2013 Level	(4) Loss Cost Premium on 2013 Level	(5) Claim Count	(6) Adjusted Frequency per($M)	(7) Annual Frequency Change	(8) 3-Year Moving Average	(9) Annual Mov. Avg. Change
2004	7,312,532	690	1.329	9,718,355	231	23.8			
2005	7,884,214	716	1.281	10,099,678	230	22.8	-4.2%		
2006	7,810,062	745	1.231	9,614,186	166	17.3	-24.1%	21.3	
2007	8,720,217	779	1.177	10,263,695	164	16.0	-7.5%	18.7	-12.2%
2008	10,284,327	807	1.136	11,682,995	204	17.5	9.4%	16.9	-9.4%
2009	9,468,358	836	1.097	10,386,789	195	18.8	7.4%	17.4	3.0%
2010	10,904,854	845	1.085	11,831,767	177	15.0	-20.2%	17.1	-1.9%
2011	13,148,108	858	1.069	14,055,327	189	13.4	-10.7%	15.7	-8.0%
2012	13,774,056	888	1.033	14,228,600	197	13.8	3.0%	14.1	-10.6%
2013	12,717,809	917	1.000	12,717,809	157	12.3	-10.9%	13.2	-6.4%

Analysis performed on data for 2004 through 2013.	Geometric Average:	-7.1%	-6.6%	Ests.
	Regression Indication:	-6.4%		1 & 2
	Selected:	-6.7%	-6.6%	
Analysis performed on data for 2005 through 2013.	Geometric Average:	-7.4%	-5.7%	Ests.
	Regression Indication:	-5.9%		3 & 4
	Selected:	-6.7%	-5.7%	
Analysis performed on data for 2006 through 2013.	Geometric Average:	-4.8%	-4.9%	Ests.
	Regression Indication:	-4.8%		5 & 6
	Selected:	-4.8%	-4.9%	

Sources:
- (1) Exhibit X-B
- (2) Exhibit XII-D
- (3) 2013 is 1.000. Values for other years divided into 2013 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

Year	(1) Ultimate Medical Losses Incurred	(2) Med. Only Ultimate Incurred Losses	(3) Ult. Med. On Lost Time Claims	(4) Claim Counts	(5) Average Loss	(6) Annual Average Loss Change	(7) 3-Year Moving Average	(8) Annual Mov. Avg. Change
2004	4,735,871	499,182	4,236,689	231	18,341			
2005	4,994,089	439,393	4,554,696	230	19,803	8.0%		
2006	3,864,823	464,210	3,400,613	166	20,486	3.4%	19,543	
2007	5,412,666 *	663,201	4,749,465	164	28,960	41.4%	23,083	18.1%
2008	4,460,289	578,077	3,882,212	204	19,030	-34.3%	22,825	-1.1%
2009	3,492,360	487,454	3,004,906	195	15,410	-19.0%	21,133	-7.4%
2010	5,210,196	732,324	4,477,872	177	25,299	64.2%	19,913	-5.8%
2011	6,709,348	846,540	5,862,808	189	31,020	22.6%	23,910	20.1%
2012	6,433,725 *	723,464	5,710,261	197	28,986	-6.6%	28,435	18.9%
2013	4,504,803	655,641	3,849,162	157	24,517	-15.4%	28,174	-0.9%

Analysis performed on data for 2004 through 2013.	Geometric Average:	3.3%	5.4%	Ests.
	Regression Indication:	4.2%		1 & 2
	Selected:	3.7%	5.4%	
Analysis performed on data for 2005 through 2013.	Geometric Average:	2.7%	3.4%	Ests.
	Regression Indication:	3.9%		3 & 4
	Selected:	3.3%	3.4%	
Analysis performed on data for 2006 through 2013.	Geometric Average:	2.6%	4.3%	Ests.
	Regression Indication:	3.9%		5 & 6
	Selected:	3.3%	4.3%	

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

* Note: Ultimate losses for the years 2007 & 2012 reflect limitations on large claims, see Exhibits V-J pp. 2 & 3.

Traumatic Loss Trend
Indemnity and Funeral losses for All Classes Combined

Severity Trend

Year	(1) Ultimate Losses	(2) Claim Counts	(3) Average Loss	(4) Annual Average Loss Change	(5) 3-Year Moving Average	(6) Annual Mov. Avg. Change
2004	7,684,977	231	33,268			
2005	12,777,231	230	55,553	67.0%		
2006	5,330,877	166	32,114	-42.2%	40,312	
2007	6,301,021 *	164	38,421	19.6%	42,029	4.3%
2008	9,596,894	204	47,044	22.4%	39,193	-6.7%
2009	5,534,564	195	28,382	-39.7%	37,949	-3.2%
2010	7,214,220	177	40,758	43.6%	38,728	2.1%
2011	9,095,748	189	48,126	18.1%	39,089	0.9%
2012	8,959,497 *	197	45,480	-5.5%	44,788	14.6%

Analysis performed on data for 2004 through 2012.	Geometric Average:	4.0%	1.8%	Ests.
	Regression Indication:	1.7%		7 & 8
	Selected:	2.8%	1.8%	
Analysis performed on data for 2005 through 2012.	Geometric Average:	-2.8%	1.3%	Ests.
	Regression Indication:	0.4%		9 & 10
	Selected:	-1.2%	1.3%	
Analysis performed on data for 2006 through 2012.	Geometric Average:	6.0%	3.4%	Ests.
	Regression Indication:	4.9%		11 & 12
	Selected:	5.5%	3.4%	

* Note: Ultimate losses for the years 2007 & 2012 reflect limitations on large claims, see Exhibits V-J pp. 2 & 3.

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

Severity Trend

Year	(1) Ultimate Losses	(2) Claim Counts	(3) Average Loss	(4) Annual Average Loss Change	(5) 3-Year Moving Average	(6) Annual Mov. Avg. Change
2004	4,735,871	753	6,289			
2005	4,994,089	709	7,044	12.0%		
2006	3,864,823	616	6,274	-10.9%	6,536	
2007	5,412,666 *	659	8,213	30.9%	7,177	9.8%
2008	4,460,289	732	6,093	-25.8%	6,860	-4.4%
2009	3,492,360	664	5,260	-13.7%	6,522	-4.9%
2010	5,210,196	736	7,079	34.6%	6,144	-5.8%
2011	6,709,348	816	8,222	16.1%	6,854	11.6%
2012	6,433,725 *	751	8,567	4.2%	7,956	16.1%

Analysis performed on data for 2004 through 2012.	Geometric Average:	3.9%	3.3%	Ests.
	Regression Indication:	2.5%		7 & 8
	Selected:	3.2%	3.3%	
Analysis performed on data for 2005 through 2012.	Geometric Average:	2.8%	2.1%	Ests.
	Regression Indication:	2.6%		9 & 10
	Selected:	2.7%	2.1%	
Analysis performed on data for 2006 through 2012.	Geometric Average:	5.3%	3.8%	Ests.
	Regression Indication:	4.0%		11 & 12
	Selected:	4.6%	3.8%	

* Note: Ultimate losses for the years 2007 & 2012 reflect limitations on large claims, see Exhibits V-J pp. 2 & 3.

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

Severity Trend

Year	(1) Ultimate Claim Counts	(2) Ultimate Incurred Losses	(3) Average Loss	(4) Annual Average Loss Change	(5) 3-Year Moving Average	(6) Annual Mov. Avg. Change
2004	522	499,182	956			
2005	479	439,393	917	-4.1%		
2006	450	464,210	1,032	12.5%	968	
2007	495	663,201	1,340	29.9%	1,096	13.2%
2008	528	578,077	1,095	-18.3%	1,155	5.4%
2009	469	487,454	1,039	-5.1%	1,158	0.2%
2010	559	732,324	1,310	26.0%	1,148	-0.9%
2011	627	846,540	1,350	3.1%	1,233	7.4%
2012	554	723,464	1,306	-3.3%	1,322	7.2%

Analysis performed on data for 2004 through 2012.	Geometric Average:	4.0%	5.3%	Ests.
	Regression Indication:	4.5%		7 & 8
	Selected:	4.2%	5.3%	
Analysis performed on data for 2005 through 2012.	Geometric Average:	5.2%	3.8%	Ests.
	Regression Indication:	4.5%		9 & 10
	Selected:	4.8%	3.8%	
Analysis performed on data for 2006 through 2012.	Geometric Average:	4.0%	3.4%	Ests.
	Regression Indication:	3.3%		11 & 12
	Selected:	3.6%	3.4%	

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

Frequency Trend

Year	(1) Ultimate Claim Counts	(2) Loss Cost Premium	(3) Frequency per($M)	(4) Annual Average Loss Change	(5) 3-Year Moving Average	(6) Annual Mov. Avg. Change
2004	231	7,312,532	31.6			
2005	230	7,884,214	29.2	-7.6%		
2006	166	7,810,062	21.3	-27.1%	27.4	
2007	164	8,720,217	18.8	-11.7%	23.1	-15.6%
2008	204	10,284,327	19.8	5.3%	20.0	-13.6%
2009	195	9,468,358	20.6	4.0%	19.7	-1.2%
2010	177	10,904,854	16.2	-21.4%	18.9	-4.4%
2011	189	13,148,108	14.4	-11.1%	17.1	-9.5%
2012	197	13,774,056	14.3	-0.7%	15.0	-12.3%

Analysis performed on data for 2004 through 2012.	Geometric Average:	-9.4%	-9.6%	Ests.
	Regression Indication:	-9.1%		7 & 8
	Selected:	-9.3%	-9.6%	
Analysis performed on data for 2005 through 2012.	Geometric Average:	-9.7%	-8.3%	Ests.
	Regression Indication:	-8.4%		9 & 10
	Selected:	-9.0%	-8.3%	
Analysis performed on data for 2006 through 2012.	Geometric Average:	-6.4%	-7.0%	Ests.
	Regression Indication:	-6.7%		11 & 12
	Selected:	-6.5%	-7.0%	

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

Frequency Trend net of Wage Trend

Year	(1) Loss Cost Premium	(2) Statewide Average Weekly Wage	(3) On 2013 Level	(4) Loss Cost Premium on 2013 Level	(5) Claim Count	(6) Adjusted Frequency per($M)	(7) Annual Frequency Change	(8) 3-Year Moving Average	(9) Annual Mov. Avg. Change
2004	7,312,532	690	1.329	9,718,355	231	23.8			
2005	7,884,214	716	1.281	10,099,678	230	22.8	-4.2%		
2006	7,810,062	745	1.231	9,614,186	166	17.3	-24.1%	21.3	
2007	8,720,217	779	1.177	10,263,695	164	16.0	-7.5%	18.7	-12.2%
2008	10,284,327	807	1.136	11,682,995	204	17.5	9.4%	16.9	-9.4%
2009	9,468,358	836	1.097	10,386,789	195	18.8	7.4%	17.4	3.0%
2010	10,904,854	845	1.085	11,831,767	177	15.0	-20.2%	17.1	-1.9%
2011	13,148,108	858	1.069	14,055,327	189	13.4	-10.7%	15.7	-8.0%
2012	13,774,056	888	1.033	14,228,600	197	13.8	3.0%	14.1	-10.6%
2013		917							

Analysis performed on data for 2004 through 2012.	Geometric Average:	-6.6%	-6.7%	Ests.
	Regression Indication:	-6.3%		7 & 8
	Selected:	-6.4%	-6.7%	
Analysis performed on data for 2005 through 2012.	Geometric Average:	-6.9%	-5.5%	Ests.
	Regression Indication:	-5.7%		9 & 10
	Selected:	-6.3%	-5.5%	
Analysis performed on data for 2006 through 2012.	Geometric Average:	-3.7%	-4.5%	Ests.
	Regression Indication:	-4.2%		11 & 12
	Selected:	-3.9%	-4.5%	

Soures:
(1) Exhibit X-B
(2) Exhibit XII-D
(3) 2013 is 1.000. Values for other years divided into 2013 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

Severity Trend

Year	(1) Ultimate Medical Losses Incurred	(2) Med. Only Ultimate Incurred Losses	(3) Ult. Med. On Lost Time Claims	(4) Claim Counts	(5) Average Loss	(6) Annual Average Loss Change	(7) 3-Year Moving Average	(8) Annual Mov. Avg. Change
2004	4,735,871	499,182	4,236,689	231	18,341			
2005	4,994,089	439,393	4,554,696	230	19,803	8.0%		
2006	3,864,823	464,210	3,400,613	166	20,486	3.4%	19,543	
2007	5,412,666 *	663,201	4,749,465	164	28,960	41.4%	23,083	18.1%
2008	4,460,289	578,077	3,882,212	204	19,030	-34.3%	22,825	-1.1%
2009	3,492,360	487,454	3,004,906	195	15,410	-19.0%	21,133	-7.4%
2010	5,210,196	732,324	4,477,872	177	25,299	64.2%	19,913	-5.8%
2011	6,709,348	846,540	5,862,808	189	31,020	22.6%	23,910	20.1%
2012	6,433,725 *	723,464	5,710,261	197	28,986	-6.6%	28,435	18.9%

Analysis performed on data for 2004 through 2012.	Geometric Average:	5.9%	6.4%	Ests.
	Regression Indication:	5.1%		7 & 8
	Selected:	5.5%	6.4%	
Analysis performed on data for 2005 through 2012.	Geometric Average:	5.6%	4.3%	Ests.
	Regression Indication:	5.0%		9 & 10
	Selected:	5.3%	4.3%	
Analysis performed on data for 2006 through 2012.	Geometric Average:	6.0%	5.6%	Ests.
	Regression Indication:	5.4%		11 & 12
	Selected:	5.7%	5.6%	

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

* Note: Ultimate losses for the years 2007 & 2012 reflect limitations on large claims, see Exhibits V-J pp. 2 & 3.

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

A. Indemnity Reported Incurred Losses as of 04/30/14

Report	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1	7,382,048	11,430,976	7,644,321	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	3,407,539
2	12,990,335	15,442,744	14,142,768	15,764,500	14,023,373	14,886,283	10,132,595	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	
3	16,871,066	21,841,614	17,418,184	18,899,163	16,937,016	19,319,350	10,822,307	10,812,980	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		
4	19,586,925	25,548,039	19,336,246	21,297,742	17,895,528	21,058,150	11,321,620	10,935,657	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			
5	21,189,848	27,756,357	19,029,994	23,283,444	19,116,711	21,755,213	12,031,334	11,473,813	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				
6	21,035,007	28,978,827	19,515,041	24,216,164	19,482,073	20,495,133	12,009,191	12,045,582	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					
7	20,382,845	30,425,965	19,983,588	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						
8	19,920,292	30,400,399	19,429,733	23,116,561	19,887,404	21,125,316	11,831,342	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							
9	19,106,424	29,654,340	19,164,572	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								
10	18,877,682	29,327,811	19,057,604	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									
11	18,750,063	28,447,443	18,464,716	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										
12	18,586,059	28,697,143	18,005,447	21,374,865	19,597,199	20,479,299	11,959,550	12,194,216	8,674,576	8,654,986	8,095,907	7,481,862	8,582,610	12,101,118											
13	18,938,310	28,677,619	18,077,666	20,831,448	19,782,074	20,635,147	11,968,738	12,323,984	8,712,300	8,662,379	8,054,458	7,481,735	8,612,926												
14	18,878,356	28,968,294	18,154,050	20,921,084	19,781,165	20,796,338	11,976,248	12,373,446	8,797,458	8,760,619	8,050,069	7,481,735													
15	18,876,061	29,335,955	18,200,852	20,665,237	19,743,633	20,955,578	12,153,996	12,414,145	8,824,907	8,763,703	8,050,069														
16	18,503,197	29,408,896	18,272,016	20,737,874	19,892,372	21,238,443	12,270,702	12,454,657	8,629,585	8,763,787															
17	18,537,957	29,660,654	18,318,328	20,810,640	19,799,167	20,549,947	12,278,302	12,494,644	8,640,604																
18	18,579,406	29,842,897	18,251,803	20,424,387	19,930,173	20,658,968	12,305,704	12,534,389																	
19	18,620,830	29,707,542	18,277,999	20,468,682	20,068,163	20,766,504	12,302,583																		
20	18,662,299	29,623,426	18,292,186	20,513,393	20,217,996	20,860,130																			

B. Act 57 Indemnity Law Adjusment Factors

1	0.8247	0.8247	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	0.8247	0.8247	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
3	0.8247	0.8247	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	1.0000	1.0000	1.0000	1.0000	1.0000		
4	0.8247	0.8247	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	1.0000	1.0000	1.0000	1.0000			
5	0.8247	0.8247	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	1.0000	1.0000	1.0000				
6	0.8247	0.8247	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	1.0000	1.0000					
7	0.8247	0.8247	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	1.0000						
8	0.8247	0.8247	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							
9	0.8247	0.8247	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								
10	0.8247	0.8247	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									
11	0.8247	0.8247	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										
12	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247	0.8871	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000											
13	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247	0.8871	1.0000	1.0000	1.0000	1.0000	1.0000												
14	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247	0.8871	1.0000	1.0000	1.0000	1.0000													
15	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247	0.8871	1.0000	1.0000	1.0000														
16	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247	0.8871	1.0000	1.0000															
17	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247	0.8871	1.0000																
18	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247	0.8871																	
19	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247																		
20	0.8247	0.8247	0.8247	0.8247	0.8247	0.8247																			

Act 57 Effective Date			Prior to
(b) Accident Year 1996 (8-23-96)			1996
Act 57	Effect	Weight	Effect
Pre	17.53%	0.644	17.53%
Post	0.00%	0.356	
1996 Avg	11.29%	1.000	
Complement:	0.8871		0.8247

C. Indemnity Incurred Losses Adjusted to Act 57 Law Level as of 04/30/14

1	6,088,000	9,427,000	6,304,000	9,437,000	7,641,000	7,283,000	6,181,000	6,090,000	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	3,407,539
2	10,713,000	12,736,000	11,664,000	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	
3	13,914,000	18,013,000	14,365,000	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		
4	16,153,000	21,069,000	15,947,000	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	6,053,552	9,233,530	5,276,335	6,918,124			
5	17,475,000	22,891,000	15,694,000	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				
6	17,348,000	23,899,000	16,094,000	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					
7	16,810,000	25,092,000	16,480,000	19,893,000	16,607,000	17,087,000	9,897,000	10,632,000	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						
8	16,428,000	25,071,000	16,024,000	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							
9	15,757,000	24,456,000	15,805,000	18,168,000	16,518,000	17,056,000	9,816,000	10,806,000	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								
10	15,568,000	24,187,000	15,717,000	18,370,000	15,967,000	16,573,000	9,860,000	10,688,000	8,461,485	8,565,347	8,091,638	7,480,132	8,515,273	12,228,895	7,494,451	7,586,354									
11	15,463,000	23,461,000	15,228,000	18,028,000	15,917,000	16,765,000	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										
12	15,328,000	23,667,000	14,849,000	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											
13	15,618,000	23,650,000	14,909,000	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												
14	15,569,000	23,890,000	14,972,000	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													
15	15,567,000	24,193,000	15,010,000	17,043,000	16,283,000	17,282,000	10,023,000	11,013,000	8,824,907	8,763,703	8,050,069														
16	15,260,000	24,254,000	15,069,000	17,103,000	16,405,000	17,515,000	10,120,000	11,049,000	8,629,585	8,763,787															
17	15,288,000	24,461,000	15,107,000	17,163,000	16,328,000	16,948,000	10,126,000	11,084,000	8,640,604																
18	15,322,000	24,611,000	15,052,000	16,844,000	16,436,000	17,037,000	10,149,000	11,119,000																	
19	15,357,000	24,500,000	15,074,000	16,881,000	16,550,000	17,126,000	10,146,000																		
20	15,391,000	24,430,000	15,086,000	16,917,000	16,674,000	17,203,000																			

Source: A. CMCRB Database as of 04/30/14 - Validated 08/13/14
B. Act 57 Indemnity Law Factor of 0.8247, 0.8871 (1996) and 1.000
C. A times B equals C

Note: Reported Losses times Act 57 factors equals Indemnity Incurred Losses on Act 57 level.

File: 2-C-C:\Clients\Coal Mine\2014 Rate Filing\[06-A,B,C,E.xlsm]A-1
Run Time: August 27, 2014 - 03:32:03 PM

PAB
Effective Date - April 01, 2015
Checksum:7,957,132,962.270460

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

A. Indemnity Incurred Losses Adjusted to Act 57 Law Level as of 04/30/14

Report	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1	6,088,000	9,427,000	6,304,000	9,437,000	7,641,000	7,283,000	6,181,000	6,090,000	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	3,407,539
2	10,713,000	12,736,000	11,664,000	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	
3	13,914,000	18,013,000	14,365,000	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		
4	16,153,000	21,069,000	15,947,000	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	6,053,552	9,233,530	5,276,335	6,918,124			
5	17,475,000	22,891,000	15,694,000	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				
6	17,348,000	23,899,000	16,094,000	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					
7	16,810,000	25,092,000	16,480,000	19,893,000	16,607,000	17,087,000	9,897,000	10,632,000	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						
8	16,428,000	25,071,000	16,024,000	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							
9	15,757,000	24,456,000	15,805,000	18,168,000	16,518,000	17,056,000	9,816,000	10,806,000	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								
10	15,568,000	24,187,000	15,717,000	18,370,000	15,967,000	16,573,000	9,860,000	10,688,000	8,461,485	8,565,347	8,091,638	7,480,132	8,515,273	12,228,895	7,494,451	7,586,354									
11	15,463,000	23,461,000	15,228,000	18,028,000	15,917,000	16,765,000	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										
12	15,328,000	23,667,000	14,849,000	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											
13	15,618,000	23,650,000	14,909,000	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												
14	15,569,000	23,890,000	14,972,000	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													
15	15,567,000	24,193,000	15,010,000	17,043,000	16,283,000	17,282,000	10,023,000	11,013,000	8,824,907	8,763,703	8,050,069														
16	15,260,000	24,254,000	15,069,000	17,103,000	16,405,000	17,515,000	10,120,000	11,049,000	8,629,585	8,763,787															
17	15,288,000	24,461,000	15,107,000	17,163,000	16,328,000	16,948,000	10,126,000	11,084,000	8,640,604																
18	15,322,000	24,611,000	15,052,000	16,844,000	16,436,000	17,037,000	10,149,000	11,119,000																	
19	15,357,000	24,500,000	15,074,000	16,881,000	16,550,000	17,126,000	10,146,000																		
20	15,391,000	24,430,000	15,086,000	16,917,000	16,674,000	17,203,000																			

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	1.0000	1.0000	1.0000	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
2	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	
3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0230	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		
4	1.0000	1.0000	1.0000	1.0000	1.0219	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			
5	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				
6	1.0000	1.0000	1.0194	1.0412	1.0655	1.0922	1.1152	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					
7	1.0000	1.0182	1.0388	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						
8	1.0170	1.0364	1.0582	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							
9	1.0340	1.0545	1.0776	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								
10	1.0509	1.0727	1.0921	1.1082	1.1201	1.1324	1.1455	1.1272	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000									
11	1.0611	1.0809	1.0980	1.1113	1.1222	1.1347	1.1480	1.1273	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000										
12	1.0688	1.0864	1.1009	1.1133	1.1244	1.1371	1.1491	1.1273	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000											
13	1.0739	1.0891	1.1028	1.1154	1.1266	1.1382	1.1491	1.1272	1.0000	1.0000	1.0000	1.0000	1.0000												
14	1.0764	1.0910	1.1047	1.1175	1.1276	1.1382	1.1491	1.1273	1.0000	1.0000	1.0000	1.0000													
15	1.0781	1.0928	1.1067	1.1185	1.1277	1.1382	1.1492	1.1272	1.0000	1.0000	1.0000														
16	1.0798	1.0945	1.1076	1.1185	1.1277	1.1383	1.1491	1.1272	1.0000	1.0000															
17	1.0815	1.0955	1.1077	1.1185	1.1277	1.1382	1.1491	1.1273	1.0000																
18	1.0824	1.0955	1.1077	1.1185	1.1277	1.1383	1.1491	1.1273																	
19	1.0823	1.0955	1.1077	1.1185	1.1277	1.1383	1.1491																		
20	1.0823	1.0955	1.1076	1.1186	1.1277	1.1382																			

Example: 1995 (2) 0.8447 (Page 3) divided by 0.8247 equals 1.0243

Selected Years 0 to 10 Claim Settlement Level Addititves	
9th Last	+2.0% per year
8th Last	+2.0% per year
7th Last	+2.0% per year
6th Last	+2.0% per year
5th Last	+1.5% per year
4th Last	+1.0% per year
3rd Last	+0.5% per year
2nd Last	+0.5% per year
1st Last	+0.5% per year

Selected Years 11 to 20 Claim Settlement Level Addititves	
14th Last	+1.2% per year
13th Last	+1.2% per year
12th Last	+1.2% per year
11th Last	+1.2% per year
10th Last	+0.9% per year
9th Last	+0.6% per year
8th Last	+0.3% per year
7th Last	+0.2% per year
6th Last	+0.2% per year
5th Last	+0.2% per year
4th Last	+0.1% per year
3rd Last	+0.0% per year
2nd Last	+0.0% per year
1st Last	+0.0% per year

C. Indemnity Incurred Losses Adjusted to Act 57 Law Level and Claim Settlement Levels as of 04/30/14

1	6,088,000	9,427,000	6,304,000	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	3,407,539
2	10,713,000	12,736,000	11,664,000	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	
3	13,914,000	18,013,000	14,365,000	15,586,000	13,968,000	16,300,000	9,358,000	10,241,000	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		
4	16,153,000	21,069,000	15,947,000	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			
5	17,475,000	22,891,000	15,694,000	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				
6	17,348,000	23,899,000	16,406,000	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					
7	16,810,000	25,549,000	17,120,000	21,123,000	18,057,000	18,957,000	11,157,000	11,951,000	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						
8	16,707,000	25,983,000	16,956,000	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							
9	16,292,000	25,790,000	17,032,000	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								
10	16,361,000	25,946,000	17,165,000	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									
11	16,408,000	25,359,000	16,720,000	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										
12	16,382,000	25,711,000	16,347,000	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	8,582,610	12,101,118											
13	16,772,000	25,758,000	16,442,000	19,163,000	18,380,000	19,370,000	11,343,000	12,323,984	8,712,300	8,662,379	8,054,458	7,481,735	8,612,926												
14	16,758,000	26,063,000	16,540,000	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													
15	16,783,000	26,438,000	16,612,000	19,063,000	18,362,000	19,671,000	11,518,000	12,414,145	8,824,907	8,763,703	8,050,069														
16	16,477,000	26,547,000	16,691,000	19,130,000	18,500,000	19,937,000	11,629,000	12,454,657	8,629,585	8,763,787															
17	16,534,000	26,797,000	16,734,000	19,197,000	18,413,000	19,290,000	11,636,000	12,494,644	8,640,604																
18	16,584,000	26,962,000	16,673,000	18,840,000	18,535,000	19,393,000	11,662,000	12,534,389																	
19	16,621,000	26,839,000	16,697,000	18,881,000	18,663,000	19,494,000	11,659,000																		
20	16,658,000	26,763,000	16,710,000	18,923,000	18,803,000	19,581,000																			

Source: A. Exhibit VI-A, p. 1 (C)
B. Section C / Section A
C. Exhibit VI-A, p. 3 (C)

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

A. Indemnity Reported Incurred Losses as of 04/30/14

Report	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1	7,382,048	11,430,976	7,644,321	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	3,407,539
2	12,990,335	15,442,744	14,142,768	15,764,500	14,023,373	14,886,283	10,132,595	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	
3	16,871,066	21,841,614	17,418,184	18,899,163	16,937,016	19,319,350	10,822,307	10,812,980	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		
4	19,586,925	25,548,039	19,336,246	21,297,742	17,895,528	21,058,150	11,321,620	10,935,657	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			
5	21,189,848	27,756,357	19,029,994	23,283,444	19,116,711	21,755,213	12,031,334	11,473,813	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				
6	21,035,007	28,978,827	19,515,041	24,216,164	19,482,073	20,495,133	12,009,191	12,045,582	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					
7	20,382,845	30,425,965	19,983,588	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						
8	19,920,292	30,400,399	19,429,733	23,116,561	19,887,404	21,125,316	11,831,342	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							
9	19,106,424	29,654,340	19,164,572	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								
10	18,877,682	29,327,811	19,057,604	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									
11	18,750,063	28,447,443	18,464,716	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										
12	18,586,059	28,697,143	18,005,447	21,374,865	19,597,199	20,479,299	11,959,550	12,194,216	8,674,576	8,654,986	8,095,907	7,481,862	8,582,610	12,101,118											
13	18,938,310	28,677,619	18,077,666	20,831,448	19,782,074	20,635,147	11,968,738	12,323,984	8,712,300	8,662,379	8,054,458	7,481,735	8,612,926												
14	18,878,356	28,968,294	18,154,050	20,921,084	19,781,165	20,796,338	11,976,248	12,373,446	8,797,458	8,760,619	8,050,069	7,481,735													
15	18,876,061	29,335,955	18,200,852	20,665,237	19,743,633	20,955,578	12,153,996	12,414,145	8,824,907	8,763,703	8,050,069														
16	18,503,197	29,408,896	18,272,016	20,737,874	19,892,372	21,238,443	12,270,702	12,454,657	8,629,585	8,763,787															
17	18,537,957	29,660,654	18,318,328	20,810,640	19,799,167	20,549,947	12,278,302	12,494,644	8,640,604																
18	18,579,406	29,842,897	18,251,803	20,424,387	19,930,173	20,658,968	12,305,704	12,534,389																	
19	18,620,830	29,707,542	18,277,999	20,468,682	20,068,163	20,766,504	12,302,583																		
20	18,662,299	29,623,426	18,292,186	20,513,393	20,217,996	20,860,130																			
	70	75	80	85	90	95	100																		

Claim Settlement Level Additions are multiplied by the percentages at the top of each column.

B. Act 57 Indemnity Law Adjusment Factors and Claim Settlement Levels

1	0.8247	0.8247	0.8247	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
2	0.8247	0.8247	0.8247	0.8247	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	
3	0.8247	0.8247	0.8247	0.8247	0.8247	0.8437	0.8647	0.9471	1.0000	1.0000	1.0000	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	0.8427	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			
5	0.8247	0.8247	0.8247	0.8417	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				
6	0.8247	0.8247	0.8407	0.8587	0.8787	0.9007	0.9197	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					
7	0.8247	0.8397	0.8567	0.8757	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						
8	0.8387	0.8547	0.8727	0.8927	0.9102	0.9245	0.9347	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000							
9	0.8527	0.8697	0.8887	0.9055	0.9192	0.9292	0.9397	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000								
10	0.8667	0.8847	0.9007	0.9140	0.9237	0.9340	0.9447	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000									
11	0.8751	0.8915	0.9055	0.9165	0.9255	0.9359	0.9467	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000										
12	0.8814	0.8960	0.9079	0.9182	0.9273	0.9378	0.9477	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000											
13	0.8856	0.8982	0.9095	0.9199	0.9291	0.9387	0.9477	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000												
14	0.8877	0.8997	0.9111	0.9216	0.9300	0.9387	0.9477	1.0000	1.0000	1.0000	1.0000	1.0000													
15	0.8891	0.9012	0.9127	0.9225	0.9300	0.9387	0.9477	1.0000	1.0000	1.0000	1.0000														
16	0.8905	0.9027	0.9135	0.9225	0.9300	0.9387	0.9477	1.0000	1.0000	1.0000															
17	0.8919	0.9035	0.9135	0.9225	0.9300	0.9387	0.9477	1.0000	1.0000																
18	0.8926	0.9035	0.9135	0.9225	0.9300	0.9387	0.9477	1.0000																	
19	0.8926	0.9035	0.9135	0.9225	0.9300	0.9387	0.9477																		
20	0.8926	0.9035	0.9135	0.9225	0.9300	0.9387																			

Act 57 Effective Date			Prior to
(b) Accident Year 1996 (8-23-96)			1996
Act 57	Effect	Weight	Effect
Pre	17.53%	0.644	17.53%
Post	0.00%	0.356	
1996 Avg	11.29%	1.000	
Complement:			
1.0-0.1129= 0.8871			0.8247

Selected Years 0 to 10	
Claim Settlement Level Addititves	
9th Last	+2.0% per year
8th Last	+2.0% per year
7th Last	+2.0% per year
6th Last	+2.0% per year
5th Last	+1.5% per year
4th Last	+1.0% per year
3rd Last	+0.5% per year
2nd Last	+0.5% per year
1st Last	+0.5% per year

Selected Years 11 to 20	
Claim Settlement Level Addititves	
14th Last	+1.2% per year
13th Last	+1.2% per year
12th Last	+1.2% per year
11th Last	+1.2% per year
10th Last	+0.9% per year
9th Last	+0.6% per year
8th Last	+0.3% per year
7th Last	+0.2% per year
6th Last	+0.2% per year
5th Last	+0.2% per year
4th Last	+0.1% per year
3rd Last	+0.0% per year
2nd Last	+0.0% per year
1st Last	+0.0% per year

C. Indemnity Incurred Losses Adjusted to Act 57 Law Level and Claim Settlement Levels as of 04/30/14

1	6,088,000	9,427,000	6,304,000	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	3,407,539
2	10,713,000	12,736,000	11,664,000	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	
3	13,914,000	18,013,000	14,365,000	15,586,000	13,968,000	16,300,000	9,358,000	10,241,000	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		
4	16,153,000	21,069,000	15,947,000	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			
5	17,475,000	22,891,000	15,694,000	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				
6	17,348,000	23,899,000	16,406,000	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					
7	16,810,000	25,549,000	17,120,000	21,123,000	18,057,000	18,957,000	11,157,000	11,951,000	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						
8	16,707,000	25,983,000	16,956,000	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							
9	16,292,000	25,790,000	17,032,000	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								
10	16,361,000	25,946,000	17,165,000	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									
11	16,408,000	25,359,000	16,720,000	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										
12	16,382,000	25,711,000	16,347,000	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	8,582,610	12,101,118											
13	16,772,000	25,758,000	16,442,000	19,163,000	18,380,000	19,370,000	11,343,000	12,323,984	8,712,300	8,662,379	8,054,458	7,481,735	8,612,926												
14	16,758,000	26,063,000	16,540,000	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													
15	16,783,000	26,438,000	16,612,000	19,063,000	18,362,000	19,671,000	11,518,000	12,414,145	8,824,907	8,763,703	8,050,069														
16	16,477,000	26,547,000	16,691,000	19,130,000	18,500,000	19,937,000	11,629,000	12,454,657	8,629,585	8,763,787															
17	16,534,000	26,797,000	16,734,000	19,197,000	18,413,000	19,290,000	11,636,000	12,494,644	8,640,604																
18	16,584,000	26,962,000	16,673,000	18,840,000	18,535,000	19,393,000	11,662,000	12,534,389																	
19	16,621,000	26,839,000	16,697,000	18,881,000	18,663,000	19,494,000	11,659,000																		
20	16,658,000	26,763,000	16,710,000	18,923,000	18,803,000	19,581,000																			

Note:1996 Adjustment Factors are capped at a maximum of 1.0000

Source: A. Exhibit VI-A, p. 1 (A)
B. Act 57 and Claim Settlement Levels Combined
Exhibit VI-A-5a,VI-A-5b,VI-A-5c
C. A times B equals C

Note: The factors in section B were taken unchanged from the corresponding section of last year's (Approved) filing.

File: 2-C-C:\Clients\Coal Mine\2014 Rate Filing\[06-A,B,C,E.xlsm]A-3
Run Time: August 27, 2014 - 03:32:03 PM

PAB
Effective Date - April 01, 2015
Checksum:7,814,969,137.722450

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

A. Indemnity Reported Incurred Losses Adjusted to Act 57 Law Level and Claim Settlement Levels as of 04/30/14

Report	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1	6,088,000	9,427,000	6,304,000	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	3,407,539
2	10,713,000	12,736,000	11,664,000	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	
3	13,914,000	18,013,000	14,365,000	15,586,000	13,968,000	16,300,000	9,358,000	10,241,000	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		
4	16,153,000	21,069,000	15,947,000	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			
5	17,475,000	22,891,000	15,694,000	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				
6	17,348,000	23,899,000	16,406,000	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					
7	16,810,000	25,549,000	17,120,000	21,123,000	18,057,000	18,957,000	11,157,000	11,951,000	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						
8	16,707,000	25,983,000	16,956,000	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							
9	16,292,000	25,790,000	17,032,000	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								
10	16,361,000	25,946,000	17,165,000	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									
11	16,408,000	25,359,000	16,720,000	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										
12	16,382,000	25,711,000	16,347,000	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	8,582,610	12,101,118											
13	16,772,000	25,758,000	16,442,000	19,163,000	18,380,000	19,370,000	11,343,000	12,323,984	8,712,300	8,662,379	8,054,458	7,481,735	8,612,926												
14	16,758,000	26,063,000	16,540,000	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													
15	16,783,000	26,438,000	16,612,000	19,063,000	18,362,000	19,671,000	11,518,000	12,414,145	8,824,907	8,763,703	8,050,069														
16	16,477,000	26,547,000	16,691,000	19,130,000	18,500,000	19,937,000	11,629,000	12,454,657	8,629,585	8,763,787															
17	16,534,000	26,797,000	16,734,000	19,197,000	18,413,000	19,290,000	11,636,000	12,494,644	8,640,604																
18	16,584,000	26,962,000	16,673,000	18,840,000	18,535,000	19,393,000	11,662,000	12,534,389																	
19	16,621,000	26,839,000	16,697,000	18,881,000	18,663,000	19,494,000	11,659,000																		
20	16,658,000	26,763,000	16,710,000	18,923,000	18,803,000	19,581,000																			

B. Annual Loss Development Factors

1:2															1.4545	1.5818	1.5072	1.6825	1.5552	1.1825	1.8090	1.4753	1.8299	1.8329
2:3														1.2156	1.0966	1.1324	1.1113	1.0720	1.1828	1.3526	1.1487	1.2410	1.2251	
3:4													1.0659	1.1055	1.0461	0.9950	1.1667	0.9332	1.0046	1.0319	1.0377	1.1851		
4:5												0.9904	1.0318	1.0298	1.1371	1.0146	1.0362	0.9821	1.0271	1.0188	1.0298			
5:6											1.0115	1.0223	1.0267	1.0657	0.9786	1.0059	0.9624	0.9487	1.0212	1.0027				
6:7										1.0185	1.0009	1.0011	0.9872	0.9726	1.0038	1.0069	1.0162	1.0043	1.0192					
7:8									0.9987	0.9945	1.0043	1.0018	0.9791	0.9817	0.9662	1.0039	1.0252	1.0027						
8:9								1.0103	0.9920	1.0101	1.0047	1.0014	0.9756	0.9933	0.9484	1.0055	1.0093							
9:10							1.0098	0.9890	1.0091	1.0115	1.0434	0.9991	1.0040	0.9818	1.0047	1.0062								
10:11						1.0136	1.0026	1.0061	1.0051	1.0096	1.0004	1.0001	1.0040	0.9832	0.9874									
11:12					1.0174	1.0095	1.0009	1.0060	1.0200	1.0009	1.0002	1.0001	1.0039	1.0064										
12:13				0.9764	1.0114	1.0086	1.0008	1.0106	1.0043	1.0009	0.9949	1.0000	1.0035											
13:14			1.0060	1.0062	1.0009	1.0078	1.0006	1.0040	1.0098	1.0113	0.9995	1.0000												
14:15		1.0144	1.0044	0.9887	0.9982	1.0076	1.0148	1.0033	1.0031	1.0004	1.0000													
15:16	0.9818	1.0041	1.0048	1.0035	1.0075	1.0135	1.0096	1.0033	0.9779	1.0000														
16:17	1.0035	1.0094	1.0026	1.0035	0.9953	0.9675	1.0006	1.0032	1.0013															
17:18	1.0030	1.0062	0.9964	0.9814	1.0066	1.0053	1.0022	1.0032																
18:19	1.0022	0.9954	1.0014	1.0022	1.0069	1.0052	0.9997																	
19:20	1.0022	0.9972	1.0008	1.0022	1.0075	1.0045																		

C. Summary

	10 Year Straight Average	6 Year Straight Average	10 Year Weighted Average	10 Year Average Ex. Hi/Lo	6 Year Average Ex. Hi/Lo	6 Year Weighted Average	Average of Middle Four
1:2	1.5911	1.6141	1.5582	1.6119	1.6674	1.5700	1.5968
2:3	1.1778	1.2037	1.1776	1.1692	1.1994	1.2102	1.1896
3:4	1.0572	1.0599	1.0645	1.0567	1.0602	1.0688	1.0604
4:5	1.0298	1.0181	1.0309	1.0223	1.0226	1.0206	1.0238
5:6	1.0046	0.9866	1.0067	1.0039	0.9874	0.9853	0.9956
6:7	1.0031	1.0038	1.0013	1.0049	1.0078	1.0011	1.0033
7:8	0.9958	0.9931	0.9959	0.9958	0.9919	0.9937	0.9946
8:9	0.9951	0.9889	0.9962	0.9990	0.9940	0.9906	0.9940
9:10	1.0059	1.0065	1.0040	1.0042	1.0035	1.0043	1.0046
10:11	1.0012	0.9975	1.0022	1.0019	0.9980	0.9966	0.9997
11:12	1.0065	1.0053	1.0076	1.0057	1.0029	1.0054	1.0057
12:13	1.0011	1.0024	1.0007	1.0030	1.0022	1.0030	1.0022
13:14	1.0046	1.0042	1.0048	1.0044	1.0036	1.0042	1.0043
14:15	1.0035	1.0049	1.0039	1.0039	1.0036	1.0056	1.0041
15:16	1.0006	1.0020	1.0020	1.0018	1.0051	1.0045	1.0026
16:17	0.9985	0.9952	0.9983	1.0014	1.0001	0.9933	0.9980
17:18	1.0005	0.9992	1.0006	1.0027	1.0018	0.9987	1.0005
18:19	1.0019	1.0018	1.0016	1.0021	1.0021	1.0015	1.0018
19:20	1.0024	1.0024	1.0021	1.0024	1.0024	1.0021	1.0023

A. Loss Development Data: Exhibit VI-A, page 3
B. Annual Loss Development Factors
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.

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

Data as of	(1) 0 to 10 Development	(2) 0 to 10 Selection
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	2.2%	2.0%
Total	16.5%	12.0%

Data as of	(3) 10 to 20 Development	(4) 10 to 20 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	0.0%	1.2%
Total	8.3%	7.3%

Sources:
(1) Exhibit VI-A Page 5b
(2) Exhibit VI-A Page 5b
(3) Exhibit VI-A Page 5c
(4) Exhibit VI-A Page 5c

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

Accident Year	(1) 4/30/1997 Rpt.Loss [a]	(2) 12 Month Fav Dev [a]	(3) (2) / (1)	(4) Selection
1987	18,806	759	4.0%	xx
1988	15,731	926	5.9%	xx
1989	19,920	856	4.3%	xx
1990	30,426	478	1.6%	xx
1991	19,515	319	1.6%	xx
1992	23,283	0	0.0%	xx
1993	17,896	445	2.5%	xx
1994	19,319	0	0.0%	xx
1995	10,133	0	0.0%	xx
Total	175,029	3,783	2.2%	2.0%

Accident Year	(1) 4/30/1998 Rpt.Loss [a]	(2) 12 Month Fav Dev [a]	(3) (2) / (1)	(4) Selection
1988	16,032	0	0.0%	xx
1989	19,106	874	4.6%	xx
1990	30,400	1150	3.8%	xx
1991	19,984	544	2.7%	xx
1992	24,216	651	2.7%	xx
1993	19,117	919	4.8%	xx
1994	21,058	337	1.6%	xx
1995	10,822	349	3.2%	xx
1996	9,862	0	0.0%	xx
Total	170,597	4,824	2.8%	2.0%

Accident Year	(1) 4/30/1999 Rpt.Loss [a]	(2) 12 Month Fav Dev [a]	(3) (2) / (1)	(4) Selection
1989	18,878	368	1.9%	xx
1990	29,654	1150	3.9%	xx
1991	19,430	596	3.1%	xx
1992	24,122	491	2.0%	xx
1993	19,482	440	2.3%	xx
1994	21,755	656	3.0%	xx
1995	11,322	127	1.1%	xx
1996	10,813	296	2.7%	xx
1997	xx	xx	xx	xx
Total	155,456	4,124	2.7%	2.0%

Accident Year	(1) 4/30/2000 Rpt.Loss [a]	(2) 12 Month Fav Dev [a]	(3) (2) / (1)	(4) Selection
1990	29,328	800	2.7%	xx
1991	19,165	457	2.4%	xx
1992	23,117	988	4.3%	xx
1993	20,137	0	0.0%	xx
1994	20,495	1321	6.4%	xx
1995	12,031	0	0.0%	xx
1996	10,936	663	6.1%	xx
1997	xx	xx	xx	xx
1998	xx	xx	xx	xx
Total	135,209	4,229	3.1%	2.0%

Accident Year	(1) 4/30/2001 Rpt.Loss [a]	(2) 12 Month Fav Dev [a]	(3) (2) / (1)	(4) Selection
1991	19,058	244	1.3%	xx
1992	22,030	813	3.7%	xx
1993	19,887	522	2.6%	xx
1994	20,719	434	2.1%	xx
1995	12,009	162	1.3%	xx
1996	11,474	156	1.4%	xx
1997	xx	xx	xx	xx
1998	xx	xx	xx	xx
1999	xx	xx	xx	xx
Total	105,177	2,331	2.2%	1.5%

Accident Year	(1) 4/30/2002 Rpt.Loss [a]	(2) 12 Month Fav Dev [a]	(3) (2) / (1)	(4) Selection
1992	22,275	0	0.0%	xx
1993	20,029	314	1.6%	xx
1994	21,125	214	1.0%	xx
1995	12,001	354	2.9%	xx
1996	12,046	0	0.0%	xx
1997	xx	xx	xx	xx
1998	xx	xx	xx	xx
1999	xx	xx	xx	xx
2000	xx	xx	xx	xx
Total	87,476	882	1.0%	1.0%

Accident Year	(1) 4/30/2003 Rpt.Loss [a]	(2) 12 Month Fav Dev [a]	(3) (2) / (1)	(4) Selection
1993	19,361	236	1.2%	xx
1994	20,681	637	3.1%	xx
1995	11,831	0	0.0%	xx
1996	11,985	0	0.0%	xx
1997	xx	xx	xx	xx
1998	xx	xx	xx	xx
1999	xx	xx	xx	xx
2000	xx	xx	xx	xx
2001	xx	xx	xx	xx
Total	63,858	873	1.4%	0.5%

Accident Year	(1) 4/30/2004 Rpt.Loss [a]	(2) 12 Month Fav Dev [a]	(3) (2) / (1)	(4) Selection
1994	20,243	368	1.8%	xx
1995	11,907	0	0.0%	xx
1996	11,994	0	0.0%	xx
1997	xx	0	xx	xx
1998	xx	xx	xx	xx
1999	xx	xx	xx	xx
2000	xx	xx	xx	xx
2001	xx	xx	xx	xx
2002	xx	xx	xx	xx
Total	44,144	368	0.8%	0.5%

Accident Year	(1) 4/30/2005 Rpt.Loss [a]	(2) 12 Month Fav Dev [a]	(3) (2) / (1)	(4) 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)
Year	Rpt.Loss[a]	Fav Dev[a]	(2) / (1)	Selection
1983	19,728	283	1.4%	xx
1984	25,745	185	0.7%	xx
1985	16,662	219	1.3%	xx
1986	18,002	194	1.1%	xx
1987	17,785	0	0.0%	xx
1988	15,926	194	1.2%	xx
1989	18,586	0	0.0%	xx
1990	28,447	1222	4.3%	xx
1991	xx	xx	xx	xx
1992	xx	xx	xx	xx
Total	160,881	2,297	1.4%	0.9%

Accident	(1) 4/30/2002	(2) 12 Month	(3)	(4)
Year	Rpt.Loss[a]	Fav Dev[a]	(2) / (1)	Selection
1983	19,581	0	0.0%	xx
1984	25,801	0	0.0%	xx
1985	16,776	0	0.0%	xx
1986	17,729	221	1.2%	xx
1987	17,924	0	0.0%	xx
1988	15,795	217	1.4%	xx
1989	18,938	0	0.0%	xx
1990	28,697	0	0.0%	xx
1991	18,465	442	2.4%	xx
1992	xx	xx	xx	xx
Total	179,706	880	0.5%	0.6%

Accident	(1) 4/30/2003	(2) 12 Month	(3)	(4)
Year	Rpt.Loss[a]	Fav Dev[a]	(2) / (1)	Selection
1983	19,537	132	0.7%	xx
1984	25,724	0	0.0%	xx
1985	16,860	0	0.0%	xx
1986	17,764	0	0.0%	xx
1987	17,933	122	0.7%	xx
1988	15,878	0	0.0%	xx
1989	18,878	0	0.0%	xx
1990	28,678	294	1.0%	xx
1991	18,005	458	2.5%	xx
1992	21,860	835	3.8%	xx
Total	201,117	1,841	0.9%	0.3%

Accident	(1) 4/30/2004	(2) 12 Month	(3)	(4)
Year	Rpt.Loss[a]	Fav Dev[a]	(2) / (1)	Selection
1983	19,617	0	0.0%	xx
1984	25,837	0	0.0%	xx
1985	16,954	0	0.0%	xx
1986	17,812	0	0.0%	xx
1987	18,072	0	0.0%	xx
1988	15,845	0	0.0%	xx
1989	18,876	0	0.0%	xx
1990	28,968	0	0.0%	xx
1991	18,078	16	0.1%	xx
1992	21,375	32	0.1%	xx
1993	19,300	358	1.9%	xx
Total	220,734	406	0.2%	0.2%

Accident	(1) 4/30/2005	(2) 12 Month	(3)	(4)
Year	Rpt.Loss[a]	Fav Dev[a]	(2) / (1)	Selection
1983	19,558	0	0.0%	xx
1984	26,025	0	0.0%	xx
1985	17,068	0	0.0%	xx
1986	17,907	0	0.0%	xx
1987	18,208	0	0.0%	xx
1988	15,700	0	0.0%	xx
1989	18,503	380	2.1%	xx
1990	29,336	0	0.0%	xx
1991	18,154	0	0.0%	xx
1992	20,831	631	3.0%	xx
1993	19,597	0	0.0%	xx
1994	20,328	0	0.0%	xx
Total	241,215	1,011	0.4%	0.2%

Accident	(1) 4/30/2006	(2) 12 Month	(3)	(4)
Year	Rpt.Loss[a]	Fav Dev[a]	(2) / (1)	Selection
1983	19,629	0	0.0%	xx
1984	25,971	0	0.0%	xx
1985	17,182	0	0.0%	xx
1986	17,896	94	0.5%	xx
1987	18,028	295	1.6%	xx
1988	15,763	0	0.0%	xx
1989	18,538	0	0.0%	xx
1990	29,409	176	0.6%	xx
1991	18,201	0	0.0%	xx
1992	20,921	0	0.0%	xx
1993	19,782	0	0.0%	xx
1994	20,479	8	0.0%	xx
1995	11,961	0	0.0%	xx
Total	253,760	573	0.2%	0.2%

Accident	(1) 4/30/07	(2) 12 Month	(3)	(4)
Year	Rpt.Loss[a]	Fav Dev[a]	(2) / (1)	Selection
1983	19,485	0	0.0%	xx
1984	26,136	0	0.0%	xx
1985	17,144	0	0.0%	xx
1986	17,999	0	0.0%	xx
1987	18,007	0	0.0%	xx
1988	15,827	0	0.0%	xx
1989	18,579	0	0.0%	xx
1990	29,661	0	0.0%	xx
1991	18,272	0	0.0%	xx
1992	20,665	0	0.0%	xx
1993	19,781	167	0.8%	xx
1994	20,635	0	0.0%	xx
1995	11,960	9	0.1%	xx
1996	12,122	0	0.0%	xx
Total	266,273	176	0.1%	0.1%

Accident	(1) 4/30/2008	(2) 12 Month	(3)	(4)
Year	Rpt.Loss[a]	Fav Dev[a]	(2) / (1)	Selection
1983	19,478	0	0.0%	xx
1984	26,205	0	0.0%	xx
1985	16,838	0	0.0%	xx
1986	18,146	0	0.0%	xx
1987	18,110	0	0.0%	xx
1988	15,892	0	0.0%	xx
1989	18,621	0	0.0%	xx
1990	29,843	0	0.0%	xx
1991	18,318	0	0.0%	xx
1992	20,738	0	0.0%	xx
1993	19,744	0	0.0%	xx
1994	20,796	0	0.0%	xx
1995	11,969	0	0.0%	xx
1996	12,194	40	0.3%	xx
1997	8,505	0	0.0%	xx
Total	275,397	40	0.0%	0.0%

Accident	(1) 4/30/2009	(2) 12 Month	(3)	(4)
Year	Rpt.Loss[a]	Fav Dev[a]	(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	0	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 04/30/14 - Validated 08/13/14 and prior

Coal Mine Compensation Rating Bureau
Traumatic Loss Development
Incurred Medical Losses for All Classes Combined

A. Medical Reported Incurred Losses as of 04/30/14

Report	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1	4,771,196	5,121,908	5,085,069	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	3,352,536
2	5,836,016	5,979,955	6,471,250	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	
3	6,363,979	7,074,053	6,824,261	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		
4	7,933,751	7,753,514	7,207,603	6,985,202	6,061,248	5,216,951	4,294,114	4,808,246	3,571,097	3,720,868	3,057,663	2,836,912	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	8,404,823	7,595,281	7,239,653	6,810,575	6,077,440	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				
6	8,841,749	7,729,893	7,315,361	6,966,052	5,804,110	5,029,268	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					
7	8,720,012	7,929,203	7,215,882	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						
8	8,176,532	7,725,007	7,140,026	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							
9	7,991,002	7,725,545	7,175,630	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								
10	8,524,905	7,808,315	7,347,568	7,100,992	5,971,283	5,144,115	4,668,534	4,651,769	4,393,793	3,777,626	3,357,242	2,950,698	2,879,623	4,160,518	3,110,017	4,206,298									
11	8,210,154	7,818,624	7,477,095	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										
12	7,853,295	7,818,489	7,453,897	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											
13	7,996,833	7,777,708	7,447,799	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												
14	8,316,349	7,799,651	7,500,265	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													
15	7,936,277	7,798,234	7,500,059	7,140,118	5,859,155	5,384,567	4,836,117	4,491,418	4,702,741	3,851,841	3,533,087														
16	7,914,050	7,789,301	7,442,165	7,069,470	5,935,724	5,423,525	4,865,082	4,520,959	4,694,564	3,852,213															
17	7,910,771	7,822,500	7,490,067	7,047,415	6,019,026	5,290,059	4,883,436	4,514,259	4,723,464																
18	7,927,236	7,870,056	7,528,919	7,028,385	6,100,724	5,370,678	4,927,115	4,523,523																	
19	7,905,531	7,847,501	7,453,318	7,029,188	6,154,033	5,371,098	4,917,010																		
20	7,888,944	7,852,764	7,374,324	7,063,572	6,153,930	5,467,814																			

B. Act 44 Medical Law Adjustment Factors

1	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
2	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	
3	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		
4	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			
5	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				
6	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					
7	0.7841	0.7783	0.7896	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						
8	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							
9	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								
10	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									
11	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										
12	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											
13	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												
14	0.7833	0.7857	0.7998	0.8170	0.9095	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000													
15	0.7832	0.7868	0.8012	0.8179	0.9108	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000														
16	0.7831	0.7879	0.8027	0.8189	0.9122	1.0000	1.0000	1.0000	1.0000	1.0000															
17	0.7830	0.7889	0.8041	0.8199	0.9135	1.0000	1.0000	1.0000	1.0000																
18	0.7829	0.7900	0.8056	0.8209	0.9148	1.0000	1.0000	1.0000																	
19	0.7828	0.7910	0.8070	0.8219	0.9162	1.0000	1.0000																		
20	0.7827	0.7921	0.8085	0.8228	0.9175	1.0000																			

Act 44 Discount Factor: 0.7082

Example : 1990 (5th Report) 0.7762. See VI-D Page 6 Col. T at 0.7762

C. Medical Incurred Losses Adjusted to Act 44 Law Level as of 04/30/14

1	3,379,000	3,627,000	3,601,000	4,223,000	4,265,000	3,814,000	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	3,352,536
2	4,133,000	4,235,000	4,583,000	5,403,000	5,169,000	4,884,000	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	
3	4,507,000	5,010,000	5,349,000	5,634,000	5,514,000	5,042,000	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		
4	5,619,000	6,010,000	5,660,000	5,638,000	5,431,000	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	6,592,000	5,896,000	5,695,000	5,504,000	5,454,000	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				
6	6,933,000	6,008,000	5,766,000	5,636,000	5,217,000	5,029,268	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					
7	6,837,000	6,172,000	5,698,000	5,741,000	5,191,000	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						
8	6,410,000	6,021,000	5,648,000	5,665,000	5,165,000	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							
9	6,264,000	6,029,000	5,687,000	5,639,000	5,247,000	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								
10	6,681,000	6,102,000	5,834,000	5,773,000	5,399,000	5,144,115	4,668,534	4,651,769	4,393,793	3,777,626	3,357,242	2,950,698	2,879,623	4,160,518	3,110,017	4,206,298									
11	6,434,000	6,119,000	5,947,000	5,779,000	5,450,000	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										
12	6,153,000	6,127,000	5,940,000	5,842,000	5,295,000	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											
13	6,265,000	6,103,000	5,946,000	5,853,000	5,206,000	5,346,840	4,869,709	4,485,294	4,602,844	3,868,653	3,531,522	3,021,095	3,012,114												
14	6,515,000	6,128,000	5,999,000	5,794,000	5,292,000	5,366,481	4,793,570	4,501,155	4,627,844	3,851,694	3,532,688	3,020,836													
15	6,216,000	6,136,000	6,009,000	5,840,000	5,337,000	5,384,567	4,836,117	4,491,418	4,702,741	3,851,841	3,533,087														
16	6,198,000	6,137,000	5,974,000	5,789,000	5,414,000	5,423,525	4,865,082	4,520,959	4,694,564	3,852,213															
17	6,194,000	6,171,000	6,023,000	5,778,000	5,498,000	5,290,059	4,883,436	4,514,259	4,723,464																
18	6,207,000	6,217,000	6,065,000	5,770,000	5,581,000	5,370,678	4,927,115	4,523,523																	
19	6,189,000	6,208,000	6,015,000	5,777,000	5,638,000	5,371,098	4,917,010																		
20	6,175,000	6,220,000	5,962,000	5,812,000	5,646,000	5,467,814																			

Large Loss is excluded from Accident Year 1992

Source: A. Loss Development Data: CMCRB Database as of 04/30/14 - Validated 08/13/14
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

File: 2-C-C:\Clients\Coal Mine\2014 Rate Filing\[06-A,B,C,E.xlsm]B-1
Run Time: August 27, 2014 - 03:32:03 PM

PAB
Effective Date - April 01, 2015
Checksum:2,945,932,654.505020

Coal Mine Compensation Rating Bureau
Traumatic Loss Development
Incurred Medical Losses for All Classes Combined

A. Adjustment to Act 44 Law Level

Report	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1	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
2	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	
3	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		
4	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			
5	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				
6	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					
7	0.7841	0.7783	0.7896	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						
8	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							
9	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								
10	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									
11	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										
12	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											
13	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												
14	0.7833	0.7857	0.7998	0.8170	0.9095	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000													
15	0.7832	0.7868	0.8012	0.8179	0.9108	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000														
16	0.7831	0.7879	0.8027	0.8189	0.9122	1.0000	1.0000	1.0000	1.0000	1.0000															
17	0.7830	0.7889	0.8041	0.8199	0.9135	1.0000	1.0000	1.0000	1.0000																
18	0.7829	0.7900	0.8056	0.8209	0.9148	1.0000	1.0000	1.0000																	
19	0.7828	0.7910	0.8070	0.8219	0.9162	1.0000	1.0000																		
20	0.7827	0.7921	0.8085	0.8228	0.9175	1.0000																			
	70	75	80	85	90	95	100	100																	

Claim Settlement Level Additions are multiplied by the percentages at the top of each column.

B. Claim Settlement Adjustments Additions

1	0.0000	0.0000	0.0000	0.0000	0.0180	0.0190	0.0200	0.0200	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
2	0.0000	0.0000	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		
3	0.0000	0.0000	0.0160	0.0340	0.0540	0.0570	0.0600	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			
4	0.0000	0.0150	0.0320	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				
5	0.0140	0.0300	0.0480	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				
6	0.0280	0.0450	0.0640	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					
7	0.0420	0.0600	0.0800	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						
8	0.0560	0.0750	0.0920	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							
9	0.0700	0.0863	0.1032	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								
10	0.0805	0.0968	0.1136	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									
11	0.0903	0.1065	0.1232	0.1403	0.1575	0.1549	0.1480	0.1280	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000										
12	0.0994	0.1155	0.1320	0.1488	0.1647	0.1596	0.1480	0.1280	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000											
13	0.1078	0.1238	0.1400	0.1556	0.1692	0.1596	0.1480	0.1280	0.0000	0.0000	0.0000	0.0000	0.0000												
14	0.1155	0.1313	0.1464	0.1598	0.1692	0.1596	0.1480	0.1280	0.0000	0.0000	0.0000	0.0000													
15	0.1225	0.1373	0.1504	0.1598	0.1692	0.1596	0.1480	0.1280	0.0000	0.0000	0.0000														
16	0.1281	0.1410	0.1504	0.1598	0.1692	0.1596	0.1480	0.1280	0.0000	0.0000															
17	0.1316	0.1410	0.1504	0.1598	0.1692	0.1596	0.1480	0.1280	0.0000																
18	0.1316	0.1410	0.1504	0.1598	0.1692	0.1596	0.1480	0.1280																	
19	0.1316	0.1410	0.1504	0.1598	0.1692	0.1596	0.1480																		
20	0.1316	0.1410	0.1504	0.1598	0.1692	0.1596																			

Act 44 Discount Factor:	0.7082
Selected Claim Settlement Factor	

Note: Act 44 effective in 1993

Selected Claim Settlement Level Additions	
17th Last	2.0% per year
16th Last	2.0% per year
15th Last	2.0% per year
14th Last	2.0% per year
13th Last	2.0% per year
12th Last	1.5% per year
11th Last	1.4% per year
10th Last	1.3% per year
9th Last	1.2% per year
8th Last	1.1% per year
7th Last	1.0% per year
6th Last	0.8% per year
5th Last	0.5% per year
4th Last	0.0% per year
3rd Last	0.0% per year
2nd Last	0.0% per year
1st Last	0.0% per year

C. Sum of Adjustment to Act 44 Law Level and Claim Settlement Adjustments Additions

1	0.7082	0.7082	0.7082	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
2	0.7082	0.7082	0.7082	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		
3	0.7082	0.7082	0.7998	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			
4	0.7082	0.7902	0.8173	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				
5	0.7983	0.8062	0.8347	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					
6	0.8122	0.8223	0.8522	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						
7	0.8261	0.8383	0.8696	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						
8	0.8400	0.8544	0.8831	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							
9	0.8539	0.8667	0.8957	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								
10	0.8642	0.8783	0.9076	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									
11	0.8739	0.8891	0.9186	0.9543	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000										
12	0.8829	0.8991	0.9289	0.9638	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000											
13	0.8912	0.9084	0.9383	0.9715	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000												
14	0.8988	0.9170	0.9462	0.9768	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000													
15	0.9057	0.9240	0.9516	0.9777	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000														
16	0.9112	0.9289	0.9531	0.9787	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000															
17	0.9146	0.9299	0.9545	0.9797	1.0000	1.0000	1.0000	1.0000	1.0000																
18	0.9145	0.9310	0.9560	0.9807	1.0000	1.0000	1.0000	1.0000																	
19	0.9144	0.9320	0.9574	0.9817	1.0000	1.0000	1.0000																		
20	0.9143	0.9331	0.9589	0.9826	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)

Coal Mine Compensation Rating Bureau
Traumatic Loss Development
Incurred Medical Losses for All Classes Combined

A. Medical Reported Incurred Losses as of 04/30/14

Report	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999 *	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1	4,771,196	5,121,908	5,085,069	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	3,352,536
2	5,836,016	5,979,955	6,471,250	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	
3	6,363,979	7,074,053	6,824,261	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		
4	7,933,751	7,753,514	7,207,603	6,985,202	6,061,248	5,216,951	4,294,114	4,808,246	3,571,097	3,720,868	3,057,663	2,836,912	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	8,404,823	7,595,281	7,239,653	6,810,575	6,077,440	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				
6	8,841,749	7,729,893	7,315,361	6,966,052	5,804,110	5,029,268	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					
7	8,720,012	7,929,203	7,215,882	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						
8	8,176,532	7,725,007	7,140,026	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							
9	7,991,002	7,725,545	7,175,630	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								
10	8,524,905	7,808,315	7,347,568	7,100,992	5,971,283	5,144,115	4,668,534	4,651,769	4,393,793	3,777,626	3,357,242	2,950,698	2,879,623	4,160,518	3,110,017	4,206,298									
11	8,210,154	7,818,624	7,477,095	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										
12	7,853,295	7,818,489	7,453,897	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											
13	7,996,833	7,777,708	7,447,799	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												
14	8,316,349	7,799,651	7,500,265	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													
15	7,936,277	7,798,234	7,500,059	7,140,118	5,859,155	5,384,567	4,836,117	4,491,418	4,702,741	3,851,841	3,533,087														
16	7,914,050	7,789,301	7,442,165	7,069,470	5,935,724	5,423,525	4,865,082	4,520,959	4,694,564	3,852,213															
17	7,910,771	7,822,500	7,490,067	7,047,415	6,019,026	5,290,059	4,883,436	4,514,259	4,723,464																
18	7,927,236	7,870,056	7,528,919	7,028,385	6,100,724	5,370,678	4,927,115	4,523,523																	
19	7,905,531	7,847,501	7,453,318	7,029,188	6,154,033	5,371,098	4,917,010																		
20	7,888,944	7,852,764	7,374,324	7,063,572	6,153,930	5,467,814																			

B. Act 44 Medical Law Adjusment Factors and Claim Settlement Levels

1	0.7082	0.7082	0.7082	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
2	0.7082	0.7082	0.7082	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	
3	0.7082	0.7082	0.7998	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		
4	0.7082	0.7902	0.8173	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			
5	0.7983	0.8062	0.8347	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				
6	0.8122	0.8223	0.8522	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					
7	0.8261	0.8383	0.8696	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						
8	0.8400	0.8544	0.8831	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							
9	0.8539	0.8667	0.8957	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								
10	0.8642	0.8783	0.9076	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									
11	0.8739	0.8891	0.9186	0.9543	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000										
12	0.8829	0.8991	0.9289	0.9638	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000											
13	0.8912	0.9084	0.9383	0.9715	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000												
14	0.8988	0.9170	0.9462	0.9768	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000													
15	0.9057	0.9240	0.9516	0.9777	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000														
16	0.9112	0.9289	0.9531	0.9787	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000															
17	0.9146	0.9299	0.9545	0.9797	1.0000	1.0000	1.0000	1.0000	1.0000																
18	0.9145	0.9310	0.9560	0.9807	1.0000	1.0000	1.0000	1.0000																	
19	0.9144	0.9320	0.9574	0.9817	1.0000	1.0000	1.0000																		
20	0.9143	0.9331	0.9589	0.9826	1.0000	1.0000																			

Act 44 Discount Factor: 0.7082
Selected Claim Settlement Factor

Note: Act 44 effective in 1993

C. Medical Incurred Losses Adjusted to Act 44 Law Level and Claim Settlement Levels as of 04/30/14

1	3,379,000	3,627,000	3,601,000	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	3,352,536
2	4,133,000	4,235,000	4,583,000	5,517,000	5,378,000	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	
3	4,507,000	5,010,000	5,458,000	5,872,000	5,847,000	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		
4	5,619,000	6,126,000	5,890,000	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	6,709,000	6,123,000	6,043,000	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				
6	7,181,000	6,356,000	6,234,000	6,229,000	5,804,110	5,029,268	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					
7	7,203,000	6,647,000	6,275,000	6,433,000	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						
8	6,868,000	6,600,000	6,305,000	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							
9	6,823,000	6,696,000	6,427,000	6,477,000	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								
10	7,368,000	6,858,000	6,668,000	6,703,000	5,971,283	5,144,115	4,668,534	4,651,769	4,393,793	3,777,626	3,357,242	2,950,698	2,879,623	4,160,518	3,110,017	4,206,298									
11	7,175,000	6,951,000	6,869,000	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										
12	6,934,000	7,030,000	6,924,000	6,908,000	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											
13	7,127,000	7,066,000	6,988,000	6,969,000	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												
14	7,475,000	7,152,000	7,097,000	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													
15	7,188,000	7,206,000	7,137,000	6,981,000	5,859,155	5,384,567	4,836,117	4,491,418	4,702,741	3,851,841	3,533,087														
16	7,212,000	7,235,000	7,093,000	6,919,000	5,935,724	5,423,525	4,865,082	4,520,959	4,694,564	3,852,213															
17	7,236,000	7,274,000	7,150,000	6,904,000	6,019,026	5,290,059	4,883,436	4,514,259	4,723,464																
18	7,250,000	7,327,000	7,198,000	6,893,000	6,100,724	5,370,678	4,927,115	4,523,523																	
19	7,229,000	7,314,000	7,136,000	6,900,000	6,154,033	5,371,098	4,917,010																		
20	7,213,000	7,327,000	7,071,000	6,941,000	6,153,930	5,467,814																			

***Large Loss is excluded from Accident Year 1992**

Source: A. Reported Medical Incurred Losses. Exhibit VI-B-1 (A)
B. Act 44 Medical Law Adjusment Factors and Claim Settlement Levels: Exhibit VI-B-2 (C)
C. Medical Incurred Losses Adjusted to Act 44 Law Level and Claim Settlement Levels= A x B

Coal Mine Compensation Rating Bureau
Traumatic Loss Development
Incurred Medical Losses for All Classes Combined

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

A. Medical Reported Incurred Losses Adjusted to Act 44 Law Level and Claim Settlement Levels as of 04/30/14

Report	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1	3,379,000	3,627,000	3,601,000	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	3,352,536
2	4,133,000	4,235,000	4,583,000	5,517,000	5,378,000	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	
3	4,507,000	5,010,000	5,458,000	5,872,000	5,847,000	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		
4	5,619,000	6,126,000	5,890,000	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	6,709,000	6,123,000	6,043,000	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				
6	7,181,000	6,356,000	6,234,000	6,229,000	5,804,110	5,029,268	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					
7	7,203,000	6,647,000	6,275,000	6,433,000	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						
8	6,868,000	6,600,000	6,305,000	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							
9	6,823,000	6,696,000	6,427,000	6,477,000	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								
10	7,368,000	6,858,000	6,668,000	6,703,000	5,971,283	5,144,115	4,668,534	4,651,769	4,393,793	3,777,626	3,357,242	2,950,698	2,879,623	4,160,518	3,110,017	4,206,298									
11	7,175,000	6,951,000	6,869,000	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										
12	6,934,000	7,030,000	6,924,000	6,908,000	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											
13	7,127,000	7,066,000	6,988,000	6,969,000	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												
14	7,475,000	7,152,000	7,097,000	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													
15	7,188,000	7,206,000	7,137,000	6,981,000	5,859,155	5,384,567	4,836,117	4,491,418	4,702,741	3,851,841	3,533,087														
16	7,212,000	7,235,000	7,093,000	6,919,000	5,935,724	5,423,525	4,865,082	4,520,959	4,694,564	3,852,213															
17	7,236,000	7,274,000	7,150,000	6,904,000	6,019,026	5,290,059	4,883,436	4,514,259	4,723,464																
18	7,250,000	7,327,000	7,198,000	6,893,000	6,100,724	5,370,678	4,927,115	4,523,523																	
19	7,229,000	7,314,000	7,136,000	6,900,000	6,154,033	5,371,098	4,917,010																		
20	7,213,000	7,327,000	7,071,000	6,941,000	6,153,930	5,467,814																			

B. Annual Loss Development Ratios

1:2															1.0904	1.1148	1.0893	1.1446	1.0041	1.0684	1.0941	1.0783	1.2648	1.0941
2:3														1.0425	0.9938	1.1666	1.0324	1.0684	1.0135	0.9893	0.9570	1.0645	1.0210	
3:4													0.9938	1.0338	0.9863	1.0046	1.0210	0.9735	1.0103	1.0255	1.0345	1.0590		
4:5												1.0171	1.0708	0.9960	1.0564	0.9915	0.9750	0.9949	1.0222	1.0087	0.9973			
5:6											0.9966	1.0180	1.0286	1.0817	0.9957	0.9876	1.0377	0.9910	1.0185	1.0011				
6:7										0.9999	0.9859	0.9968	0.9743	1.0159	0.9993	1.0247	1.0117	1.0032	0.9961					
7:8									1.0049	1.0082	1.0123	0.9977	0.9885	1.0193	0.9974	1.0015	1.0143	1.0003						
8:9								1.0019	1.0163	0.9867	1.0203	1.0107	0.9973	0.9552	1.0658	1.0008	0.9982							
9:10							0.9964	1.0056	1.0941	1.0098	1.0373	0.9993	1.0350	1.0036	1.0097	1.0037								
10:11						1.0252	1.0054	0.9945	1.0454	1.0222	0.9988	0.9994	1.0290	1.0010	0.9978									
11:12					0.9701	1.0042	1.0260	0.9932	0.9985	0.9953	1.0167	1.0245	1.0145	1.0071										
12:13				1.0088	0.9818	1.0096	1.0112	0.9763	1.0035	1.0066	1.0359	1.0000	1.0021											
13:14			1.0156	0.9940	1.0150	1.0037	0.9844	1.0035	1.0054	0.9956	1.0003	0.9999												
14:15		1.0076	1.0056	1.0078	1.0069	1.0034	1.0089	0.9978	1.0162	1.0000	1.0001													
15:16	1.0033	1.0040	0.9938	0.9911	1.0131	1.0072	1.0060	1.0066	0.9983	1.0001														
16:17	1.0033	1.0054	1.0080	0.9978	1.0140	0.9754	1.0038	0.9985	1.0062															
17:18	1.0019	1.0073	1.0067	0.9984	1.0136	1.0152	1.0089	1.0021																
18:19	0.9971	0.9982	0.9914	1.0010	1.0087	1.0001	0.9979																	
19:20	0.9978	1.0018	0.9909	1.0059	1.0000	1.0180																		

C. Summary

	10 Year Straight Average	6 Year Straight Average	10 Year Weighted Average	10 Year Average Ex. Hi/Lo	6 Year Average Ex. Hi/Lo	6 Year Weighted Average	Average of Middle Four
1:2	1.1043	1.1006	1.1019	1.0968	1.0837	1.0983	1.0994
2:3	1.0349	1.0190	1.0348	1.0282	1.0221	1.0199	1.0262
3:4	1.0142	1.0206	1.0156	1.0137	1.0228	1.0205	1.0177
4:5	1.0130	0.9983	1.0101	1.0105	0.9981	0.9996	1.0046
5:6	1.0157	1.0053	1.0165	1.0109	1.0016	1.0071	1.0098
6:7	1.0008	1.0085	1.0020	1.0011	1.0075	1.0082	1.0047
7:8	1.0044	1.0036	1.0054	1.0046	1.0034	1.0051	1.0044
8:9	1.0053	1.0047	1.0028	1.0040	1.0018	1.0007	1.0033
9:10	1.0195	1.0148	1.0187	1.0130	1.0130	1.0136	1.0150
10:11	1.0119	1.0080	1.0125	1.0099	1.0054	1.0078	1.0094
11:12	1.0050	1.0094	1.0026	1.0068	1.0092	1.0080	1.0073
12:13	1.0036	1.0041	1.0027	1.0030	1.0031	1.0027	1.0031
13:14	1.0017	0.9982	1.0025	1.0022	0.9998	0.9979	1.0005
14:15	1.0054	1.0044	1.0059	1.0050	1.0031	1.0047	1.0049
15:16	1.0024	1.0052	1.0020	1.0024	1.0050	1.0057	1.0038
16:17	1.0014	0.9993	1.0018	1.0033	1.0016	0.9992	1.0010
17:18	1.0068	1.0075	1.0065	1.0068	1.0078	1.0073	1.0071
18:19	0.9992	0.9996	0.9990	0.9989	0.9993	0.9994	0.9992
19:20	1.0024	1.0024	1.0017	1.0014	1.0014	1.0017	1.0018

***Large Loss is excluded from Accident Year 1992**

Source: A. Incurred Losses Adjusted to Act 44 Law Level and Claim Settlement Levels: Exhibit VI-B-3
B. Annual Loss Development Ratios
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.

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

Accident Year	(1) 4/30/1994 Rpt.Loss[a]	(2) 12 Month Fav Dev[a]	(3) (2) / (1)	(4) Selection
1984	7,380	243	3.3%	xx
1985	4,469	105	2.3%	xx
1986	5,192	222	4.3%	xx
1987	4,941	262	5.3%	xx
1988	5,722	396	6.9%	xx
1989	8,405	532	6.3%	xx
1990	7,754	298	3.8%	xx
1991	6,824	328	4.8%	xx
1992	5,389	437	8.1%	xx
Total	56,076	2,823	5.0%	2.0%

Accident Year	(1) 4/30/1995 Rpt.Loss[a]	(2) 12 Month Fav Dev[a]	(3) (2) / (1)	(4) Selection
1985	4,303	199	4.6%	xx
1986	5,166	122	2.4%	xx
1987	4,805	122	2.5%	xx
1988	5,860	161	2.7%	xx
1989	8,842	299	3.4%	xx
1990	7,595	471	6.2%	xx
1991	7,208	83	1.2%	xx
1992	4,462	198	4.4%	xx
1993	5,786	164	2.8%	xx
Total	54,027	1,819	3.4%	2.0%

Accident Year	(1) 4/30/1996 Rpt.Loss[a]	(2) 12 Month Fav Dev[a]	(3) (2) / (1)	(4) Selection
1986	5,126	84	1.6%	xx
1987	4,959	72	1.5%	xx
1988	5,470	451	8.2%	xx
1989	8,720	575	6.6%	xx
1990	7,730	220	2.8%	xx
1991	7,240	281	3.9%	xx
1992	4,458	269	6.0%	xx
1993	6,163	189	3.1%	xx
1994	4,930	231	4.7%	xx
Total	54,796	2,372	4.3%	2.0%

Accident Year	(1) 4/30/1997 Rpt.Loss[a]	(2) 12 Month Fav Dev[a]	(3) (2) / (1)	(4) Selection
1987	4,895	93	1.9%	xx
1988	5,318	202	3.8%	xx
1989	8,177	793	9.7%	xx
1990	7,929	274	3.5%	xx
1991	7,315	141	1.9%	xx
1992	4,284	319	7.4%	xx
1993	6,061	216	3.6%	xx
1994	5,062	155	3.1%	xx
1995	4,444	211	4.7%	xx
Total	53,485	2,404	4.5%	2.0%

Accident Year	(1) 4/30/1998 Rpt.Loss[a]	(2) 12 Month Fav Dev[a]	(3) (2) / (1)	(4) Selection
1988	5,228	70	1.3%	xx
1989	7,991	321	4.0%	xx
1990	7,725	436	5.6%	xx
1991	7,216	173	2.4%	xx
1992	4,439	85	1.9%	xx
1993	6,077	194	3.2%	xx
1994	5,217	77	1.5%	xx
1995	4,354	272	6.2%	xx
1996	4,316	87	2.0%	xx
Total	52,563	1,715	3.3%	2.0%

Accident Year	(1) 4/30/1999 Rpt.Loss[a]	(2) 12 Month Fav Dev[a]	(3) (2) / (1)	(4) Selection
1989	8,525	96	1.1%	xx
1990	7,726	83	1.1%	xx
1991	7,140	208	2.9%	xx
1992	2,428	74	3.0%	xx
1993	5,804	322	5.5%	xx
1994	5,111	198	3.9%	xx
1995	4,294	164	3.8%	xx
1996	4,690	106	2.3%	xx
1997	xx	xx	xx	xx
Total	45,718	1,251	2.7%	1.5%

Accident Year	(1) 4/30/2000 Rpt.Loss[a]	(2) 12 Month Fav Dev[a]	(3) (2) / (1)	(4) Selection
1990	7,808	52	0.7%	xx
1991	7,176	15	0.2%	xx
1992	2,327	125	5.4%	xx
1993	5,767	161	2.8%	xx
1994	5,029	130	2.6%	xx
1995	4,416	97	2.2%	xx
1996	4,808	119	2.5%	xx
1997	xx	xx	xx	xx
1998	xx	xx	xx	xx
Total	37,331	699	1.9%	1.4%

Accident Year	(1) 4/30/2001 Rpt.Loss[a]	(2) 12 Month Fav Dev[a]	(3) (2) / (1)	(4) Selection
1991	7,348	85	1.2%	xx
1992	2,286	86	3.8%	xx
1993	5,730	77	1.3%	xx
1994	5,060	29	0.6%	xx
1995	4,484	150	3.3%	xx
1996	4,806	187	3.9%	xx
1997	xx	xx	xx	xx
1998	xx	xx	xx	xx
1999	xx	xx	xx	xx
Total	29,714	614	2.1%	1.3%

Accident Year	(1) 4/30/2002 Rpt.Loss[a]	(2) 12 Month Fav Dev[a]	(3) (2) / (1)	(4) Selection
1992	2,939	16	0.5%	xx
1993	5,812	57	1.0%	xx
1994	5,113	40	0.8%	xx
1995	4,667	101	2.2%	xx
1996	4,704	242	5.1%	xx
1997	xx	xx	xx	xx
1998	xx	xx	xx	xx
1999	xx	xx	xx	xx
2000	xx	xx	xx	xx
Total	23,235	456	2.0%	1.2%

Accident Year	(1) 4/30/2003 Rpt.Loss[a]	(2) 12 Month Fav Dev[a]	(3) (2) / (1)	(4) Selection
1993	5,971	0	0.0%	xx
1994	5,125	0	0.0%	xx
1995	4,706	0	0.0%	xx
1996	4,578	145	3.2%	xx
1997	xx	xx	xx	xx
1998	xx	xx	xx	xx
1999	xx	xx	xx	xx
2000	xx	xx	xx	xx
2001	xx	xx	xx	xx
Total	20,380	145	0.7%	1.1%

Accident Year	(1) 4/30/2004 Rpt.Loss[a]	(2) 12 Month Fav Dev[a]	(3) (2) / (1)	(4) Selection
1994	5,179	59	1.1%	xx
1995	4,740	83	1.8%	xx
1996	4,702	32	0.7%	xx
1997	xx	xx	xx	xx
1998	xx	xx	xx	xx
1999	xx	xx	xx	xx
2000	xx	xx	xx	xx
2001	xx	xx	xx	xx
2002	xx	xx	xx	xx
Total	14,621	174	1.2%	1.0%

Accident Year	(1) 4/30/2005 Rpt.Loss[a]	(2) 12 Month Fav Dev[a]	(3) (2) / (1)	(4) Selection
1995	4,669	0	0.0%	xx
1996	4,626	0	0.0%	xx
1997	xx	xx	xx	xx
1998	xx	xx	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	9,295	0	0.0%	0.8%

Accident Year	(1) 4/30/2006 Rpt.Loss[a]	(2) 12 Month Fav Dev[a]	(3) (2) / (1)	(4) Selection
1996	4,708	25	0.5%	xx
1997	xx	0	xx	xx
1998	xx	xx	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
2004	xx	xx	xx	xx
Total	4,708	25	0.5%	0.5%

Accident Year	(1) 4/30/2007 Rpt.Loss[a]	(2) 12 Month Fav Dev[a]	(3) (2) / (1)	(4) Selection
1997	xx	xx	xx	xx
1998	xx	xx	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
2004	xx	xx	xx	xx
2005	xx	xx	xx	xx
Total	0	0	0.0%	0.0%

Accident Year	(1) 4/30/2008 Rpt.Loss[a]	(2) 12 Month Fav Dev[a]	(3) (2) / (1)	(4) Selection
1998	xx	xx	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
2004	xx	xx	xx	xx
2005	xx	xx	xx	xx
2006	xx	xx	xx	xx
Total	0	0	0.0%	0.0%

Accident Year	(1) 4/30/2009 Rpt.Loss[a]	(2) 12 Month Fav Dev[a]	(3) (2) / (1)	(4) Selection
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
2004	xx	xx	xx	xx
2005	xx	xx	xx	xx
2006	xx	xx	xx	xx
2007	xx	xx	xx	xx
2008	xx	xx	xx	xx
Total	0	0	0.0%	0.0%

(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

Coal Mine Compensation Rating Bureau
Traumatic Loss Development
Incurred Indemnity and Funeral Claim Counts for All Classes Combined (excl. USLH)

A. Indemnity Reported Incurred Claims as of 04/30/14

Report	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1	508	428	415	339	297	263	240	227	241	196	219	203	156	163	193	170	168	175	169	145
2	547	442	422	358	301	269	250	238	244	196	227	228	163	164	206	193	177	182	195	
3	549	441	427	355	314	272	252	237	246	197	230	229	165	164	203	195	177	188		
4	540	439	428	358	313	274	254	237	246	198	231	230	166	164	205	195	177			
5	533	438	425	358	313	274	254	237	246	199	231	230	166	164	204	195				
6	531	438	426	357	312	274	254	237	246	199	231	230	166	164	204					
7	530	438	427	357	312	274	254	237	246	199	231	230	166	164						
8	530	438	427	357	312	274	254	237	246	199	231	230	166							
9	530	437	427	357	312	274	254	237	246	199	231	230								
10	530	437	427	357	312	274	254	237	246	199	231									
11	530	437	426	357	312	274	254	237	246	199										
12	530	437	426	357	312	274	254	237	246											
13	530	437	426	357	312	274	254	237												
14	530	437	426	357	312	274	254													
15	530	437	426	357	312	274														
16	530	437	426	357	312															
17	530	437	426	357																
18	530	437	426																	
19	530	437																		
20	530																			

B. Annual Claim Count Development

1:2										1.0000	1.0365	1.1232	1.0449	1.0061	1.0674	1.1353	1.0536	1.0400	1.1538
2:3									1.0082	1.0051	1.0132	1.0044	1.0123	1.0000	0.9854	1.0104	1.0000	1.0330	
3:4								1.0000	1.0000	1.0051	1.0043	1.0044	1.0061	1.0000	1.0099	1.0000	1.0000		
4:5							1.0000	1.0000	1.0000	1.0051	1.0000	1.0000	1.0000	1.0000	0.9951	1.0000			
5:6						1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				
6:7					1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000					
7:8				1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000						
8:9			1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000							
9:10		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000								
10:11	1.0000	1.0000	0.9977	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000									
11:12	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000										
12:13	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000											
13:14	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000												
14:15	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000													
15:16	1.0000	1.0000	1.0000	1.0000	1.0000														
16:17	1.0000	1.0000	1.0000	1.0000															
17:18	1.0000	1.0000	1.0000																
18:19	1.0000	1.0000																	
19:20	1.0000																		

C. Summary

	10 Year Straight Average	6 Year Straight Average	10 Year Weighted Average	10 Year Average ex. Hi&Lo	6 Year Average ex. Hi&Lo	6 Year Weighted Average	Average of Middle Four	Selected	Cumulative	Acc. Year	Ultimate
1:2	1.0661	1.0760	1.0657	1.0634	1.0741	1.0761	1.0705	1.0705	1.0808	2013	157
2:3	1.0072	1.0069	1.0071	1.0067	1.0057	1.0065	1.0068	1.0068	1.0096	2012	197
3:4	1.0030	1.0034	1.0029	1.0025	1.0026	1.0035	1.0030	1.0028	1.0028	2011	189
4:5	1.0000	0.9992	1.0000	1.0000	1.0000	0.9992	0.9998	1.0000	1.0000	2010	177
5:6	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2009	195
6:7	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2008	204
7:8	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2007	164
8:9	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2006	166
9:10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2005	230
10:11	0.9998	1.0000	0.9997	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2004	231
11:12	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2003	199
12:13	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2002	246
13:14	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2001	237
14:15	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2000	254
15:16	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1999	274
16:17	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1998	312
17:18	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1997	357
18:19	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1996	426
19:20	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1995	437
										1994	530

Source: A. Loss Development Data: CMCRB Database as of 04/30/14 - Validated 08/13/14
B. Annual Loss Development Ratios
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-2

Coal Mine Compensation Rating Bureau
Traumatic Loss Development
Medical Only Claim Counts for All Classes Combined (excl. USLH)

A. Medical Only Reported Incurred Claims Valued as of 04/30/14

Report	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1	1,094	940	911	867	684	641	488	519	487	453	516	476	456	488	523	479	559	628	563	469
2	1,167	940	923	863	685	640	500	536	499	462	524	479	453	494	527	469	560	632	554	
3	1,171	944	926	865	686	641	503	539	500	461	523	480	451	495	528	469	559	627		
4	1,176	945	926	863	684	641	497	535	500	461	522	479	450	495	527	469	559			
5	1,180	945	927	863	684	643	497	535	500	461	522	479	450	495	528	469				
6	1,180	945	927	864	685	643	498	535	500	461	522	479	450	495	528					
7	1,180	945	926	864	685	643	498	535	500	461	522	479	450	495						
8	1,180	945	926	864	685	643	498	535	500	461	522	479	450							
9	1,180	945	926	864	685	643	498	535	500	461	522	479								
10	1,180	945	926	864	685	643	498	535	500	461	522									
11	1,180	945	927	864	685	643	498	535	500	461										
12	1,180	945	927	864	685	643	498	535	500											
13	1,180	945	927	864	685	643	498	535												
14	1,180	945	927	864	685	643	498													
15	1,180	945	927	864	685	643														
16	1,180	945	927	864	685															
17	1,180	945	927	864																
18	1,180	945	927																	
19	1,180	945																		
20	1,180																			

B. Annual Claim Count Development

1:2										1.0199	1.0155	1.0063	0.9934	1.0123	1.0076	0.9791	1.0018	1.0064	0.9840
2:3									1.0020	0.9978	0.9981	1.0021	0.9956	1.0020	1.0019	1.0000	0.9982	0.9921	
3:4								0.9926	1.0000	1.0000	0.9981	0.9979	0.9978	1.0000	0.9981	1.0000	1.0000		
4:5							1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0019	1.0000			
5:6						1.0000	1.0020	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				
6:7					1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000					
7:8				1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000						
8:9			1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000							
9:10		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000								
10:11	1.0000	1.0000	1.0011	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000									
11:12	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000										
12:13	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000											
13:14	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000												
14:15	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000													
15:16	1.0000	1.0000	1.0000	1.0000	1.0000														
16:17	1.0000	1.0000	1.0000	1.0000															
17:18	1.0000	1.0000	1.0000																
18:19	1.0000	1.0000																	
19:20	1.0000																		

C. Summary

	10 Year Straight Average	6 Year Straight Average	10 Year Weighted Average	10 Year Average ex. Hi&Lo	6 Year Average ex. Hi&Lo	6 Year Weighted Average	Average of Middle Four	Selected	Cumulative	Acc. Year	Ultimate
1:2	1.0026	0.9985	1.0025	1.0034	1.0000	0.9988	1.0010	1.0000	1.0000	2013	469
2:3	0.9990	0.9983	0.9988	0.9995	0.9989	0.9981	0.9988	1.0000	1.0000	2012	554
3:4	0.9985	0.9990	0.9984	0.9990	0.9990	0.9990	0.9989	1.0000	1.0000	2011	627
4:5	1.0002	1.0003	1.0002	1.0000	1.0000	1.0003	1.0002	1.0000	1.0000	2010	559
5:6	1.0002	1.0000	1.0002	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2009	469
6:7	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2008	528
7:8	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2007	495
8:9	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2006	450
9:10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2005	479
10:11	1.0001	1.0000	1.0001	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2004	522
11:12	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2003	461
12:13	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2002	500
13:14	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2001	535
14:15	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2000	498
15:16	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1999	643
16:17	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1998	685
17:18	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1997	864
18:19	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1996	927
19:20	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1995	945
										1994	1180

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

Source: A. Loss Development Data: CMCRB Database as of 04/30/14 - Validated 08/13/14
B. Annual Loss Development Ratios
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.

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Run Time: August 27, 2014 - 03:32:03 PM

PAB
Effective Date - April 01, 2015
Checksum:239,210.997476

Coal Mine Compensation Rating Bureau
Traumatic Loss Development
Medical Only Incurred for All Classes Combined (excl. USLH)

A. Medical Only Reported Incurred Losses Valued as of 04/30/14

Report	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1	441,801	367,266	427,684	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	642,407
2	468,629	380,455	436,047	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	
3	465,881	416,036	438,409	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		
4	515,530	416,719	438,965	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			
5	522,613	416,875	440,156	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				
6	522,465	416,875	440,156	392,408	412,623	409,426	305,104	341,085	345,393	346,252	499,175	577,565	464,210	663,201	578,077					
7	523,095	416,875	430,802	392,408	412,623	409,426	305,104	341,085	345,393	346,252	499,175	577,565	464,210	663,201						
8	528,443	416,875	430,802	392,408	412,623	405,010	305,104	347,675	345,393	346,252	499,182	439,393	464,210							
9	528,564	416,875	430,802	392,408	412,623	405,010	305,104	347,675	345,393	346,318	499,182	439,393								
10	524,654	416,875	430,802	392,408	412,623	405,010	305,104	347,675	345,393	346,318	499,182									

B. Annual Loss Development

1:2										0.9990	1.1120	1.0067	1.0365	1.0333	1.0471	0.9520	1.0334	1.0405	0.9773
2:3									0.9907	0.9953	1.0210	1.4409	0.9431	0.9770	1.0178	1.0253	1.0272	0.9797	
3:4								1.0009	0.9794	1.0123	0.9981	1.0123	0.9996	1.0036	0.9781	1.0001	1.0000		
4:5							1.0016	1.0000	1.0042	1.0000	1.0004	1.0000	1.0000	1.0060	1.0130	1.0002			
5:6						1.0000	1.0017	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0080	1.0155				
6:7					1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000					
7:8				1.0000	1.0000	0.9892	1.0000	1.0193	1.0000	1.0000	1.0000	0.7608	1.0000						
8:9			1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0002	1.0000	1.0000							
9:10		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000								

C. Summary

	10 Year Straight Average	6 Year Straight Average	10 Year Weighted Average	10 Year Average ex. Hi&Lo	6 Year Average ex. Hi&Lo	6 Year Weighted Average	Average of Middle Four	Selected	Cumulative	Acc. Year	Ultimate
1:2	1.0238	1.0139	1.0235	1.0217	1.0211	1.0159	1.0206	1.0206	1.0206	2013	655,641
2:3	1.0418	0.9950	1.0300	1.0043	1.0000	0.9949	1.0073	1.0000	1.0000	2012	723,464
3:4	0.9984	0.9990	0.9986	0.9993	1.0008	0.9990	0.9990	1.0000	1.0000	2011	846,540
4:5	1.0025	1.0033	1.0029	1.0016	1.0017	1.0036	1.0026	1.0000	1.0000	2010	732,324
5:6	1.0025	1.0039	1.0032	1.0012	1.0020	1.0045	1.0029	1.0000	1.0000	2009	487,454
6:7	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2008	578,077
7:8	0.9769	0.9634	0.9668	0.9987	1.0000	0.9489	0.9764	1.0000	1.0000	2007	663,201
8:9	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2006	464,210
9:10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	2005	439,393

Source: A. Loss Development Data: CMCRB Database as of 04/30/14 - Validated 08/13/14
B. Annual Loss Development Ratios
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.

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

Report	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	Accident Year																														
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
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	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	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	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	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	xx	xx	xx	xx	xx
7	0.7082	0.7082	0.7082	0.7082	0.7657	0.7661	0.7841	0.7783	0.7896	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	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	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	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	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	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	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	xx	xx	xx	xx	xx	xx	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	xx	xx	xx	xx	xx	xx	xx	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	xx	xx	xx	xx	xx	xx	xx	xx	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	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx
17	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	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	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	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	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	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	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx	xx

Adjustments to development factors applicable to medical loss evaluated as of 04/30/2014
Act 44 became effective in 1993.

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

Coal Mine Compensation Rating Bureau
Traumatic - Medical Losses
Derivation of Act 44 Adjustments for Accident Year 1994

(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#	(I) Est Res 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
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
1 Payments before 1993	-29.18%	0.7082
2 1993 Payments - First Report	-17.33%	0.8267
3 1993 Payments - Reports after First	-13.37%	0.8663
4 Payments after 1993	0.00%	1.0000

	Percentage	Factor
1 Reserves Prior to 1993	-29.18%	0.7082
2 Reserves as of 1993	-11.67%	0.8833
3 Reserves as of 1994	-5.84%	0.9416
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.

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- (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
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- (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)
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Coal Mine Compensation Rating Bureau
Traumatic - Medical Losses
Derivation of Act 44 Adjustments for Accident Year 1993

(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#	(I) Est Res 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
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 Act 44 becoming effective in 1993 [from prior filings]

	Percentage	Factor
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4 Payments after 1993	0.00%	1.0000

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Coal Mine Compensation Rating Bureau
Traumatic - Medical Losses
Derivation of Act 44 Adjustments for Accident Year 1992

(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#	(I) Est Res 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
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

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Coal Mine Compensation Rating Bureau
Traumatic - Medical Losses
Derivation of Act 44 Adjustments for Accident Year 1991

(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#	(I) Est Res 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
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

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(C) Reported incurred loss from Exhibit VI-B Page 1
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(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.
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(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)
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(T) Smoothed values based on values in (S)

Coal Mine Compensation Rating Bureau
Traumatic - Medical Losses
Derivation of Act 44 Adjustments for Accident Year 1990

(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#	(I) Est Res 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
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 becoming effective in 1993 [from prior filings]

	Percentage	Factor
1 Payments before 1993	-29.18%	0.7082
2 1993 Payments - First Report	-17.33%	0.8267
3 1993 Payments - Reports after First	-13.37%	0.8663
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4 Reserves as of 1995	-2.92%	0.9708
5 Reserves as of 1996	-1.46%	0.9854
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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.

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Coal Mine Compensation Rating Bureau
Traumatic - Medical Losses
Derivation of Act 44 Adjustments for Accident Year 1989

(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#	(I) Est Res 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
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

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

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Coal Mine Compensation Rating Bureau
Traumatic - Medical Losses
Derivation of Act 44 Adjustments for Accident Year 1988

(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#	(I) Est Res 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
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

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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
(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
Derivation of Act 44 Adjustments for Accident Year 1987

(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#	(I) Est Res 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
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	3,788,252	0	na	na	15,516	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

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

	Percentage	Factor
1 Payments before 1993	-29.18%	0.7082
2 1993 Payments - First Report	-17.33%	0.8267
3 1993 Payments - Reports after First	-13.37%	0.8663
4 Payments after 1993	0.00%	1.0000

	Percentage	Factor
1 Reserves Prior to 1993	-29.18%	0.7082
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3 Reserves as of 1994	-5.84%	0.9416
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)
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Coal Mine Compensation Rating Bureau
Traumatic - Medical Losses
Derivation of Act 44 Adjustments for Accident Year 1986

(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#	(I) Est Res 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
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 becoming effective in 1993 [from prior filings]

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Coal Mine Compensation Rating Bureau
Traumatic - Medical Losses
Derivation of Act 44 Adjustments for Accident Year 1985

(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#	(I) Est Res 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
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	1,407,750	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	191,604	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 becoming effective in 1993 [from prior filings]

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Coal Mine Compensation Rating Bureau
Traumatic - Medical Losses
Derivation of Act 44 Adjustments for Accident Year 1984

(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#	(I) Est Res 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
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

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

	Percentage	Factor
1 Payments before 1993	-29.18%	0.7082
2 1993 Payments - First Report	-17.33%	0.8267
3 1993 Payments - Reports after First	-13.37%	0.8663
4 Payments after 1993	0.00%	1.0000

	Percentage	Factor
1 Reserves Prior to 1993	-29.18%	0.7082
2 Reserves as of 1993	-11.67%	0.8833
3 Reserves as of 1994	-5.84%	0.9416
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 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)

Coal Mine Compensation Rating Bureau
Traumatic - Medical Losses
Derivation of Act 44 Adjustments for Accident Year 1983

(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#	(I) Est Res 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
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	196,629	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	182,224	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	112,262	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

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

	Percentage	Factor
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(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 Data from Exhibit VI-D Page 15 {Filing of December 11, 2002 Exhibit VI-B Page 1m} ["na" = not available; "tbd" = to be determined]

Report	Acc Yr 1983	Acc Yr 1984	Acc Yr 1985	Acc Yr 1986	Acc Yr 1987	Acc Yr 1988	Acc Yr 1989	Acc Yr 1990	Acc Yr 1991	Acc Yr 1992	Acc Yr 1993	Acc Yr 1994	Acc Yr 1995
1	na	na	na	na	na	na	na	na	na	0.6295	0.6490	0.6110	0.6217
2	na	na	na	na	na	na	na	na	0.7424	0.7683	0.7014	0.6836	0.7402
3	na	na	na	na	na	na	na	0.7829	0.7867	0.8094	0.7310	0.7314	0.8365
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	na	na	0.7200	0.7262	0.8179	0.8173	0.8751	0.8077	0.8197	0.9069
6	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 Payment Pattern to Report 20

Report	Acc Yr 1983	Acc Yr 1984	Acc Yr 1985	Acc Yr 1986	Acc Yr 1987	Acc Yr 1988	Acc Yr 1989	Acc Yr 1990	Acc Yr 1991	Acc Yr 1992	Acc Yr 1993	Acc Yr 1994	Acc Yr 1995
1	0.4216	0.3407	0.4397	0.4403	0.4407	0.3386	0.4402	0.3736	0.3438	0.6295	0.6490	0.6110	0.6217
2	0.4713	0.3806	0.4985	0.5047	0.5022	0.4584	0.5050	0.4784	0.7424	0.7683	0.7014	0.6836	0.7402
3	0.5167	0.4181	0.5511	0.5617	0.5569	0.5565	0.5623	0.7829	0.7867	0.8094	0.7310	0.7314	0.8365
4	0.5582	0.4534	0.5981	0.6121	0.6056	0.6368	0.7318	0.7612	0.7941	0.8343	0.7593	0.7623	0.8892
5	0.5962	0.4865	0.6403	0.6567	0.6490	0.7200	0.7262	0.8179	0.8173	0.8751	0.8077	0.8197	0.9069
6	0.6309	0.5175	0.6780	0.6962	0.7417	0.7525	0.7210	0.8264	0.8302	0.8828	0.8678	0.8689	0.9142
7	0.6626	0.5468	0.7118	0.7199	0.7692	0.7484	0.7461	0.8229	0.8675	0.8890	0.8945	0.8827	0.8829
8	0.6916	0.5742	0.7080	0.7859	0.7979	0.8283	0.8160	0.8733	0.9047	0.9059	0.9182	0.8925	0.8978
9	0.7181	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	0.7644	0.6470	0.8150	0.8351	0.8255	0.9103	0.8364	0.8997	0.9090	0.9443	0.9272	0.9448	0.9504
12	0.7847	0.6683	0.8344	0.8541	0.8446	0.9266	0.8554	0.9165	0.9253	0.9581	0.9423	0.9585	0.9635
13	0.8032	0.6884	0.8518	0.8709	0.8617	0.9399	0.8721	0.9304	0.9387	0.9684	0.9544	0.9688	0.9732
14	0.8201	0.7073	0.8673	0.8857	0.8769	0.9508	0.8869	0.9421	0.9497	0.9762	0.9639	0.9765	0.9803
15	0.8355	0.7250	0.8812	0.8989	0.8905	0.9597	0.9000	0.9518	0.9587	0.9821	0.9714	0.9824	0.9855
16	0.8497	0.7417	0.8937	0.9105	0.9025	0.9670	0.9116	0.9598	0.9661	0.9865	0.9774	0.9867	0.9893
17	0.8626	0.7573	0.9048	0.9208	0.9132	0.9730	0.9218	0.9666	0.9722	0.9898	0.9821	0.9900	0.9921
18	0.8744	0.7720	0.9148	0.9299	0.9228	0.9779	0.9309	0.9722	0.9772	0.9923	0.9858	0.9925	0.9942
19	0.8852	0.7858	0.9237	0.9380	0.9312	0.9819	0.9389	0.9768	0.9813	0.9942	0.9888	0.9944	0.9957
20	0.8950	0.7988	0.9317	0.9451	0.9388	0.9852	0.9459	0.9807	0.9846	0.9957	0.9911	0.9958	0.9969
21	0.9041	0.8109	0.9389	0.9514	0.9455	0.9878	0.9522	0.9839	0.9874	0.9967	0.9930	0.9968	0.9977

\# Geometric series with A = last unpaid ratio, B = average last increment in unpaid ratio, and C = decay ratio such that:
$A + B = B (1 + C + C^2 + C^3 + C^4 + \dots)$ or $C = A / (A+B)$.
For example: For 1984: A = .3758 and B = .0242 so that C = A / (A+B).
At report 11 cumulative payment ratio for 1984 is (1-A)+BC or .6242 + .0242x.9395]=.6470
At report 12 cumulative payment ratio for 1984 is (1-A)+B[C+C^2] or .6242 + .0242 x [.9395+.8826]=.6683
At report 13 cumulative payment ratio for 1984 is (1-A)+B[C+C^2+C^3] or .6242 + .0242 x [.9395+.8826+.8291]=.6884

Source: Exhibit VI-D Page 15

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

Acc. Year	Paid Losses	O/S Losses	Total Losses
1983	3,593,056	1,247,215	4,840,271
1984	3,635,897	1,572,958	5,208,855
1985	2,180,035	899,294	3,079,329
1986	2,390,521	930,238	3,320,759
1987	3,164,726	1,102,091	4,266,817
1988	3,005,631	1,169,106	4,174,737
1989	5,171,723	1,894,952	7,066,675
1990	4,988,099	1,383,343	6,371,442
1991	4,155,610	1,441,756	5,597,366
1992	3,417,548	2,011,232	5,428,780

Medical Losses as of 4-30-94

Acc. Year	Paid Losses	O/S Losses	Total Losses
1984	3,770,764	2,269,936	6,040,700
1985	2,241,799	726,720	2,968,519
1986	2,522,878	687,388	3,210,266
1987	3,243,160	973,283	4,216,443
1988	3,144,266	1,034,411	4,178,677
1989	5,539,329	2,088,604	7,627,933
1990	5,333,913	1,673,604	7,007,517
1991	4,777,388	1,295,629	6,073,017
1992	4,719,224	1,423,578	6,142,802
1993	2,820,429	1,525,266	4,345,695

Medical Losses as of 4-30-95

Acc. Year	Paid Losses	O/S Losses	Total Losses
1985	2,275,521	592,983	2,868,504
1986	2,563,723	703,796	3,267,519
1987	3,311,135	838,885	4,150,020
1988	3,221,252	1,083,114	4,304,366
1989	5,624,130	2,176,061	7,800,191
1990	5,653,864	1,258,730	6,912,594
1991	5,105,265	1,323,391	6,428,656
1992	5,234,023	1,232,761	6,466,784
1993	3,796,107	1,615,772	5,411,879
1994	2,260,605	1,439,041	3,699,646

Medical Losses as of 4-30-96

Acc. Year	Paid Losses	O/S Losses	Total Losses
1986	2,627,475	601,432	3,228,907
1987	3,335,177	885,063	4,220,240
1988	3,262,933	676,264	3,939,197
1989	5,758,559	1,960,033	7,718,592
1990	5,878,277	1,234,867	7,113,144
1991	5,295,039	1,183,464	6,478,503
1992	5,371,615	1,067,131	6,438,746
1993	4,161,675	1,531,206	5,692,881
1994	3,194,721	1,478,360	4,673,081
1995	2,205,072	1,341,644	3,546,716

Medical Losses as of 4-30-97

Acc. Year	Paid Losses	O/S Losses	Total Losses
1987	3,128,219	763,304	3,891,523
1988	3,223,663	524,776	3,748,439
1989	5,801,157	1,307,691	7,108,848
1990	5,994,292	1,290,432	7,284,724
1991	5,410,477	1,106,504	6,516,981
1992	5,469,644	780,918	6,250,562
1993	4,244,152	1,345,273	5,589,425
1994	3,518,063	1,291,906	4,809,969
1995	2,894,764	1,016,170	3,910,934
1996	2,486,791	1,508,261	3,995,052

Medical Losses as of 4-30-98

Acc. Year	Paid Losses	O/S Losses	Total Losses
1988	3,289,816	404,363	3,694,179
1989	6,003,061	1,007,133	7,010,194
1990	6,185,121	897,556	7,082,677
1991	5,554,784	848,200	6,402,984
1992	5,689,456	755,496	6,444,952
1993	4,551,509	1,083,707	5,635,216
1994	3,799,152	1,184,953	4,984,105
1995	3,190,562	623,518	3,814,080
1996	3,184,587	875,309	4,059,896
1997	1,830,550	1,043,667	2,874,217

Medical Losses as of 4-30-99

Acc. Year	Paid Losses	O/S Losses	Total Losses
1989	6,179,846	1,402,918	7,582,764
1990	6,294,236	825,406	7,119,642
1991	5,697,621	599,983	6,297,604
1992	5,833,010	728,123	6,561,133
1993	4,663,295	710,514	5,373,809
1994	4,028,294	885,823	4,914,117
1995	3,347,914	417,186	3,765,100
1996	3,482,003	886,766	4,368,769
1997	2,455,286	689,856	3,145,142
1998	2,125,311	1,229,373	3,354,684

Medical Losses as of 4-30-2000

Acc. Year	Paid Losses	O/S Losses	Total Losses
1990	6,264,568	858,266	7,122,834
1991	5,673,497	621,263	6,294,760
1992	5,819,201	604,606	6,423,807
1993	4,617,165	544,279	5,161,444
1994	4,185,282	631,401	4,816,683
1995	3,480,029	357,268	3,837,297
1996	3,640,989	870,454	4,511,443
1997	2,724,704	611,091	3,335,795
1998	2,800,503	820,233	3,620,736
1999	1,808,223	914,936	2,723,159

Medical Losses as of 4-30-2001

Acc. Year	Paid Losses	O/S Losses	Total Losses
1991	5,983,048	746,507	6,729,555
1992	5,972,915	447,893	6,420,808
1993	4,724,758	420,747	5,145,505
1994	4,304,736	572,134	4,876,870
1995	3,535,494	331,935	3,867,429
1996	3,734,865	726,810	4,461,675
1997	2,811,693	504,982	3,316,675
1998	3,061,322	556,829	3,618,151
1999	2,438,830	574,104	3,012,934
2000	1,675,345	792,474	2,467,819

Medical Losses as of 4-30-2002

Acc. Year	Paid Losses	O/S Losses	Total Losses
1992	6,091,978	486,270	6,578,248
1993	4,767,316	446,071	5,213,387
1994	4,400,461	529,831	4,930,292
1995	3,600,867	477,739	4,078,606
1996	3,814,393	583,462	4,397,855
1997	2,962,959	501,313	3,464,272
1998	3,180,315	532,014	3,712,329
1999	2,657,390	528,738	3,186,128
2000	2,180,533	529,633	2,710,166
2001	1,390,454	799,916	2,190,370

Medical Losses as of 4-30-2003

Acc. Year	Paid Losses	O/S Losses	Total 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
2002	2,013,689	1,136,566	3,150,255

Medical Losses as of 4-30-2004

Acc. Year	Paid Losses	O/S Losses	Total Losses
1994	4,766,728	377,387	5,144,115
1995	4,278,816	406,618	4,685,434
1996	4,217,481	399,604	4,617,085
1997	3,596,616	335,600	3,932,216
1998	3,456,730	304,533	3,761,263
1999	3,021,424	167,357	3,188,781
2000	2,491,759	345,153	2,836,912
2001	2,236,309	409,939	2,646,248
2002	2,673,510	935,929	3,609,439
2003	1,481,566	1,097,747	2,579,313

Medical Losses as of 4-30-2005

Acc. Year	Paid Losses	O/S Losses	Total Losses
1995	4,354,014	314,520	4,668,534
1996	4,239,562	386,153	4,625,715
1997	3,648,054	303,421	3,951,475
1998	3,494,885	265,838	3,760,723
1999	3,075,426	102,660	3,178,086
2000	2,617,138	268,392	2,885,530
2001	2,326,207	303,703	2,629,910
2002	3,007,596	755,241	3,762,837
2003	2,121,377	691,104	2,812,481
2004	2,435,389	753,720	3,189,109

Report	As of: 4-30-93	As of 4-30-94	As of 4-30-95	As of 4-30-96	As of 4-30-97	As of 4-30-98	As of 4-30-99	As of 4-30-00	As of 4-30-01	As of 4-30-02	As of 4-30-03	As of 4-30-04	As of 4-30-05
10th	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
9th	0.6980	0.7552	0.7846	0.7903	0.8600	0.8563	0.8841	0.9013	0.9302	0.9144	0.9144	0.9132	0.9165
8th	0.7080	0.7859	0.7979	0.8283	0.8160	0.8733	0.9047	0.9059	0.9182	0.8925	0.8978	0.9135	0.9232
7th	0.7199	0.7692	0.7484	0.7461	0.8229	0.8675	0.8890	0.8945	0.8827	0.8829	0.9123	0.9147	0.9293
6th	0.7417	0.7525	0.7210	0.8264	0.8302	0.8828	0.8678	0.8689	0.9142	0.8673	0.8734	0.9190	0.9677
5th	0.7200	0.7262	0.8179	0.8173	0.8751	0.8077	0.8197	0.9069	0.8371	0.8553	0.8989	0.9475	0.9070
4th	0.7318	0.7612	0.7941	0.8343	0.7593	0.7623	0.8892	0.8071	0.8477	0.8567	0.9304	0.8783	0.8845
3rd	0.7829	0.7867	0.8094	0.7310	0.7314	0.8365	0.7970	0.8168	0.8461	0.8340	0.8347	0.8451	0.7993
2nd	0.7424	0.7683	0.7014	0.6836	0.7402	0.7844	0.7807	0.7735	0.8095	0.8046	0.7831	0.7407	0.7543
1st	0.6295	0.6490	0.6110	0.6217	0.6225	0.6369	0.6335	0.6640	0.6789	0.6348	0.6392	0.5744	0.7637

Source: Evaluations 1993 thru 2002 from prior filing.

AY 1986 and later: Ten Classes, Eleven Coal Mine Writers
AY 1985 and prior: Four major classes, Eight Coal Mine Writers
Losses as of 4-30-2003 thru 4-30-2005 use actual paid and O/S from CMCRB database.

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

Indemnity and Funeral Reported Paid Losses as of 04/30/14

Report	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1								1,519,950	1,745,062	1,453,835	2,265,522	1,499,127	1,585,758	2,123,723	1,424,937	1,477,485	1,883,649	1,490,981	1,524,765	1,786,240	2,050,254	1,866,742
2							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	
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		
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			
5				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			13,400,929	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					
7		13,395,863	14,310,907	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						
8	16,787,366	14,079,814	15,086,127	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							
9	17,689,265	14,681,144	16,007,142	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								
10	18,002,627	15,101,039	16,528,234	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									
11	18,419,560	15,620,333	16,897,053	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										
12	18,718,272	15,884,719	17,241,800	11,744,206	11,001,168	8,001,766	8,408,704	7,879,189	7,480,909	7,855,086	11,009,570											
13	19,129,950	16,155,671	17,506,981	11,774,571	11,110,031	8,057,267	8,460,058	8,038,850	7,481,735	7,919,766												
14	19,264,565	16,583,337	17,773,596	11,804,826	11,331,615	8,118,370	8,717,825	8,050,069	7,481,735													
15	19,426,729	16,817,609	18,027,853	11,995,979	11,414,237	8,170,070	8,731,745	8,050,069														
16	19,537,924	17,037,196	18,376,371	12,137,005	11,494,656	8,264,818	8,742,665															
17	19,648,893	17,253,705	18,642,449	12,156,503	11,575,737	8,297,379																
18	19,712,052	17,457,285	18,807,962	12,175,951	11,656,817																	
19	19,778,753	17,662,051	18,973,983	12,192,048																		
20	19,845,571	17,881,759	19,125,877																			

Medical Reported Paid Losses as of 04/30/14

Report	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
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	2,300,529
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						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					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			
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				
6			4,389,242	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					
7		5,149,026	4,487,578	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						
8	6,401,003	5,317,681	4,583,303	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							
9	6,494,799	5,360,316	4,686,069	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								
10	6,613,862	5,431,732	4,766,728	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									
11	6,692,320	5,484,250	4,977,633	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										
12	6,804,727	5,515,392	5,050,319	4,444,736	4,322,947	4,026,401	3,625,447	3,339,216	2,791,316	2,821,879	3,760,085											
13	6,858,573	5,570,940	5,097,751	4,482,464	4,338,162	4,068,692	3,640,675	3,530,763	2,794,972	2,865,653												
14	6,879,694	5,630,292	5,134,011	4,506,980	4,355,042	4,106,625	3,686,245	3,531,885	2,799,305													
15	6,904,878	5,669,851	5,173,710	4,530,249	4,371,918	4,152,798	3,716,598	3,532,238														
16	6,918,013	5,726,344	5,222,342	4,596,503	4,434,578	4,235,368	3,733,612															
17	6,937,949	5,786,245	5,243,874	4,642,586	4,437,180	4,268,527																
18	6,961,865	5,834,833	5,253,033	4,676,936	4,439,837																	
19	6,974,368	5,895,287	5,259,632	4,727,156																		
20	6,985,460	5,945,407	5,329,554																			

Note: Large loss was excluded from accident year 1992.

Source: CMCRB Database as of 04/30/14 - Validated 08/13/14

Coal Mine Compensation Rating Bureau **Exhibit VII-A**
Average Severity from Before Act 57 through Stages to After Act 57 **Page 1**
Underground Anthracite

	State O.D.			Federal Excess O.D.		
	Base	All PP	Weighted 100%-0%	Base	All PP	Weighted 100%-0%
(a) After AMA Guidelines				(a) After AMA Guidelines		
(1) Number of Claims	# 8			# 8		
(2) Average Amounts	$860,157	$399,833	$860,157	$25,205	$226,280	$25,205
(3) Index (Base)	100%		100.0000%	100%		100.0000%
(b) Social Security Offset				(b) Social Security Onset		
(1) Total (including above)	–	–	–	$36,521	$226,280	$36,521
(2) Difference- Social Security (Federal= b-1 minus a-2)	$103,037	$0	$103,037	11,316	0	11,316
(3) Index (to a(2))	11.9789%	0.0000%	11.9789%	44.8958%	0.0000%	44.8958%
(4) Complement	88.0211%	100.0000%	88.0211%	55.1042%	100.0000%	55.1042%
(c) Pension Offset (after Social Security Offset)				(c) Pension Onset		
(1) Total (including above)	–	–	–	$95,318	$233,782	$95,318
(2) Difference (Federal= c-1 minus b-1)	$128,436	$38,744	$128,436	58,798	7,502	58,798
(3) % Pension (VII-G, P. 2)	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%
(4) Net Pension	16,054	4,843	16,054	7,350	938	7,350
(5) Index (to a-2)	1.8665%	1.2112%	1.8665%	29.1601%	0.4144%	29.1601%
(6) Complement	98.1335%	98.7888%	98.1335%			
(d) Combined Social Security and Pension Offsets				(d) Combined Social Sec, Pension Onsets		
(1) Average Amounts (b-2 plus c-4)	$119,091	$4,843	$119,091	$18,666	$938	$18,666
(2) Index (to a-2)	13.8453%	1.2112%	13.8453%			74.0559%
(3) Complement	86.1547%	98.7888%	86.1547%	Factor		174.0559%
(4) Total Average	741,066	394,991	741,066			43,870
(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)			86.1547%	(d-3) times (e-4)		174.0559%
(2) AMA Guidelines (a-3)			100.0000%			100.0000%
(3) Full Effect of Act 57 (1 X 2)			86.1547%			174.0559%
(4) Percentage Decrease			13.8453%	Increase		74.0559%
(g) Combined Dollar Effect						
(1) (d-1) plus (e-3) Decrease			$119,091	Increase		$18,666
(2) Average after Act 57 (a-2 plus or minus g-1)			$741,066			$43,870

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

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

	State O.D.			Federal Excess O.D.		
	Base	All PP	Weighted 100%-0%	Base	All PP	Weighted 100%-0%
(a) After AMA Guidelines				(a) After AMA Guidelines		
(1) Number of Claims	# 43			# 43		
(2) Average Amounts	$411,072	$308,272	$411,072	$214,276	$246,882	$214,276
(3) Index (Base)	100%		100.0000%	100%		100.0000%
(b) Social Security Offset				(b) Social Security Onset		
(1) Total (including above)	–	–	–	$219,449	$251,747	$219,449
(2) Difference- Social Security (Federal= b-1 minus a-2)	$21,574	$11,926	$21,574	5,173	4,865	5,173
(3) Index (to a(2))	5.2482%	3.8687%	5.2482%	2.4141%	1.9705%	2.4141%
(4) Complement	94.7518%	96.1313%	94.7518%	97.5859%	98.0295%	97.5859%
(c) Pension Offset (after Social Security Offset				(c) Pension Onset		
(1) Total (including above)	–	–	–	$239,754	$268,066	$239,754
(2) Difference (Federal= c-1 minus b-1)	$93,648	$71,178	$93,648	20,305	16,319	20,305
(3) % Pension (VII-G, P. 2)	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%
(4) Net Pension	11,706	8,897	11,706	2,538	2,040	2,538
(5) Index (to a-2)	2.8477%	2.8862%	2.8477%	1.1845%	0.8262%	1.1845%
(6) Complement	97.1523%	97.1138%	97.1523%			
(d) Combined Social Security and Pension Offsets				(d) Combined Social Sec, Pension Onsets		
(1) Average Amounts (b-2 plus c-4)	$33,280	$20,823	$33,280	$7,711	$6,905	$7,711
(2) Index (to a-2)	8.0958%	6.7549%	8.0958%			3.5987%
(3) Complement	91.9042%	93.2451%	91.9042%	Factor		103.5987%
(4) Total Average	377,792	287,448	377,792			221,987
(e) Wage Level Decrease				(e) Wage Level Increase		
(1) Percentage from Exhibit VII-G, Page ´			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)			91.9042%			103.5987%
(2) AMA Guidelines (a-3)			100.0000%			100.0000%
(3) Full Effect of Act 57 (1 X 2)			91.9042%			103.5987%
(4) Percentage Decrease			8.0958%	Increase		3.5987%
(g) Combined Dollar Effect						
(1) (d-1) plus (e-3)			$33,280	Increase		$7,711
(2) Average after Act 57 (a-2 plus or minus g-1)			$377,792			$221,987

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

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

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

Exhibit VII-A
Page 3
Surface Anthracite

	State O.D.			Federal Excess O.D.		
	Base	All PP	Weighted 100%-0%	Base	All PP	Weighted 100%-0%
(a) After AMA Guidelines				(a) After AMA Guidelines		
(1) Number of Claims	# 36			# 36		
(2) Average Amounts	$456,430	$318,313	$456,430	$56,237	$122,610	$56,237
(3) Index (Base)	100%		100.0000%	100%		100.0000%
(b) Social Security Offset				(b) Social Security Onset		
(1) Total (including above)	–	–	–	$59,369	$122,643	$59,369
(2) Difference- Social Security (Federal= b-1 minus a-2)	$13,019	$3,647	$13,019	3,132	33	3,132
(3) Index (to a(2))	2.8524%	1.1458%	2.8524%	5.5696%	0.0272%	5.5696%
(4) Complement	97.1476%	98.8542%	97.1476%	94.4304%	99.9728%	94.4304%
(c) Pension Offset (after Social Security Offset				(c) Pension Onset		
(1) Total (including above)	–	–	–	$73,488	$131,928	$73,488
(2) Difference (Federal= c-1 minus b-1)	$85,704	$63,559	$85,704	14,119	9,285	14,119
(3) % Pension (VII-G, P. 2)	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%
(4) Net Pension	10,713	7,945	10,713	1,765	1,161	1,765
(5) Index (to a-2)	2.3471%	2.4959%	2.3471%	3.1383%	0.9466%	3.1383%
(6) Complement	97.6529%	97.5041%	97.6529%			
(d) Combined Social Security and Pension Offsets				(d) Combined Social Sec, Pension Onsets		
(1) Average Amounts (b-2 plus c-4)	$23,732	$11,592	$23,732	$4,897	$1,194	$4,897
(2) Index (to a-2)	5.1995%	3.6417%	5.1995%			8.7079%
(3) Complement	94.8005%	96.3583%	94.8005%	Factor		108.7079%
(4) Total Average	432,698	306,721	432,698			61,134
(e) Wage Level Decrease				(e) Wage Level Increase		
(1) Percentage from Exhibit VII-G, Page ´			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)			94.8005%			108.7079%
(2) AMA Guidelines (a-3)			100.0000%			100.0000%
(3) Full Effect of Act 57 (1 X 2)			94.8005%			108.7079%
(4) Percentage Decrease			5.1995%	Increase		8.7079%
(g) Combined Dollar Effect						
(1) (d-1) plus (e-3)			$23,732	Increase		$4,897
(2) Average after Act 57 (a-2 plus or minus g-1)			$432,698			$61,134

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

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

	State O.D.			Federal Excess O.D.		
	Base	All PP	Weighted 100%-0%	Base	All PP	Weighted 100%-0%
(a) After AMA Guidelines				(a) After AMA Guidelines		
(1) Number of Claims	# 16			# 16		
(2) Average Amounts	$473,209	$292,215	$473,209	$159,596	$246,965	$159,596
(3) Index (Base)	100%		100.0000%	100%		100.0000%
(b) Social Security Offset				(b) Social Security Onset		
(1) Total (including above)	–	–	–	$170,875	$249,450	$170,875
(2) Difference- Social Security (Federal= b-1 minus a-2)	$67,600	$15,398	$67,600	11,279	2,485	11,279
(3) Index (to a(2))	14.2854%	5.2695%	14.2854%	7.0673%	1.0064%	7.0673%
(4) Complement	85.7146%	94.7305%	85.7146%	92.9327%	98.9936%	92.9327%
(c) Pension Offset (after Social Security Offset				(c) Pension Onset		
(1) Total (including above)	–	–	–	$218,916	$270,683	$218,916
(2) Difference (Federal= c-1 minus b-1)	$88,016	$48,498	$88,016	48,041	21,232	48,041
(3) % Pension (VII-G, P. 2)	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%
(4) Net Pension	11,002	6,062	11,002	6,005	2,654	6,005
(5) Index (to a-2)	2.3250%	2.0746%	2.3250%	3.7627%	1.0747%	3.7627%
(6) Complement	97.6750%	97.9254%	97.6750%			
(d) Combined Social Security and Pension Offsets				(d) Combined Social Sec, Pension Onsets		
(1) Average Amounts (b-2 plus c-4)	$78,602	$21,461	$78,602	$17,284	$5,139	$17,284
(2) Index (to a-2)	16.6103%	7.3441%	16.6103%			10.8301%
(3) Complement	83.3897%	92.6559%	83.3897%	Factor		110.8301%
(4) Total Average	394,607	270,754	394,607			176,880
(e) Wage Level Decrease				(e) Wage Level Increase		
(1) Percentage from Exhibit VII-G, Page ´			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)			83.3897%			110.8301%
(2) AMA Guidelines (a-3)			100.0000%			100.0000%
(3) Full Effect of Act 57 (1 X 2)			83.3897%			110.8301%
(4) Percentage Decrease			16.6103%	Increase		10.8301%
(g) Combined Dollar Effect						
(1) (d-1) plus (e-3)			$78,602	Increase		$17,284
(2) Average after Act 57 (a-2 plus or minus g-1)			$394,607			$176,880

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

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

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

	State O.D.			Federal Excess O.D.		
	Base	All PP	Weighted 100%-0%	Base	All PP	Weighted 100%-0%
(a) After AMA Guidelines				(a) After AMA Guidelines		
(1) Number of Claims	# 11			# 11		
(2) Average Amounts	$455,539	$259,390	$455,539	$124,373	$222,751	$124,373
(3) Index (Base)	100%		100.0000%	100%		100.0000%
(b) Social Security Offset				(b) Social Security Onset		
(1) Total (including above)	–	–	–	$146,184	$228,360	$146,184
(2) Difference- Social Security (Federal= b-1 minus a-2)	$62,648	$15,457	$62,648	21,811	5,610	21,811
(3) Index (to a(2))	13.7525%	5.9588%	13.7525%	17.5364%	2.5183%	17.5364%
(4) Complement	86.2475%	94.0412%	86.2475%	82.4636%	97.4817%	82.4636%
(c) Pension Offset (after Social Security Offset				(c) Pension Onset		
(1) Total (including above)	–	–	–	$177,261	$238,432	$177,261
(2) Difference (Federal= c-1 minus b-1)	$79,320	$42,694	$79,320	31,077	10,072	31,077
(3) % Pension (VII-G, P. 2)	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%
(4) Net Pension	9,915	5,337	9,915	3,885	1,259	3,885
(5) Index (to a-2)	2.1765%	2.0574%	2.1765%	3.1234%	0.5652%	3.1234%
(6) Complement	97.8235%	97.9426%	97.8235%			
(d) Combined Social Security and Pension Offsets				(d) Combined Social Sec, Pension Onsets		
(1) Average Amounts (b-2 plus c-4)	$72,563	$20,793	$72,563	$25,695	$6,869	$25,695
(2) Index (to a-2)	15.9290%	8.0163%	15.9290%			20.6598%
(3) Complement	84.0710%	91.9837%	84.0710%	Factor		120.6598%
(4) Total Average	382,976	238,596	382,976			150,068
(e) Wage Level Decrease				(e) Wage Level Increase		
(1) Percentage from Exhibit VII-G, Page ´			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)			84.0710%			120.6598%
(2) AMA Guidelines (a-3)			100.0000%			100.0000%
(3) Full Effect of Act 57 (1 X 2)			84.0710%			120.6598%
(4) Percentage Decrease			15.9290%	Increase		20.6598%
(g) Combined Dollar Effect						
(1) (d-1) plus (e-3)			$72,563	Increase		$25,695
(2) Average after Act 57 (a-2 plus or minus g-1)			$382,976			$150,068

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

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

COAL MINE COMPENSATION RATING BUREAU

State Occupational Disease Classification Credibility

Classification		Code	(1) Estimated Miner Years 2004-2013	(2) Claim Frequency per 100 Miner Years: Indicated (Eff 4/1/2014)	(3) Claim Frequency per 100 Miner Years: Trended to 4/1/2015	(4) Claim Frequency per 100 Miner Years: Indicated (Eff 4/1/2015)	(5) Credibility: Expected Awarded Claims	(6) Credibility: Factor	(7) Claim Frequency Indicated w/ Credibility	(8) Change in Indication After Cred.	(9) 10 Year 2004-2013 Payroll ($ millions)	(10) Claim Frequency Per $100 of Payroll
Underground:	Anthracite	1011	310.8	0.2705	0.2705	0.4328	# 0.84100	0.148	0.294516	8.9%	13.309650	0.068774
	Bituminous	1002	17,416.5	0.0971	0.0971	0.1401	16.91800	0.662	0.125591	29.3%	1,062.863328	0.020580
Surface:	Anthracite	1016	3,795.2	0.2692	0.2692	0.2014	10.21700	0.514	0.234372	-12.9%	168.156019	0.052897
	Bituminous	1013	15,592.1	0.0175	0.0175	0.0132	2.72200	0.266	0.016331	-6.5%	680.958925	0.003739
Four Standard Classifications			37,114.6	0.0827	0.0827	0.0955	30.69800		0.092228	9.8%	1,925.287922	0.017779
	Coke	1017	2,044.3	0.0131	0.0131	0.0110	0.26700	0.083	0.012882	-1.3%	85.816881	0.003069
	Auger	1019	267.1	0.0279	0.0279	0.0110	0.07500	0.044	0.027155	-2.7%	11.572993	0.006267
Co-Gen:	Anthracite	1022	2,010.4	0.0418	0.0418	0.0110	0.84100	0.148	0.037280	-10.9%	87.888268	0.008528
	Bituminous	1024	1,523.5	0.0585	0.0585	0.0738	0.89100	0.152	0.060820	4.0%	91.437283	0.010134
Prep Plants:	Anthracite	1026	1,433.3	0.2792	0.2792	0.2648	4.00200	0.322	0.274592	-1.7%	63.295763	0.062180
	Bituminous	1028	3,988.3	0.0458	0.0458	0.0416	1.82500	0.217	0.044854	-2.0%	242.397904	0.007380
Other Classes			11,266.9	0.0701		0.0626	7.90100		0.068667	-2.6%	582.409092	0.013284
Total			48,381.5	0.0798		0.0879	# 38.59900		0.086741	6.9%	2,507.697014	0.016735

Source: (1) Estimated Miner Years from Exhibit VII-B-2
(2) Exhibit VII-B-1-B Col. 10
(3) Approved claim frequency trended to 4/1/2015 @ 0.0%
(4) Indicated Frequency - Exhibit VII-B-2; totals and subtotals are based on class frequencies weighted with 10 year estimated miner years.
(5) Expected Awarded Claims = (1) x (2) / 100
(6) Factor Z = ((5) / 38.599)^0.5
(7)=(4)*(6)+((3)*(1-(6))
(8)=(7)/(2)-1 Totals and subtotals are weighted with 10 year estimated miner years.
(9) From Exhibit X-A
(10)=(7) x (1) / ((9) x 100)

COAL MINE COMPENSATION RATING BUREAU

State Occupational Disease Classification Credibility

Classification		Code	(1) Approved Claim Freq. 4/1/2014	(2) Payroll 2003-2012	(3) Expected Awarded Claims 2003-2012 (1) x (2)	(4) Estimated Miner Years 2004-2013	(5) Estimated Miner Years 2013	(6) Adjustment Factor	(7) Average Weekly Wage 2003	(8) Payroll 000,000's 2003	(9) Estimated Miner Years 2003-2012	(10) Frequency Per 100 Miner Years
Underground:	Anthracite	1011	0.064428	14.281586	0.920134	310.80	7.7	1.041	675.00	1.354265	340.2	0.2705
	Bituminous	1002	0.016357	971.139573	15.884930	17,416.50	2,146.2	1.426	675.00	54.215496	16,353.5	0.0971
Surface:	Anthracite	1016	0.062667	158.194384	9.913567	3,795.20	445.8	1.041	675.00	12.166211	3,682.4	0.2692
	Bituminous	1013	0.004100	665.325148	2.727833	15,592.10	1,279.4	1.041	675.00	47.873740	15,622.9	0.0175
Four Standard Classifications				1,808.940691	29.446465	37,114.60	3,879.1			115.609712	35,998.9	
	Coke	1017	0.003192	92.559051	0.295448	2,044.30	96.5	1.041	675.00	11.534080	2,263.5	0.0131
	Auger	1019	0.006631	11.581426	0.076796	267.10	22.0	1.041	675.00	1.102223	275.3	0.0279
Co-Gen:	Anthracite	1022	0.009843	86.347547	0.849919	2,010.40	174.8	1.041	675.00	7.137655	2,030.9	0.0418
	Bituminous	1024	0.010003	81.356383	0.813808	1,523.50	193.1	1.426	675.00	3.052523	1,391.4	0.0585
Prep Plants:	Anthracite	1026	0.065048	58.750663	3.821613	1,433.30	166.5	1.041	675.00	3.721296	1,368.6	0.2792
	Bituminous	1028	0.007756	223.214316	1.731250	3,988.30	499.1	1.426	675.00	14.752318	3,783.9	0.0458
Other Classes				553.809386		11,266.90	1,152.0			41.300095	11,113.6	
Total				2,362.750077		48,381.50	5,031.1			156.909807	47,112.5	

Source:
(1) Approved Claim Frequency (4/1/14): See Exhibit III from filing effective 4/1/2014 (See Exhibit X-F)
(2) 10 years Payroll(2003-2012): See Exhibit X-A-1
(3) Expected Awarded Claims = (1)x(2)
(4) Estimated Miner Years 2004-2013: See Exhibit VII-B-2
(5) Estimated Miner Years 2013: See Exhibit VII-B-2
(6) Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G
(7) Average Weekly Wage 2003: See Exhibit XII-D
(8) Payroll 2003: See Exhibit X-A-1
(9) Estimated Miner Years 2003-2012 =(4)-(5)+(8)/((6)x(7)x52) x 1,000,000
(10) Frequency Per 100 Miner Years = (3)/((9)/100))

STATE OCCUPATIONAL DISEASE FREQUENCY WITH FEDERAL EXCESS FREQUENCY

ANTHRACITE UNDERGROUND (1011)

YEAR	REPORTED	AWARDED	PENDING	DENIED	IBNR	IBNR + PENDING	0.864 AWARD RATIO	Payroll	EXPECTED ULTIMATE AWARDED	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	10-Year Payroll Weighted Frequency
2004	0	0	0	0	0.0000	0.0000	0.000000	1,345,321	0.000000	690	1.041	36.0	0.0000	
2005	0	0	0	0	0.0000	0.0000	0.000000	1,417,568	0.000000	716	1.041	36.6	0.0000	
2006	0	0	0	0	0.0000	0.0000	0.000000	1,442,524	0.000000	745	1.041	35.8	0.0000	
2007	0	0	0	0	0.0000	0.0000	0.000000	1,662,537	0.000000	779	1.041	39.4	0.0000	
2008	0	0	0	0	0.0000	0.0000	0.000000	2,136,713	0.000000	807	1.041	48.9	0.0000	
2009	0	0	0	0	0.0000	0.0000	0.000000	1,335,866	0.000000	836	1.041	29.5	0.0000	
2010	0	0	0	0	0.0000	0.0000	0.000000	1,299,588	0.000000	845	1.041	28.4	0.0000	
2011	1	1	0	0	0.0000	0.0000	0.000000	1,257,944	1.000000	858	1.041	27.1	3.6900	
2012	0	0	0	0	0.0484	0.0484	0.041800	1,029,260	0.041800	888	1.041	21.4	0.1953	
2013	0	0	0	0	0.0394	0.0394	0.034068	382,329	0.034068	917	1.041	7.7	0.4424	
TOTAL	1	1	0	0	0.0878	0.0878	0.075868	13,309,650	1.075868			310.8	4.3278	
Average: State Frequency													0.4328	
Federal Excess Frequency (times 40.0%)													0.1731	

BITUMINOUS UNDERGROUND (1002)

YEAR	REPORTED	AWARDED	PENDING	DENIED	IBNR	IBNR + PENDING	0.846 AWARD RATIO	Payroll	EXPECTED ULTIMATE AWARDED	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years
2004	3	1	1	1	0.0000	1.0000	0.846000	65,497,665	1.846000	690	1.426	1,280.1	0.1442
2005	4	3	0	1	0.0829	0.0829	0.070150	70,872,620	3.070150	716	1.426	1,334.9	0.2300
2006	0	0	0	0	0.1945	0.1945	0.164539	70,465,937	0.164539	745	1.426	1,275.6	0.0129
2007	0	0	0	0	0.3660	0.3660	0.309602	79,904,266	0.309602	779	1.426	1,383.3	0.0224
2008	2	2	0	0	0.6598	0.6598	0.558199	101,353,977	2.558199	807	1.426	1,693.7	0.1510
2009	0	0	0	0	0.9770	0.9770	0.826542	101,348,140	0.826542	836	1.426	1,634.9	0.0506
2010	0	0	0	0	1.6991	1.6991	1.437422	125,393,576	1.437422	845	1.426	2,001.2	0.0718
2011	1	1	0	0	2.8450	2.8450	2.406862	148,485,709	3.406862	858	1.426	2,333.9	0.1460
2012	3	2	1	0	3.8339	4.8339	4.089488	153,602,187	6.089488	888	1.426	2,332.7	0.2610
2013	2	2	0	0	5.5326	5.5326	4.680546	145,939,251	6.680546	917	1.426	2,146.2	0.3113
TOTAL	15	11	2	2	16.1907	18.1907	15.389349	1,062,863,328	26.389349			17,416.5	1.4012
Average: State Frequency													0.1401
Federal Excess Frequency (times 40.0%)													0.0560

ANTHRACITE SURFACE (1016)

YEAR	REPORTED	AWARDED	PENDING	DENIED	IBNR	IBNR + PENDING	0.857 AWARD RATIO	Payroll	EXPECTED ULTIMATE AWARDED	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years
2004	1	1	0	0	0.0000	0.0000	0.000000	12,359,731	1.000000	690	1.041	330.9	0.3022
2005	1	1	0	0	0.0000	0.0000	0.000000	12,140,911	1.000000	716	1.041	313.2	0.3193
2006	0	0	0	0	0.0000	0.0000	0.000000	11,946,382	0.000000	745	1.041	296.2	0.0000
2007	3	3	0	0	0.0000	0.0000	0.000000	14,555,579	3.000000	779	1.041	345.2	0.8691
2008	1	0	0	1	0.0000	0.0000	0.000000	16,954,313	0.000000	807	1.041	388.1	0.0000
2009	0	0	0	0	0.0000	0.0000	0.000000	16,445,462	0.000000	836	1.041	363.4	0.0000
2010	0	0	0	0	0.0679	0.0679	0.058190	14,295,288	0.058190	845	1.041	312.5	0.0186
2011	1	1	0	0	0.2110	0.2110	0.180810	21,034,600	1.180810	858	1.041	452.9	0.2607
2012	0	0	0	0	0.4289	0.4289	0.367559	26,295,907	0.367559	888	1.041	547.0	0.0672
2013	0	0	0	0	0.9216	0.9216	0.789828	22,127,846	0.789828	917	1.041	445.8	0.1772
TOTAL	7	6	0	1	1.6294	1.6294	1.396387	168,156,019	7.396387			3,795.2	2.0143
Average: State Frequency													0.2014
Federal Excess Frequency (times 40.0%)													0.0806

BITUMINOUS SURFACE (1013)

YEAR	REPORTED	AWARDED	PENDING	DENIED	IBNR	IBNR + PENDING	0.864 AWARD RATIO	Payroll	EXPECTED ULTIMATE AWARDED	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years
2004	0	0	0	0	0.0000	0.0000	0.000000	56,217,298	0.000000	690	1.041	1,505.1	0.0000
2005	1	1	0	0	0.0000	0.0000	0.000000	64,871,562	1.000000	716	1.041	1,673.7	0.0597
2006	0	0	0	0	0.0000	0.0000	0.000000	63,008,975	0.000000	745	1.041	1,562.4	0.0000
2007	0	0	0	0	0.0000	0.0000	0.000000	63,295,774	0.000000	779	1.041	1,501.0	0.0000
2008	0	0	0	0	0.0000	0.0000	0.000000	73,054,482	0.000000	807	1.041	1,672.3	0.0000
2009	0	0	0	0	0.0000	0.0000	0.000000	61,784,394	0.000000	836	1.041	1,365.3	0.0000
2010	0	0	0	0	0.0000	0.0000	0.000000	72,711,558	0.000000	845	1.041	1,589.6	0.0000
2011	1	0	1	0	0.0766	1.0766	0.930191	86,074,064	0.930191	858	1.041	1,853.2	0.0502
2012	0	0	0	0	0.1544	0.1544	0.133402	76,433,301	0.133402	888	1.041	1,590.1	0.0084
2013	0	0	0	0	0.2045	0.2045	0.176679	63,507,517	0.176679	917	1.041	1,279.4	0.0138
TOTAL	2	1	1	0	0.4355	1.4355	1.240272	680,958,925	2.240272			15,592.1	0.1321
Average: State Frequency													0.0132
Federal Excess Frequency (times 40.0%)													0.0053

FOUR STANDARD CLASSES

YEAR	REPORTED	AWARDED	PENDING	DENIED	IBNR	IBNR + PENDING	0.864 AWARD RATIO	Payroll	EXPECTED ULTIMATE AWARDED	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	
2004	4	2	1	1	0.0000	1.0000	0.864000	135,420,015	2.846000	690		3,152.1	0.0903	
2005	6	5	0	1	0.0829	0.0829	0.071643	149,302,661	5.070150	716		3,358.4	0.1510	
2006	0	0	0	0	0.1945	0.1945	0.168039	146,863,818	0.164539	745		3,170.0	0.0052	
2007	3	3	0	0	0.3660	0.3660	0.316189	159,418,156	3.309602	779		3,268.9	0.1012	
2008	3	2	0	1	0.6598	0.6598	0.570076	193,499,485	2.558199	807		3,803.0	0.0673	
2009	0	0	0	0	0.9770	0.9770	0.844128	180,913,862	0.826542	836		3,393.1	0.0244	
2010	0	0	0	0	1.7670	1.7670	1.526671	213,700,010	1.495612	845		3,931.7	0.0380	
2011	4	3	1	0	3.1326	4.1326	3.570549	256,852,317	6.517862	858		4,667.1	0.1397	
2012	3	2	1	0	4.4656	5.4656	4.722261	257,360,655	6.632249	888		4,491.2	0.1477	
2013	2	2	0	0	6.6981	6.6981	5.787158	231,956,943	7.681121	917		3,879.1	0.1980	
TOTAL	25	19	3	3	18.3434	21.3434	18.440715	1,925,287,922	37.101876			37,114.6	0.9627	
Average: State Frequency													0.0963	0.095526
Federal Excess Frequency (times 40.0%)													0.0385	0.038210

Source: Claim counts - CMCRB OD Database as of 08/13/2014
IBNR: Exhibit VII-C
Payroll- Exhibit X-A
The Award Ratio is equal to Awarded ÷ (Awarded plus Denied).
For Classes 1011 and 1013, the Award Ratios were set to the Award Ratio of the Four Standard Classes due to the absence of either Awarded or Denied
The Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G
Estimated Miner Years = Payroll / (SAWW x Adj. Factor x 52)
Freqency per 100 Miner Years = (Expected Ult. Awarded / Est. Miner Years) x 100

STATE OCCUPATIONAL DISEASE FREQUENCY
WITH FEDERAL EXCESS FREQUENCY

COKE (1017)

IBNR Factor adjusted by 0.4000

YEAR	REPORTED	AWARDED	PENDING	DENIED	IBNR	IBNR + PENDING	0.885 AWARD RATIO	Payroll	EXPECTED ULTIMATE AWARDED	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	10-Year Payroll Weighted Frequency
2004	0	0	0	0	0.0020	0.0020	0.001770	12,049,126	0.001770	690	1.041	322.6	0.0005	
2005	0	0	0	0	0.0043	0.0043	0.003806	12,860,979	0.003806	716	1.041	331.8	0.0011	
2006	0	0	0	0	0.0068	0.0068	0.006018	12,737,394	0.006018	745	1.041	315.8	0.0019	
2007	0	0	0	0	0.0121	0.0121	0.010709	13,669,925	0.010709	779	1.041	324.2	0.0033	
2008	0	0	0	0	0.0137	0.0137	0.012125	9,761,146	0.012125	807	1.041	223.4	0.0054	
2009	0	0	0	0	0.0105	0.0105	0.009293	5,173,552	0.009293	836	1.041	114.3	0.0081	
2010	0	0	0	0	0.0151	0.0151	0.013364	5,435,658	0.013364	845	1.041	118.8	0.0112	
2011	0	0	0	0	0.0139	0.0139	0.012302	3,599,086	0.012302	858	1.041	77.5	0.0159	
2012	0	0	0	0	0.0334	0.0334	0.029559	5,738,105	0.029559	888	1.041	119.4	0.0248	
2013	0	0	0	0	0.0410	0.0410	0.036285	4,791,910	0.036285	917	1.041	96.5	0.0376	
TOTAL	0	0	0	0	0.1528	0.1528	0.135228	85,816,881	0.135228			2,044.3	0.1099	
Average: State Frequency													0.0110	
Federal Excess Frequency (times 40.0%)													0.0044	

AUGER (1019)

IBNR Factor adjusted by 0.4000

YEAR	REPORTED	AWARDED	PENDING	DENIED	IBNR	IBNR + PENDING	0.885 AWARD RATIO	Payroll	EXPECTED ULTIMATE AWARDED	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years
2004	0	0	0	0	0.0002	0.0002	0.000177	1,058,799	0.000177	690	1.041	28.3	0.0006
2005	0	0	0	0	0.0003	0.0003	0.000266	1,026,537	0.000266	716	1.041	26.5	0.0010
2006	0	0	0	0	0.0006	0.0006	0.000531	1,066,831	0.000531	745	1.041	26.5	0.0020
2007	0	0	0	0	0.0010	0.0010	0.000885	1,121,156	0.000885	779	1.041	26.6	0.0033
2008	0	0	0	0	0.0035	0.0035	0.003098	2,488,558	0.003098	807	1.041	57.0	0.0054
2009	0	0	0	0	0.0019	0.0019	0.001682	926,163	0.001682	836	1.041	20.5	0.0082
2010	0	0	0	0	0.0022	0.0022	0.001947	806,696	0.001947	845	1.041	17.6	0.0111
2011	0	0	0	0	0.0045	0.0045	0.003983	1,176,255	0.003983	858	1.041	25.3	0.0157
2012	0	0	0	0	0.0047	0.0047	0.004160	808,208	0.004160	888	1.041	16.8	0.0248
2013	0	0	0	0	0.0094	0.0094	0.008319	1,093,790	0.008319	917	1.041	22.0	0.0378
TOTAL	0	0	0	0	0.0283	0.0283	0.025046	11,572,993	0.025046			267.1	0.1100
Average: State Frequency													0.0110
Federal Excess Frequency (times 40.0%)													0.0044

ANTHRACITE CO-GEN (1022)

IBNR Factor adjusted by 0.4000

YEAR	REPORTED	AWARDED	PENDING	DENIED	IBNR	IBNR + PENDING	0.885 AWARD RATIO	Payroll	EXPECTED ULTIMATE AWARDED	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years
2004	0	0	0	0	0.0012	0.0012	0.001062	7,351,514	0.001062	690	1.041	196.8	0.0005
2005	0	0	0	0	0.0026	0.0026	0.002301	7,855,289	0.002301	716	1.041	202.7	0.0011
2006	0	0	0	0	0.0045	0.0045	0.003983	8,405,393	0.003983	745	1.041	208.4	0.0019
2007	0	0	0	0	0.0081	0.0081	0.007169	9,160,450	0.007169	779	1.041	217.2	0.0033
2008	0	0	0	0	0.0112	0.0112	0.009912	7,958,335	0.009912	807	1.041	182.2	0.0054
2009	0	0	0	0	0.0163	0.0163	0.014426	8,004,644	0.014426	836	1.041	176.9	0.0082
2010	0	0	0	0	0.0235	0.0235	0.020798	8,481,228	0.020798	845	1.041	185.4	0.0112
2011	0	0	0	0	0.0452	0.0452	0.040002	11,720,035	0.040002	858	1.041	252.3	0.0159
2012	0	0	0	0	0.0597	0.0597	0.052835	10,273,004	0.052835	888	1.041	213.7	0.0247
2013	0	0	0	0	0.0742	0.0742	0.065667	8,678,376	0.065667	917	1.041	174.8	0.0376
TOTAL	0	0	0	0	0.2465	0.2465	0.218153	87,888,268	0.218153			2,010.4	0.1098
Average: State Frequency													0.0110
Federal Excess Frequency (times 40.0%)													0.0044

BITUMINOUS CO-GEN (1024)

IBNR Factor adjusted by 0.4000

YEAR	REPORTED	AWARDED	PENDING	DENIED	IBNR	IBNR + PENDING	0.885 AWARD RATIO	Payroll	EXPECTED ULTIMATE AWARDED	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years
2004	0	0	0	0	0.0010	0.0010	0.000885	6,374,483	0.000885	690	1.426	124.6	0.0007
2005	0	0	0	0	0.0028	0.0028	0.002478	8,524,752	0.002478	716	1.426	160.6	0.0015
2006	1	1	0	0	0.0050	0.0050	0.004425	9,397,580	1.004425	745	1.426	170.1	0.5905
2007	0	0	0	0	0.0095	0.0095	0.008408	10,789,214	0.008408	779	1.426	186.8	0.0045
2008	0	0	0	0	0.0119	0.0119	0.010532	8,468,561	0.010532	807	1.426	141.5	0.0074
2009	0	0	0	0	0.0160	0.0160	0.014160	7,866,413	0.014160	836	1.426	126.9	0.0112
2010	0	0	0	0	0.0242	0.0242	0.021417	8,732,701	0.021417	845	1.426	139.4	0.0154
2011	0	0	0	0	0.0351	0.0351	0.031064	9,102,411	0.031064	858	1.426	143.1	0.0217
2012	0	0	0	0	0.0526	0.0526	0.046551	9,047,745	0.046551	888	1.426	137.4	0.0339
2013	0	0	0	0	0.1123	0.1123	0.099386	13,133,423	0.099386	917	1.426	193.1	0.0515
TOTAL	1	1	0	0	0.2704	0.2704	0.239304	91,437,283	1.239304			1,523.5	0.7383
Average: State Frequency													0.0738
Federal Excess Frequency (times 40.0%)													0.0295

Source: Claim counts - CMCRB OD Database as of 08/13/2014
IBNR: Exhibit VII-C-6, p.4
Payroll- Exhibit X-A
The Award Ratio is equal to Awarded ÷ (Awarded plus Denied). Other Classes use the Total Award Ratio: 0.885=23 / [23 + 03]

The Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G
Estimated Miner Years = Payroll / (SAWW x Adj. Factor x 52)
Freqency per 100 Miner Years = (Expected Ult. Awarded / Est. Miner Years) x 100

STATE OCCUPATIONAL DISEASE FREQUENCY
WITH FEDERAL EXCESS FREQUENCY

ANTHRACITE PREP PLANT (1026)

IBNR Factor adjusted by 1.0000

YEAR	REPORTED	AWARDED	PENDING	DENIED	IBNR	IBNR + PENDING	0.885 AWARD RATIO	Payroll	EXPECTED ULTIMATE AWARDED	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	10-Year Payroll Weighted Frequency
2004	1	1	0	0	0.0018	0.0018	0.001593	4,406,653	1.001593	690	1.041	118.0	0.8488	
2005	0	0	0	0	0.0043	0.0043	0.003806	5,170,069	0.003806	716	1.041	133.4	0.0029	
2006	0	0	0	0	0.0065	0.0065	0.005753	4,885,882	0.005753	745	1.041	121.2	0.0047	
2007	1	1	0	0	0.0127	0.0127	0.011240	5,756,439	1.011240	779	1.041	136.5	0.7408	
2008	0	0	0	0	0.0225	0.0225	0.019913	6,390,767	0.019913	807	1.041	146.3	0.0136	
2009	0	0	0	0	0.0344	0.0344	0.030444	6,749,748	0.030444	836	1.041	149.2	0.0204	
2010	1	1	0	0	0.0399	0.0399	0.035312	5,762,086	1.035312	845	1.041	126.0	0.8217	
2011	0	0	0	0	0.0698	0.0698	0.061773	7,236,583	0.061773	858	1.041	155.8	0.0396	
2012	0	0	0	0	0.1261	0.1261	0.111599	8,671,140	0.111599	888	1.041	180.4	0.0619	
2013	0	0	0	0	0.1767	0.1767	0.156380	8,266,396	0.156380	917	1.041	166.5	0.0939	
TOTAL	3	3	0	0	0.4947	0.4947	0.437810	63,295,763	3.437810			1,433.3	2.6484	
Average: State Frequency													0.2648	
Federal Excess Frequency (times 40.0%)													0.1059	

BITUMINOUS PREP PLANT (1028)

IBNR Factor adjusted by 0.4000

YEAR	REPORTED	AWARDED	PENDING	DENIED	IBNR	IBNR + PENDING	0.885 AWARD RATIO	Payroll	EXPECTED ULTIMATE AWARDED	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years
2004	0	0	0	0	0.0030	0.0030	0.002655	18,067,286	0.002655	690	1.426	353.1	0.0008
2005	1	0	1	0	0.0059	1.0059	0.890222	17,690,358	0.890222	716	1.426	333.2	0.2672
2006	0	0	0	0	0.0091	0.0091	0.008054	17,050,967	0.008054	745	1.426	308.7	0.0026
2007	0	0	0	0	0.0167	0.0167	0.014780	18,895,192	0.014780	779	1.426	327.1	0.0045
2008	0	0	0	0	0.0299	0.0299	0.026462	21,250,256	0.026462	807	1.426	355.1	0.0075
2009	0	0	0	0	0.0404	0.0404	0.035754	19,828,012	0.035754	836	1.426	319.9	0.0112
2010	0	0	0	0	0.0729	0.0729	0.064517	26,313,130	0.064517	845	1.426	419.9	0.0154
2011	0	0	0	0	0.1356	0.1356	0.120006	35,155,068	0.120006	858	1.426	552.6	0.0217
2012	0	0	0	0	0.1990	0.1990	0.176115	34,211,729	0.176115	888	1.426	519.6	0.0339
2013	0	0	0	0	0.2902	0.2902	0.256827	33,935,906	0.256827	917	1.426	499.1	0.0515
TOTAL	1	0	1	0	0.8027	1.8027	1.595390	242,397,904	1.595390			3,988.3	0.4161
Average: State Frequency													0.0416
Federal Excess Frequency (times 40.0%)													0.0166

TOTAL OTHER CLASSES

YEAR	REPORTED	AWARDED	PENDING	DENIED	IBNR	IBNR + PENDING	0.885 AWARD RATIO	Payroll	EXPECTED ULTIMATE AWARDED	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	
2004	1	1	0	0	0.0092	0.0092	0.008142	49,307,861	1.008142	690		1,143.4	0.0882	
2005	1	0	1	0	0.0202	1.0202	0.902877	53,127,984	0.902877	716		1,188.2	0.0760	
2006	1	1	0	0	0.0325	0.0325	0.028763	53,544,047	1.028763	745		1,150.7	0.0894	
2007	1	1	0	0	0.0601	0.0601	0.053189	59,392,376	1.053189	779		1,218.4	0.0864	
2008	0	0	0	0	0.0927	0.0927	0.082040	56,317,623	0.082040	807		1,105.5	0.0074	
2009	0	0	0	0	0.1195	0.1195	0.105758	48,548,532	0.105758	836		907.7	0.0117	
2010	1	1	0	0	0.1778	0.1778	0.157353	55,531,499	1.157353	845		1,007.1	0.1149	
2011	0	0	0	0	0.3041	0.3041	0.269129	67,989,438	0.269129	858		1,206.6	0.0223	
2012	0	0	0	0	0.4755	0.4755	0.420818	68,749,931	0.420818	888		1,187.3	0.0354	
2013	0	0	0	0	0.7038	0.7038	0.622863	69,899,801	0.622863	917		1,152.0	0.0541	
TOTAL	5	4	1	0	1.9954	2.9954	2.650929	582,409,092	6.650929			11,266.9	0.5858	
Average: State Frequency													0.0586	0.048420
Federal Excess Frequency (times 40.0%)													0.0234	0.019368

GRAND TOTAL

YEAR	REPORTED	AWARDED	PENDING	DENIED	IBNR	IBNR + PENDING	0.885 AWARD RATIO	Payroll	EXPECTED ULTIMATE AWARDED	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	
2004	5	3	1	1	0.0092	1.0092	0.893142	184,727,876	3.854142	690		4,295.5	0.0897	
2005	7	5	1	1	0.1031	1.1031	0.976261	202,430,645	5.973027	716		4,546.6	0.1314	
2006	1	1	0	0	0.2270	0.2270	0.200886	200,407,865	1.193301	745		4,320.7	0.0276	
2007	4	4	0	0	0.4261	0.4261	0.377063	218,810,532	4.362791	779		4,487.3	0.0972	
2008	3	2	0	1	0.7525	0.7525	0.665971	249,817,108	2.640239	807		4,908.5	0.0538	
2009	0	0	0	0	1.0965	1.0965	0.970403	229,462,394	0.932300	836		4,300.8	0.0217	
2010	1	1	0	0	1.9448	1.9448	1.721130	269,231,509	2.652965	845		4,938.8	0.0537	
2011	4	3	1	0	3.4367	4.4367	3.926462	324,841,755	6.786991	858		5,873.7	0.1155	
2012	3	2	1	0	4.9411	5.9411	5.257856	326,110,586	7.053066	888		5,678.5	0.1242	
2013	2	2	0	0	7.4019	7.4019	6.550682	301,856,744	8.303984	917		5,031.1	0.1651	
TOTAL	30	23	4	3	20.3388	24.3388	21.539856	2,507,697,014	43.752805			48,381.5	0.8799	
Average: State Frequency													0.0880	0.084556
Federal Excess Frequency (times 40.0%)													0.0352	0.033822

Source: Claim counts - CMCRB OD Database as of 08/13/2014
IBNR: Exhibit VII-C-6, p.4
Payroll- Exhibit X-A
The Award Ratio is equal to Awarded ÷ (Awarded plus Denied). Other Classes use the Total Award Ratio: 0.885=23 / [23 + 03]

The Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G
Estimated Miner Years = Payroll / (SAWW x Adj. Factor x 52)
Freqency per 100 Miner Years = (Expected Ult. Awarded / Est. Miner Years) x 100

COAL MINE COMPENSATION RATING BUREAU
STATE OCCUPATIONAL DISEASE
ANTHRACITE UNDERGROUND (1011)

Claims with File Dates on or before 12-31-2013, Valued as of 4-30-2014

Incremental Frequency and IBNR

Reported Claims

Months	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
12	3	3	1	1	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
24	6	3	1	2	0	2	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	
36	6	3	3	2	0	2	3	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1		
48	6	3	4	4	0	2	3	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0			
60	6	3	4	4	0	3	4	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0				
72	6	3	4	4	0	3	4	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0					
84	6	3	5	4	0	3	4	0	0	0	0	0	1	1	1	0	0	0	0	0	0						
96	6	3	5	4	0	3	4	0	0	0	0	0	1	1	1	0	0	0	0	0							
108	6	3	5	4	0	3	4	0	0	0	0	0	1	1	1	0	0	0	0								
120	6	3	5	4	0	3	4	0	0	0	0	0	1	1	1	0	0	0									
132	6	3	5	4	0	3	4	0	0	0	0	0	1	1	1	0	0										
144	6	3	5	4	0	3	4	0	0	0	0	0	1	1	1	0											
156	6	3	5	4	0	3	4	0	0	0	0	0	1	1	1												
168	6	3	5	4	0	3	4	0	0	0	0	0	1	1													
180	6	3	5	4	0	3	4	0	0	0	0	0	1														
192	6	3	5	4	0	3	4	0	0	0	0	0															
204	6	3	5	4	0	3	4	0	0	0	0																
216	6	3	5	4	0	3	4	0	0	0																	
228	6	3	5	4	0	3	4	0	0																		
240	6	3	5	4	0	3	4	0																			

Incremental Changes

12-24													0	1	0	0	0	0	0	0	0	0	0	0	0	0	
24-36												0	0	0	0	0	0	0	0	0	0	0	0	0	0		
36-48											0	0	0	0	1	0	0	0	0	0	0	0	0	0			
48-60										0	0	0	0	0	0	0	0	0	0	0	0	0	0				
60-72									0	0	0	0	0	0	0	0	0	0	0	0	0	0					
72-84								0	0	0	0	0	0	0	0	0	0	0	0	0	0						
84-96							0	0	0	0	0	0	0	0	0	0	0	0	0	0							
96-108						0	0	0	0	0	0	0	0	0	0	0	0	0	0								
108-120					0	0	0	0	0	0	0	0	0	0	0	0	0	0									
120-132				0	0	0	0	0	0	0	0	0	0	0	0	0	0										
132-144			0	0	0	0	0	0	0	0	0	0	0	0	0	0											
144-156		0	0	0	0	0	0	0	0	0	0	0	0	0	0												
156-168	0	0	0	0	0	0	0	0	0	0	0	0	0	0													
168-180	0	0	0	0	0	0	0	0	0	0	0	0	0														
180-192	0	0	0	0	0	0	0	0	0	0	0	0															
192-204	0	0	0	0	0	0	0	0	0	0	0																
204-216	0	0	0	0	0	0	0	0	0	0																	
216-228	0	0	0	0	0	0	0	0	0																		
228-240	0	0	0	0	0	0	0	0																			

Payroll ($Millions)	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average	Smoothed
	4.06188	2.74569	2.06629	1.54705	0.71815	0.93280	1.18200	1.31068	1.49352	1.61270	1.57161	1.76229	1.81416	1.37016	1.63652	1.38655	1.35427	1.34532	1.41757	1.44252	1.66254	2.13671	1.33587	1.29959	1.25794	1.02926	0.38233		
12-24														0.72984	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		0.05614	0.05614
24-36													0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000			0.00000	0.04700
36-48												0.00000	0.00000	0.00000	0.61105	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000				0.04700	0.00000
48-60											0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000					0.00000	0.00000
60-72										0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000						0.00000	0.00000
72-84									0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000							0.00000	0.00000
84-96								0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000								0.00000	0.00000
96-108							0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000									0.00000	0.00000
108-120						0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000										0.00000	0.00000
120-132					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000											0.00000	0.00000
132-144				0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000												0.00000	0.00000
144-156			0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000													0.00000	0.00000
156-168		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000														0.00000	0.00000
168-180	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000															0.00000	0.00000
180-192	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																0.00000	0.00000
192-204	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																	0.00000	0.00000
204-216	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																		0.00000	0.00000
216-228	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																			0.00000	0.00000
228-240	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																				0.00000	0.00000
																											Total=	0.10314	0.10314

IBNR Claims

Cumulative Factor									0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.04700	0.10314
times Payroll									0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.04838	0.03943

Source: Coal Mine Compensation Rating Bureau Database as of 4-30-2014
Payrolls: Exhibit X-A pages 1 & 2

COAL MINE COMPENSATION RATING BUREAU
STATE OCCUPATIONAL DISEASE
BITUMINOUS UNDERGROUND (1002)

Claims with File Dates on or before 12-31-2013, Valued as of 4-30-2014

Incremental Frequency and IBNR

Reported Claims

Months	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
12	8	6	4	0	1	8	0	3	0	0	1	0	0	0	2	1	1	1	1	0	0	0	0	0	0	0	2
24	9	7	6	4	1	11	2	3	1	0	2	0	0	0	2	1	2	1	3	0	0	0	0	0	1	3	
36	9	8	6	4	1	14	2	3	3	0	3	1	2	1	2	2	2	1	3	0	0	0	0	0	1		
48	12	8	7	5	2	15	2	4	3	0	3	1	2	1	2	2	2	2	3	0	0	1	0	0			
60	14	8	8	6	2	15	2	4	3	0	3	1	2	1	3	3	2	2	3	0	0	2	0				
72	15	8	9	7	2	15	2	4	3	2	3	1	2	1	3	3	2	2	4	0	0	2					
84	16	8	9	7	2	15	2	4	3	2	3	1	2	9	3	3	2	2	4	0	0						
96	16	8	9	7	2	15	2	4	3	2	3	1	2	9	4	3	2	2	4	0							
108	16	8	9	7	2	15	2	4	3	2	3	1	2	9	4	3	2	3	4								
120	16	8	9	7	2	15	2	4	3	2	3	1	2	9	4	3	2	3									
132	16	8	9	7	2	15	2	4	3	2	3	1	2	9	4	3	2										
144	16	8	9	7	2	15	2	4	3	2	3	1	2	9	4	3											
156	16	8	9	7	2	15	2	4	3	2	3	1	2	9	4												
168	16	8	9	7	2	15	2	4	3	2	3	1	2	9													
180	16	8	9	7	2	15	2	4	3	2	3	1	2														
192	16	8	9	7	2	15	2	4	3	2	3	1															
204	16	8	9	7	2	15	2	4	3	2	3																
216	17	8	9	7	2	15	2	4	3	2																	
228	17	8	9	7	2	15	2	4	3																		
240	17	8	9	7	2	15	2	4																			

Incremental Changes

12-24													0	0	0	0	1	0	2	0	0	0	0	0	1	3	
24-36												1	2	1	0	1	0	0	0	0	0	0	0	0	0		
36-48											0	0	0	0	0	0	0	1	0	0	0	1	0	0			
48-60										0	0	0	0	0	1	1	0	0	0	0	0	1	0				
60-72									0	2	0	0	0	0	0	0	0	0	1	0	0	0					
72-84								0	0	0	0	0	0	8	0	0	0	0	0	0	0						
84-96							0	0	0	0	0	0	0	0	1	0	0	0	0	0							
96-108						0	0	0	0	0	0	0	0	0	0	0	0	1	0								
108-120					0	0	0	0	0	0	0	0	0	0	0	0	0	0									
120-132				0	0	0	0	0	0	0	0	0	0	0	0	0	0										
132-144			0	0	0	0	0	0	0	0	0	0	0	0	0	0											
144-156		0	0	0	0	0	0	0	0	0	0	0	0	0	0												
156-168	0	0	0	0	0	0	0	0	0	0	0	0	0	0													
168-180	0	0	0	0	0	0	0	0	0	0	0	0	0														
180-192	0	0	0	0	0	0	0	0	0	0	0	0															
192-204	0	0	0	0	0	0	0	0	0	0	0																
204-216	1	0	0	0	0	0	0	0	0	0																	
216-228	0	0	0	0	0	0	0	0	0																		
228-240	0	0	0	0	0	0	0	0																			

Payroll ($Millions)	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average	Smoothed
	55.03658	64.84330	74.33529	77.52445	59.43937	63.64694	52.75653	60.59094	65.27115	75.22304	70.39669	61.08733	58.68524	47.52056	48.52263	49.25035	54.21550	65.49767	70.87262	70.46594	79.90427	101.35398	101.34814	125.39358	148.48571	153.60219	145.93925		
12-24														0.00000	0.00000	0.00000	0.01844	0.00000	0.02822	0.00000	0.00000	0.00000	0.00000	0.00000	0.00673	0.01953		0.00561	0.01295
24-36													0.03408	0.02104	0.00000	0.02030	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000			0.00580	0.00580
36-48												0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01527	0.00000	0.00000	0.00000	0.00987	0.00000	0.00000				0.00193	0.00561
48-60											0.00000	0.00000	0.00000	0.00000	0.02061	0.02030	0.00000	0.00000	0.00000	0.00000	0.00000	0.00987	0.00000					0.00391	0.00391
60-72										0.02659	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01411	0.00000	0.00000	0.00000							0.00313	0.00313
72-84									0.00000	0.00000	0.00000	0.00000	0.00000	0.16835	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000							0.01295	0.00193
84-96								0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.02061	0.00000	0.00000	0.00000	0.00000	0.00000								0.00159	0.00182
96-108							0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01527	0.00000									0.00117	0.00159
108-120						0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000										0.00000	0.00117
120-132					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000											0.00000	0.00000
132-144				0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000												0.00000	0.00000
144-156			0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000													0.00000	0.00000
156-168		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000														0.00000	0.00000
168-180	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000															0.00000	0.00000
180-192	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																0.00000	0.00000
192-204	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																	0.00000	0.00000
204-216	0.01817	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																		0.00182	0.00000
216-228	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																			0.00000	0.00000
228-240	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																				0.00000	0.00000
																											Total=	0.03791	0.03791

IBNR Claims

Cumulative Factor									0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00117	0.00276	0.00458	0.00651	0.00964	0.01355	0.01916	0.02496	0.03791
times Payroll									0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.08292	0.19449	0.36596	0.65981	0.97700	1.69908	2.84499	3.83391	5.53256

Source: Coal Mine Compensation Rating Bureau Database as of 4-30-2014
Payrolls: Exhibit X-A pages 1 & 2

COAL MINE COMPENSATION RATING BUREAU
STATE OCCUPATIONAL DISEASE
ANTHRACITE SURFACE (1016)

Claims with File Dates on or before 12-31-2013, Valued as of 4-30-2014

Incremental Frequency and IBNR

Reported Claims

Months	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	Year																										
12	23	8	1	4	5	2	1	1	1	0	2	1	1	0	1	1	1	1	1	0	1	1	0	0	1	0	0
24	24	10	1	9	7	2	2	5	4	1	3	1	1	3	1	1	2	1	1	0	2	1	0	0	1	0	
36	24	10	1	10	9	5	4	6	7	1	3	1	1	3	1	2	2	1	1	0	2	1	0	0	1		
48	25	10	2	11	10	6	6	8	7	1	3	1	1	3	1	2	2	1	1	0	3	1	0	0			
60	25	11	2	11	11	7	7	8	7	2	3	1	1	3	1	2	2	1	1	0	3	1	0				
72	25	11	6	11	11	7	7	8	7	2	3	1	1	3	1	2	2	1	1	0	3	1					
84	26	11	7	11	11	7	7	8	7	3	3	1	1	3	1	2	2	1	1	0	3						
96	26	11	7	11	11	7	7	8	7	3	3	1	1	3	1	2	2	1	1	0							
108	26	11	7	12	11	7	7	8	7	3	3	1	1	3	1	2	2	1	1								
120	27	11	7	12	11	7	7	8	7	3	3	1	1	3	1	2	2	1									
132	27	11	7	12	11	7	7	8	7	3	3	1	1	3	1	2	2										
144	27	11	7	12	11	7	7	8	7	3	3	1	1	3	1	2											
156	27	11	7	12	11	7	7	8	7	3	3	1	1	3	1												
168	27	11	7	12	11	7	7	8	7	3	3	1	1	3													
180	27	11	7	12	11	7	7	8	7	3	3	1	1														
192	27	11	7	12	11	7	7	8	7	3	3	1															
204	27	11	7	12	11	7	7	8	7	3	3																
216	27	11	7	12	11	7	7	8	7	3																	
228	27	11	7	12	11	7	7	8	7																		
240	27	11	7	12	11	7	7	8																			

Incremental Changes

12-24													0	3	0	0	1	0	0	0	1	0	0	0	0	0	
24-36												0	0	0	0	1	0	0	0	0	0	0	0	0	0		
36-48											0	0	0	0	0	0	0	0	0	0	1	0	0	0			
48-60										1	0	0	0	0	0	0	0	0	0	0	0	0	0				
60-72									0	0	0	0	0	0	0	0	0	0	0	0	0	0					
72-84								0	0	1	0	0	0	0	0	0	0	0	0	0	0						
84-96							0	0	0	0	0	0	0	0	0	0	0	0	0	0							
96-108						0	0	0	0	0	0	0	0	0	0	0	0	0	0								
108-120					0	0	0	0	0	0	0	0	0	0	0	0	0	0									
120-132				0	0	0	0	0	0	0	0	0	0	0	0	0	0										
132-144			0	0	0	0	0	0	0	0	0	0	0	0	0	0											
144-156		0	0	0	0	0	0	0	0	0	0	0	0	0	0												
156-168	0	0	0	0	0	0	0	0	0	0	0	0	0	0													
168-180	0	0	0	0	0	0	0	0	0	0	0	0	0														
180-192	0	0	0	0	0	0	0	0	0	0	0	0															
192-204	0	0	0	0	0	0	0	0	0	0	0																
204-216	0	0	0	0	0	0	0	0	0	0																	
216-228	0	0	0	0	0	0	0	0	0																		
228-240	0	0	0	0	0	0	0	0																			

Payroll ($Millions)	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average	Smoothed
	25.00816	23.09936	27.04451	32.39289	30.95658	29.47612	30.10339	30.21045	20.28889	16.19217	17.78314	17.37629	18.44114	16.80781	13.94080	12.25126	12.16621	12.35973	12.14091	11.94638	14.55558	16.95431	16.44546	14.29529	21.03460	26.29591	22.12785		
12-24														0.17849	0.00000	0.00000	0.08219	0.00000	0.00000	0.00000	0.06870	0.00000	0.00000	0.00000	0.00000	0.00000		0.02534	0.02534
24-36													0.00000	0.00000	0.00000	0.08162	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000			0.00628	0.00628
36-48												0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06870	0.00000	0.00000	0.00000				0.00528	0.00528
48-60											0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000					0.00000	0.00475
60-72										0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000						0.00000	0.00000
72-84									0.00000	0.06176	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000							0.00475	0.00000
84-96								0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000								0.00000	0.00000
96-108							0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000									0.00000	0.00000
108-120						0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000										0.00000	0.00000
120-132					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000											0.00000	0.00000
132-144				0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000												0.00000	0.00000
144-156			0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000													0.00000	0.00000
156-168		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000														0.00000	0.00000
168-180	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000															0.00000	0.00000
180-192	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																0.00000	0.00000
192-204	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																	0.00000	0.00000
204-216	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																		0.00000	0.00000
216-228	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																			0.00000	0.00000
228-240	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																				0.00000	0.00000
																											Total=	0.04165	0.04165

IBNR Claims

Cumulative Factor									0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00475	0.01003	0.01631	0.04165
times Payroll									0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06790	0.21098	0.42889	0.92162

Source: Coal Mine Compensation Rating Bureau Database as of 4-30-2014
Payrolls: Exhibit X-A pages 1 & 2

COAL MINE COMPENSATION RATING BUREAU
STATE OCCUPATIONAL DISEASE
BITUMINOUS SURFACE (1013)

Exhibit VII-C-4

Claims with File Dates on or before 12-31-2013, Valued as of 4-30-2014

Incremental Frequency and IBNR

Reported Claims

Months	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
12	8	2	1	0	4	1	1	1	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
24	10	3	1	0	4	3	2	4	1	2	2	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	
36	10	4	1	1	4	4	2	5	2	3	2	1	2	0	0	0	0	0	1	0	0	0	0	0	1		
48	10	4	1	2	4	4	2	5	3	3	3	1	2	0	0	0	0	0	1	0	0	0	0	0			
60	10	4	2	2	5	4	2	5	3	3	3	1	2	0	0	0	0	0	1	0	0	0	0				
72	10	4	2	2	5	4	3	5	3	3	4	1	2	0	0	0	0	0	1	0	0	0					
84	10	4	2	2	5	5	3	5	3	3	4	1	2	0	0	0	0	0	1	0	0						
96	10	4	2	2	5	5	3	5	3	3	4	1	2	0	0	0	0	0	1	0							
108	10	4	2	2	5	5	3	5	3	3	4	1	2	0	0	0	0	0	1								
120	10	4	2	2	5	5	3	5	3	3	4	1	2	0	0	0	0	0									
132	10	4	2	2	5	5	3	5	3	3	4	1	2	0	0	0	0										
144	10	4	2	2	5	5	3	5	3	3	4	1	2	0	0	0											
156	10	4	2	2	5	5	3	5	3	3	4	1	2	0	0												
168	10	4	2	2	5	5	3	5	3	3	4	1	2	0													
180	10	4	2	2	5	5	3	5	3	3	4	1	2														
192	10	4	2	2	5	5	3	5	3	3	4	1															
204	10	4	2	2	5	5	3	5	3	3	4																
216	10	4	2	2	5	5	3	5	3	3																	
228	10	4	2	2	5	5	3	5	3																		
240	10	4	2	2	6	5	3	5																			

Incremental Changes

12-24													1	0	0	0	0	0	0	0	0	0	0	0	0	0	
24-36												1	0	0	0	0	0	0	0	0	0	0	0	0	1		
36-48											1	0	0	0	0	0	0	0	0	0	0	0	0	0			
48-60										0	0	0	0	0	0	0	0	0	0	0	0	0	0				
60-72									0	0	1	0	0	0	0	0	0	0	0	0	0	0					
72-84								0	0	0	0	0	0	0	0	0	0	0	0	0	0						
84-96							0	0	0	0	0	0	0	0	0	0	0	0	0	0							
96-108						0	0	0	0	0	0	0	0	0	0	0	0	0	0								
108-120					0	0	0	0	0	0	0	0	0	0	0	0	0	0									
120-132				0	0	0	0	0	0	0	0	0	0	0	0	0	0										
132-144			0	0	0	0	0	0	0	0	0	0	0	0	0	0											
144-156		0	0	0	0	0	0	0	0	0	0	0	0	0	0												
156-168	0	0	0	0	0	0	0	0	0	0	0	0	0	0													
168-180	0	0	0	0	0	0	0	0	0	0	0	0	0														
180-192	0	0	0	0	0	0	0	0	0	0	0	0															
192-204	0	0	0	0	0	0	0	0	0	0	0																
204-216	0	0	0	0	0	0	0	0	0	0																	
216-228	0	0	0	0	0	0	0	0	0																		
228-240	0	0	0	0	1	0	0	0																			

Payroll ($Millions)	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average	Smoothed
	134.30589	126.49321	125.36171	124.18907	104.58350	100.99938	94.55659	92.46464	78.75261	77.82841	67.90579	63.65156	54.16227	49.93562	58.15133	53.50209	47.87374	56.21730	64.87156	63.00898	63.29577	73.05448	61.78439	72.71156	86.07406	76.43330	63.50752		
12-24														0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		0.00000	0.00120
24-36													0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01162			0.00089	0.00113
36-48												0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000				0.00000	0.00089
48-60											0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000					0.00000	0.00000
60-72										0.00000	0.01473	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000						0.00113	0.00000
72-84									0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000							0.00000	0.00000
84-96								0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000								0.00000	0.00000
96-108							0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000									0.00000	0.00000
108-120						0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000										0.00000	0.00000
120-132					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000											0.00000	0.00000
132-144				0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000												0.00000	0.00000
144-156			0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000													0.00000	0.00000
156-168		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000														0.00000	0.00000
168-180	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000															0.00000	0.00000
180-192	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																0.00000	0.00000
192-204	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																	0.00000	0.00000
204-216	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																		0.00000	0.00000
216-228	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																			0.00000	0.00000
228-240	0.00000	0.00000	0.00000	0.00000	0.00956	0.00000	0.00000	0.00000																				0.00120	0.00000
																											Total=	0.00322	0.00322

IBNR Claims

Cumulative Factor									0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00089	0.00202	0.00322
times Payroll									0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.07661	0.15440	0.20449

Source: Coal Mine Compensation Rating Bureau Database as of 4-30-2014
Payrolls: Exhibit X-A pages 1 & 2

COAL MINE COMPENSATION RATING BUREAU
STATE OCCUPATIONAL DISEASE
OTHER CLASSIFICATIONS - STATE

Claims with File Dates on or before 12-31-2013, Valued as of 4-30-2014

Incremental Frequency and IBNR

Reported Claims

Months	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
12	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0
24	0	0	0	0	0	1	1	0	0	0	1	0	0	1	0	1	1	1	0	1	1	0	0	1	0	0	
36	0	0	0	0	0	1	1	0	0	0	1	0	0	1	0	1	1	1	0	1	1	0	0	1	0		
48	1	0	0	0	0	1	1	0	0	0	1	0	0	1	0	1	1	1	0	1	1	0	0	1			
60	1	0	0	0	0	1	1	0	0	0	1	0	0	1	0	1	1	1	0	1	1	0	0				
72	1	0	0	0	0	1	1	0	0	0	1	0	1	1	0	1	1	1	0	1	1	0					
84	1	0	0	0	0	1	1	0	0	0	2	0	1	1	0	1	1	1	0	1	1						
96	1	0	0	0	0	1	1	0	0	0	2	0	1	1	0	1	1	1	1	1							
108	1	0	0	0	0	1	1	0	0	0	2	0	1	1	0	1	1	1	1								
120	1	0	0	0	0	1	1	0	0	0	2	0	1	1	0	1	1	1									
132	1	0	0	0	0	1	1	0	0	0	2	0	1	1	0	1	1										
144	1	0	0	0	0	1	1	0	0	0	2	0	1	1	0	1											
156	1	0	0	0	0	1	1	0	0	0	2	0	1	1	0												
168	1	0	0	0	0	1	1	0	0	0	2	0	1	1													
180	1	0	0	0	0	1	1	0	0	0	2	0	1														
192	1	0	0	0	0	1	1	0	0	0	2	0															
204	1	0	0	0	0	1	1	0	0	0	2																
216	1	0	0	0	0	1	1	0	0	0																	
228	1	0	0	0	0	1	1	0	0																		
240	1	0	0	0	0	1	1	0																			

Incremental Changes

12-24													0	1	0	0	0	1	0	1	1	0	0	0	0	0	
24-36												0	0	0	0	0	0	0	0	0	0	0	0	0	0		
36-48											0	0	0	0	0	0	0	0	0	0	0	0	0	0			
48-60										0	0	0	0	0	0	0	0	0	0	0	0	0	0				
60-72									0	0	0	0	1	0	0	0	0	0	0	0	0	0					
72-84								0	0	0	1	0	0	0	0	0	0	0	0	0	0						
84-96							0	0	0	0	0	0	0	0	0	0	0	0	1	0							
96-108						0	0	0	0	0	0	0	0	0	0	0	0	0	0								
108-120					0	0	0	0	0	0	0	0	0	0	0	0	0	0									
120-132				0	0	0	0	0	0	0	0	0	0	0	0	0	0										
132-144			0	0	0	0	0	0	0	0	0	0	0	0	0	0											
144-156		0	0	0	0	0	0	0	0	0	0	0	0	0	0												
156-168	0	0	0	0	0	0	0	0	0	0	0	0	0	0													
168-180	0	0	0	0	0	0	0	0	0	0	0	0	0														
180-192	0	0	0	0	0	0	0	0	0	0	0	0															
192-204	0	0	0	0	0	0	0	0	0	0	0																
204-216	0	0	0	0	0	0	0	0	0	0																	
216-228	0	0	0	0	0	0	0	0	0																		
228-240	0	0	0	0	0	0	0	0																			

Payroll ($Millions)	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average	Smoothed
	28.26926	20.12482	14.47189	64.28048	55.26295	47.49607	58.74792	60.28848	60.34187	62.83464	73.62183	31.35678	30.45186	29.53686	32.92544	36.81203	41.30010	49.30786	53.12799	53.54404	59.39238	56.31764	48.54852	55.53151	67.98945	68.74994	69.89981		
12-24														0.03386	0.00000	0.00000	0.00000	0.02028	0.00000	0.01868	0.01684	0.00000	0.00000	0.00000	0.00000	0.00000		0.00690	0.00690
24-36													0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000			0.00000	0.00253
36-48												0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000				0.00000	0.00145
48-60											0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000					0.00000	0.00104
60-72										0.00000	0.00000	0.00000	0.03284	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000						0.00253	0.00000
72-84									0.00000	0.00000	0.01358	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000							0.00104	0.00000
84-96								0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01882	0.00000								0.00145	0.00000
96-108							0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000									0.00000	0.00000
108-120						0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000										0.00000	0.00000
120-132					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000											0.00000	0.00000
132-144				0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000												0.00000	0.00000
144-156			0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000													0.00000	0.00000
156-168		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000														0.00000	0.00000
168-180	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000															0.00000	0.00000
180-192	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																0.00000	0.00000
192-204	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																	0.00000	0.00000
204-216	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																		0.00000	0.00000
216-228	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																			0.00000	0.00000
228-240	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																				0.00000	0.00000
																											Total=	0.01192	0.01192

IBNR Claims

Cumulative Factor									0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00104	0.00249	0.00502	0.01192
times Payroll									0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.05775	0.16929	0.34512	0.83321

Source: Coal Mine Compensation Rating Bureau Database as of 4-30-2014
Payrolls: Exhibit X-A pages 1 & 2
File: 2-C:C:\Clients\Coal Mine\2014 Rate Filing\[07-C.xlsm]VII-C-5
Run Date: 09-24-2014 09:58:02 AM

FTI - PAB
Filing Date 04/01/2015

Checksum:154,112.160840

COAL MINE COMPENSATION RATING BUREAU
STATE OCCUPATIONAL DISEASE
ALL CLASSIFICATIONS

Claims with File Dates on or before 12-31-2013, Valued as of 4-30-2014

Incremental Frequency and IBNR

Reported Claims

Months	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	Year																										
12	42	19	7	5	10	14	2	5	2	0	4	1	3	0	3	3	3	2	3	0	1	1	0	1	2	0	2
24	49	23	9	15	12	19	8	12	6	3	8	1	4	5	3	3	5	3	5	1	3	1	0	1	3	3	
36	49	25	11	17	14	26	12	14	12	4	9	3	6	6	3	5	5	3	5	1	3	1	0	1	4		
48	54	25	14	22	16	28	14	17	13	4	10	3	6	6	4	5	5	4	5	1	4	2	0	1			
60	56	26	16	23	18	30	16	17	13	5	10	3	6	6	5	6	5	4	5	1	4	3	0				
72	57	26	21	24	18	30	17	17	13	7	11	3	7	6	5	6	5	4	6	1	4	3					
84	59	26	23	24	18	31	17	17	13	8	12	3	7	14	5	6	5	4	6	1	4						
96	59	26	23	24	18	31	17	17	13	8	12	3	7	14	6	6	5	4	7	1							
108	59	26	23	25	18	31	17	17	13	8	12	3	7	14	6	6	5	5	7								
120	60	26	23	25	18	31	17	17	13	8	12	3	7	14	6	6	5	5									
132	60	26	23	25	18	31	17	17	13	8	12	3	7	14	6	6	5										
144	60	26	23	25	18	31	17	17	13	8	12	3	7	14	6	6											
156	60	26	23	25	18	31	17	17	13	8	12	3	7	14	6												
168	60	26	23	25	18	31	17	17	13	8	12	3	7	14													
180	60	26	23	25	18	31	17	17	13	8	12	3	7														
192	60	26	23	25	18	31	17	17	13	8	12	3															
204	60	26	23	25	18	31	17	17	13	8	12																
216	61	26	23	25	18	31	17	17	13	8																	
228	61	26	23	25	18	31	17	17	13																		
240	61	26	23	25	19	31	17	17																			

Incremental Changes

12-24													1	5	0	0	2	1	2	1	2	0	0	0	1	3	
24-36												2	2	1	0	2	0	0	0	0	0	0	0	0	1		
36-48											1	0	0	0	1	0	0	1	0	0	1	1	0	0			
48-60										1	0	0	0	0	1	1	0	0	0	0	0	1	0				
60-72									0	2	1	0	1	0	0	0	0	0	1	0	0	0					
72-84								0	0	1	1	0	0	8	0	0	0	0	0	0	0						
84-96							0	0	0	0	0	0	0	0	1	0	0	0	1	0							
96-108						0	0	0	0	0	0	0	0	0	0	0	0	1	0								
108-120					0	0	0	0	0	0	0	0	0	0	0	0	0	0									
120-132				0	0	0	0	0	0	0	0	0	0	0	0	0	0										
132-144			0	0	0	0	0	0	0	0	0	0	0	0	0	0											
144-156		0	0	0	0	0	0	0	0	0	0	0	0	0	0												
156-168	0	0	0	0	0	0	0	0	0	0	0	0	0	0													
168-180	0	0	0	0	0	0	0	0	0	0	0	0	0														
180-192	0	0	0	0	0	0	0	0	0	0	0	0															
192-204	0	0	0	0	0	0	0	0	0	0	0																
204-216	1	0	0	0	0	0	0	0	0	0																	
216-228	0	0	0	0	0	0	0	0	0																		
228-240	0	0	0	0	1	0	0	0																			

Payroll	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
($Millions)	246.68177	237.30638	243.27969	299.93394	250.96055	242.55131	237.34643	244.86519	226.14804	233.69096	231.27906	175.23425	163.55467	145.17101	155.17672	153.20228	156.90982	184.72788	202.43065	200.40786	218.81054	249.81712	229.46238	269.23153	324.84176	326.11060	301.85676		
																												Average	Smoothed
12-24														0.03444	0.00000	0.00000	0.01275	0.00541	0.00988	0.00499	0.00914	0.00000	0.00000	0.00000	0.00308	0.00920		0.00684	0.00684
24-36													0.01223	0.00689	0.00000	0.01305	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00308			0.00271	0.00490
36-48												0.00000	0.00000	0.00000	0.00644	0.00000	0.00000	0.00541	0.00000	0.00000	0.00457	0.00400	0.00000	0.00000				0.00157	0.00271
48-60											0.00000	0.00000	0.00000	0.00000	0.00644	0.00653	0.00000	0.00000	0.00000	0.00000	0.00000	0.00400	0.00000					0.00131	0.00184
60-72										0.00856	0.00432	0.00000	0.00611	0.00000	0.00000	0.00000	0.00000	0.00000	0.00494	0.00000	0.00000	0.00000						0.00184	0.00157
72-84									0.00000	0.00428	0.00432	0.00000	0.00000	0.05511	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000							0.00490	0.00131
84-96								0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00644	0.00000	0.00000	0.00000	0.00494	0.00000								0.00088	0.00088
96-108							0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00541	0.00000									0.00042	0.00050
108-120						0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000										0.00000	0.00042
120-132					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000											0.00000	0.00041
132-144				0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000												0.00000	0.00000
144-156			0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000													0.00000	0.00000
156-168		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000														0.00000	0.00000
168-180	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000															0.00000	0.00000
180-192	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																0.00000	0.00000
192-204	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																	0.00000	0.00000
204-216	0.00405	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																		0.00041	0.00000
216-228	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																			0.00000	0.00000
228-240	0.00000	0.00000	0.00000	0.00000	0.00398	0.00000	0.00000	0.00000																				0.00050	0.00000
																											Total=	0.02138	0.02138

IBNR Claims

Cumulative Factor									0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00041	0.00083	0.00133	0.00221	0.00352	0.00509	0.00693	0.00964	0.01454	0.02138
times Payroll									0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.07574	0.16802	0.26654	0.48357	0.87936	1.16796	1.86577	3.13147	4.74165	6.45370

Source: Counts and Payrolls: Sum of Exhibits VII-C-1 thru VII-C-5

COAL MINE COMPENSATION RATING BUREAU
STATE OCCUPATIONAL DISEASE
ALL CLASSIFICATIONS

IBNR By Class

	CLASSIFICATION					
A. IBNR Factor	Coke	Auger	Anthracite Co-Gen	Bituminous Co-Gen	Anthracite Prep Plant	Bituminous Prep Plant
Year	1017	1019	1022	1024	1026	1028
2004	0.00041	0.00041	0.00041	0.00041	0.00041	0.00041
2005	0.00083	0.00083	0.00083	0.00083	0.00083	0.00083
2006	0.00133	0.00133	0.00133	0.00133	0.00133	0.00133
2007	0.00221	0.00221	0.00221	0.00221	0.00221	0.00221
2008	0.00352	0.00352	0.00352	0.00352	0.00352	0.00352
2009	0.00509	0.00509	0.00509	0.00509	0.00509	0.00509
2010	0.00693	0.00693	0.00693	0.00693	0.00693	0.00693
2011	0.00964	0.00964	0.00964	0.00964	0.00964	0.00964
2012	0.01454	0.01454	0.01454	0.01454	0.01454	0.01454
2013	0.02138	0.02138	0.02138	0.02138	0.02138	0.02138
B. Adjustment Factor	0.40000	0.40000	0.40000	0.40000	1.00000	0.40000
C. Payroll Per $1M						
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
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	1.09379	8.67838	13.13342	8.26640	33.93591
D. IBNR						
2004	0.0020	0.0002	0.0012	0.0010	0.0018	0.0030
2005	0.0043	0.0003	0.0026	0.0028	0.0043	0.0059
2006	0.0068	0.0006	0.0045	0.0050	0.0065	0.0091
2007	0.0121	0.0010	0.0081	0.0095	0.0127	0.0167
2008	0.0137	0.0035	0.0112	0.0119	0.0225	0.0299
2009	0.0105	0.0019	0.0163	0.0160	0.0344	0.0404
2010	0.0151	0.0022	0.0235	0.0242	0.0399	0.0729
2011	0.0139	0.0045	0.0452	0.0351	0.0698	0.1356
2012	0.0334	0.0047	0.0597	0.0526	0.1261	0.1990
2013	0.0410	0.0094	0.0742	0.1123	0.1767	0.2902

Source: IBNR Factor - Exhibit VII-C-6
Adjustment Factor - Judgement
Payrolls: Exhibit X-A pages 1 & 2
IBNR = A times B times C

COAL MINE COMPENSATION RATING BUREAU
STATE OCCUPATIONAL DISEASE
ALL CLASSIFICATIONS

IBNR By Class

	CLASSIFICATION					
A. IBNR Factor	Coke	Auger	Anthracite Co-Gen	Bituminous Co-Gen	Anthracite Prep Plant	Bituminous Prep Plant
Year	1017	1019	1022	1024	1026	1028
1994	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
1995	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
1996	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
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
B. Adjustment Factor	0.40000	0.40000	0.40000	0.40000	1.00000	0.40000
C. Payroll Per $1M						
1994	54.72132	1.48504	3.70450	0.37762	0.00000	0.00000
1995	55.00022	1.49964	3.48185	0.36016	0.00000	0.00000
1996	54.57121	0.84662	3.75897	0.37020	0.22107	3.06657
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
D. IBNR						
1994	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1995	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1996	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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

Source: IBNR Factor - Exhibit VII-C-6
Adjustment Factor - Judgement
Payrolls: Exhibit X-A pages 1 & 2
IBNR = A times B times C

State O.D. Severity- Before Act 57

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	1	1,310,850	-	-			-	-		
	1	1,597,909	-	-			-	-		
	1	1,662,245	-	-			-	-		
	-	-	1	152,105			-	-		
	1	590,708	-	-			-	-		
	1	578,675	-	-			-	-		
	1	445,145	-	-			-	-		
	1	543,619	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total	# 7	$6,729,152	# 1	$152,105	# 8	$6,881,257	# 0	$0	# 8	$6,881,257
(ii) Average		$961,307		$152,105		$860,157		$0		$860,157

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	7	1	8
(ii) Percentage	87.5000%	12.5000%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$961,307	$152,105	
(ii) Difference (Col. 2 minus Col. 1)			($809,202)

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	87.5000%	12.5000%	
(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	($809,202)	
(iii) (e-i) + (e-ii)	$0	$0	limited to zero: negative offset is impossible
(iv) Total (d-ii) x (e-iii)	$0	$0	
(v) Total of (e-iv)			$0

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 7	$6,729,152	$961,307	# 0.0000	$0	$0	# 7.0000	$6,729,152	$961,307
(ii) Comm./Comp.	# 1	$152,105	$152,105	# 0.0000	$0	$0	# 1.0000	$152,105	$152,105
(iii) Total	# 8	$6,881,257	$860,157	# 0.0000	$0	$0	# 8.0000	$6,881,257	$860,157
(iv) Average Severity before Adjustment									$860,157
(v) Impact									$0

Source: Exhibit IX-A

State O.D. Severity- Before Act 57

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	1	62,548			-	-		
	-	-	1	155,816			-	-		
	-	-	1	112,122			-	-		
	-	-	1	387,780			-	-		
	1	1,207,108	-	-			-	-		
	1	1,094,423	-	-			-	-		
	1	1,449,944	-	-			-	-		
	-	-	1	109,465			-	-		
	-	-	-	-			1	800,744		
	-	-	1	111,031			-	-		
	1	594,957	-	-			-	-		
	-	-	1	129,430			-	-		
	1	1,146,623	-	-			-	-		
	1	1,150,698	-	-			-	-		
	-	-	-	-			1	929,327		
	-	-	1	177,505			-	-		
	-	-	1	124,184			-	-		
	-	-	1	119,662			-	-		
	-	-	1	33,633			-	-		
	-	-	1	302,647			-	-		
	-	-	1	163,351			-	-		
	-	-	1	31,299			-	-		
	-	-	1	508,389			-	-		
	-	-	1	100,510			-	-		
	-	-	1	106,865			-	-		
	-	-	1	107,972			-	-		
	-	-	1	103,026			-	-		
	-	-	1	142,772			-	-		
	-	-	1	358,016			-	-		
	-	-	1	143,873			-	-		
	-	-	1	213,934			-	-		
	-	-	1	168,041			-	-		
	-	-	1	112,562			-	-		
	-	-	1	225,635			-	-		
	-	-	1	545,639			-	-		
	-	-	1	510,492			-	-		
	-	-	1	525,395			-	-		
	-	-	1	523,271			-	-		
	1	1,046,632	-	-			-	-		
	1	1,120,650	-	-			-	-		
	1	1,358,871	-	-			-	-		
	1	591,273	-	-			-	-		
	-	-	1	76,065			-	-		
(i) Total	# 10	$10,761,180	# 31	$6,492,930	# 41	$17,254,109	# 2	$1,730,071	# 43	$18,984,180
(ii) Average		$1,076,118		$209,449		$420,832		$865,036		$441,493

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 10	# 31	# 41
(ii) Percentage	24.3902%	75.6098%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$1,076,118	$209,449	
(ii) Difference (Col. 2 minus Col. 1)			($866,669)

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	24.3902%	75.6098%	
(ii) Number	# 0.4878	# 1.5122	# 2

e. Pending Average from Above; Commuted and Compromised less Awarded Difference

(i) Pending Ave.	$865,036	$865,036		
(ii) C/C Difference	$0	($866,669)		
(iii) (e-i) + (e-ii)	$865,036	$0	limited to zero: negative offset is impossible	
(iv) Total (d-ii) x (e-iii)	$421,969	$0		
(v) Total of (e-iv)				$421,969

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 10	$10,761,180	$1,076,118	# 0.4878	$421,969	$865,036	# 10.4878	$11,183,148	$1,066,300
(ii) Comm./Comp.	# 31	$6,492,930	$209,449	# 1.5122	$0	$0	# 32.5122	$6,492,930	$199,708
(iii) Total	# 41	$17,254,109	$420,832	# 2.0000	$421,969	$210,984	# 43.0000	$17,676,078	$411,072
(iv) Average Severity before Adjustment									$441,493
(v) Impact									($30,421)

Source: Exhibit IX-A

State O.D. Severity- Before Act 57

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	1	484,222			-	-		
	1	51,683	-	-			-	-		
	1	729,148	-	-			-	-		
	1	528,180	-	-			-	-		
	1	644,490	-	-			-	-		
	-	-	1	106,502			-	-		
	-	-	1	316,252			-	-		
	-	-	1	488,506			-	-		
	-	-	1	45,671			-	-		
	-	-	1	27,728			-	-		
	-	-	1	110,508			-	-		
	-	-	1	206,697			-	-		
	-	-	1	113,453			-	-		
	-	-	1	53,472			-	-		
	-	-	1	96,350			-	-		
	1	434,758	-	-			-	-		
	1	569,385	-	-			-	-		
	1	472,658	-	-			-	-		
	1	762,703	-	-			-	-		
	1	251,927	-	-			-	-		
	1	638,680	-	-			-	-		
	1	678,307	-	-			-	-		
	1	702,384	-	-			-	-		
	1	647,913	-	-			-	-		
	1	567,967	-	-			-	-		
	1	894,391	-	-			-	-		
	1	520,957	-	-			-	-		
	1	637,927	-	-			-	-		
	1	428,561	-	-			-	-		
	1	1,212,849	-	-			-	-		
	1	374,669	-	-			-	-		
	1	630,233	-	-			-	-		
	1	558,825	-	-			-	-		
	1	478,495	-	-			-	-		
	-	-	1	30,977			-	-		
	1	934,037	-	-			-	-		
(i) Total	# 24	$14,351,127	# 12	$2,080,339	# 36	$16,431,466	# 0	$0	# 36	$16,431,466
(ii) Average		$597,964		$173,362		$456,430		$0		$456,430

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 24	# 12	# 36
(ii) Percentage	66.6667%	33.3333%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$597,964	$173,362	
(ii) Difference (Col. 2 minus Col. 1)			($424,602)

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	66.6667%	33.3333%	
(ii) Number	# 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	($424,602)	
(iii) (e-i) + (e-ii)	$0	$0	limited to zero: negative offset is impossible
(iv) Total (d-ii) x (e-iii)	$0	$0	
(v) Total of (e-iv)			$0

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 24	$14,351,127	$597,964	# 0.0000	$0	$0	# 24.0000	$14,351,127	$597,964
(ii) Comm./Comp.	# 12	$2,080,339	$173,362	# 0.0000	$0	$0	# 12.0000	$2,080,339	$173,362
(iii) Total	# 36	$16,431,466	$456,430	# 0.0000	$0	$0	# 36.0000	$16,431,466	$456,430

(iv) Average Severity before Adjustment	$456,430
(v) Impact	$0

Source: Exhibit IX-A

State O.D. Severity- Before Act 57

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	-	-			1	829,650		
	-	-	1	566,031			-	-		
	-	-	1	189,309			-	-		
	-	-	1	83,010			-	-		
	-	-	1	89,065			-	-		
	-	-	1	185,131			-	-		
	-	-	1	31,399			-	-		
	-	-	1	123,216			-	-		
	-	-	1	70,966			-	-		
	-	-	1	435,148			-	-		
	1	1,223,320	-	-			-	-		
	1	934,047	-	-			-	-		
	1	1,515,405	-	-			-	-		
	1	800,987	-	-			-	-		
	1	984,370	-	-			-	-		
	-	-	1	63,391			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
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	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total	# 5	$5,458,128	# 10	$1,836,666	# 15	$7,294,794	# 1	$829,650	# 16	$8,124,444
(ii) Average		$1,091,626		$183,667		$486,320		$829,650		$507,778

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 5	# 10	# 15
(ii) Percentage	33.3333%	66.6667%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$1,091,626	$183,667	
(ii) Difference (Col. 2 minus Col. 1)			($907,959)

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	33.3333%	66.6667%	
(ii) Number	# 0.3333	# 0.6667	# 1

e. Pending Average from Above; Commuted and Compromised less Awarded Difference

(i) Pending Ave.	$829,650	$829,650		
(ii) C/C Difference	$0	($907,959)		
(iii) (e-i) + (e-ii)	$829,650	$0	limited to zero: negative offset is impossible	
(iv) Total (d-ii) x (e-iii)	$276,550	$0		
(v) Total of (e-iv)				$276,550

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 5	$5,458,128	$1,091,626	# 0.3333	$276,550	$829,650	# 5.3333	$5,734,678	$1,075,252
(ii) Comm./Comp.	# 10	$1,836,666	$183,667	# 0.6667	$0	$0	# 10.6667	$1,836,666	$172,187
(iii) Total	# 15	$7,294,794	$486,320	# 1.0000	$276,550	$276,550	# 16.0000	$7,571,344	$473,209

(iv) Average Severity before Adjustment	$507,778
(v) Impact	($34,569)

Source: Exhibit IX-A

State O.D. Severity- Before Act 57

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	1	224,654			-	-		
	1	1,350,248	-	-			-	-		
	-	-	1	108,778			-	-		
	-	-	1	131,464			-	-		
	1	1,109,322	-	-			-	-		
	1	431,749	-	-			-	-		
	-	-	1	62,767			-	-		
	1	461,949	-	-			-	-		
	-	-	1	77,182			-	-		
	-	-	-	-			1	1,418,247		
	-	-	1	70,064			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
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	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total	# 4	$3,353,267	# 6	$674,909	# 10	$4,028,176	# 1	$1,418,247	# 11	$5,446,424
(ii) Average		$838,317		$112,485		$402,818		$1,418,247		$495,129

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 4	# 6	# 10
(ii) Percentage	40.0000%	60.0000%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$838,317	$112,485	
(ii) Difference (Col. 2 minus Col. 1)			($725,832)

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	40.0000%	60.0000%	
(ii) Number	# 0.4000	# 0.6000	# 1

e. Pending Average from Above; Commuted and Compromised less Awarded Difference

(i) Pending Ave.	$1,418,247	$1,418,247	
(ii) C/C Difference	$0	($725,832)	
(iii) (e-i) + (e-ii)	$1,418,247	$692,415	
(iv) Total (d-ii) x (e-iii)	$567,299	$415,449	
(v) Total of (e-iv)			$982,748

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 4	$3,353,267	$838,317	# 0.4000	$567,299	$1,418,247	# 4.4000	$3,920,566	$891,038
(ii) Comm./Comp.	# 6	$674,909	$112,485	# 0.6000	$415,449	$692,415	# 6.6000	$1,090,358	$165,206
(iii) Total	# 10	$4,028,176	$402,818	# 1.0000	$982,748	$982,748	# 11.0000	$5,010,924	$455,539

(iv) Average Severity before Adjustment	$495,129
(v) Impact	($39,591)

Source: Exhibit IX-A

State O. D. Severity- Social Security Offset

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	1	255,395	-	-			-	-		
	1	279,183	-	-			-	-		
	1	289,718	-	-			-	-		
	-	-	1	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
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	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total	# 7	$824,296	# 1	$0	# 8	$824,296	# 0	$0	# 8	$824,296
(ii) Average		$117,757		$0		$103,037		$0		$103,037

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 7	# 1	# 8
(ii) Percentage	87.5000%	12.5000%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$117,757	$0	
(ii) Difference (Col. 2 minus Col. 1)			($117,757)

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	87.5000%	12.5000%	
(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	($117,757)		
(iii) (e-i) + (e-ii)	$0	$0	limited to zero: negative offset is impossible	
(iv) Total (d-ii) x (e-iii)	$0	$0		
(v) Total of (e-iv)				$0

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 7	$824,296	$117,757	# 0.0000	$0	$0	# 7.0000	$824,296	$117,757
(ii) Comm./Comp.	# 1	$0	$0	# 0.0000	$0	$0	# 1.0000	$0	$0
(iii) Total	# 8	$824,296	$103,037	# 0.0000	$0	$0	# 8.0000	$824,296	$103,037

(iv) Average Severity before Adjustment	$103,037
(v) Impact	$0

Source: Exhibit IX-A

State O. D. Severity- Social Security Offset

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	289,609	-	-			-	-		
	-	-	1	-			-	-		
	-	-	-	-			1	-		
	-	-	1	2,124			-	-		
	1	-	-	-			-	-		
	-	-	1	27,621			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	-	-	-	-			1	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	53,157			-	-		
	-	-	1	24,416			-	-		
	-	-	1	79			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	29,168			-	-		
	-	-	1	21,953			-	-		
	-	-	1	-			-	-		
	-	-	1	41,652			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	50,516			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	45,279			-	-		
	-	-	1	71,697			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	270,398	-	-			-	-		
	1	-	-	-			-	-		
	-	-	1	-			-	-		
(i) Total	# 10	$560,007	# 31	$367,661	# 41	$927,668	# 2	$0	# 43	$927,668
(ii) Average		$56,001		$11,860		$22,626		$0		$21,574

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 10	# 31	# 41
(ii) Percentage	24.3902%	75.6098%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$56,001	$11,860	
(ii) Difference (Col. 2 minus Col. 1)			($44,141)

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	24.3902%	75.6098%	
(ii) Number	# 0.4878	# 1.5122	# 2

e. Pending Average from Above; Commuted and Compromised less Awarded Difference

(i) Pending Ave.	$0	$0		
(ii) C/C Difference	$0	($44,141)		
(iii) (e-i) + (e-ii)	$0	$0	limited to zero: negative offset is impossible	
(iv) Total (d-ii) x (e-iii)	$0	$0		
(v) Total of (e-iv)				$0

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 10	$560,007	$56,001	# 0.4878	$0	$0	# 10.4878	$560,007	$53,396
(ii) Comm./Comp.	# 31	$367,661	$11,860	# 1.5122	$0	$0	# 32.5122	$367,661	$11,308
(iii) Total	# 41	$927,668	$22,626	# 2.0000	$0	$0	# 43.0000	$927,668	$21,574

(iv) Average Severity before Adjustment	$21,574
(v) Impact	$0

Source: Exhibit IX-A

State O. D. Severity- Social Security Offset

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	1	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	47,084			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	222,841	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	-	-	1	-			-	-		
	1	198,762	-	-			-	-		
(i) Total	# 24	$421,602	# 12	$47,084	# 36	$468,686	# 0	$0	# 36	$468,686
(ii) Average		$17,567		$3,924		$13,019		$0		$13,019

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 24	# 12	# 36
(ii) Percentage	66.6667%	33.3333%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$17,567	$3,924	
(ii) Difference (Col. 2 minus Col. 1)			($13,643)

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	66.6667%	33.3333%	
(ii) Number	# 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	($13,643)		
(iii) (e-i) + (e-ii)	$0	$0	limited to zero: negative offset is impossible	
(iv) Total (d-ii) x (e-iii)	$0	$0		
(v) Total of (e-iv)				$0

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 24	$421,602	$17,567	# 0.0000	$0	$0	# 24.0000	$421,602	$17,567
(ii) Comm./Comp.	# 12	$47,084	$3,924	# 0.0000	$0	$0	# 12.0000	$47,084	$3,924
(iii) Total	# 36	$468,686	$13,019	# 0.0000	$0	$0	# 36.0000	$468,686	$13,019

(iv) Average Severity before Adjustment	$13,019
(v) Impact	$0

Source: Exhibit IX-A

State O. D. Severity- Social Security Offset

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	-	-			1	255,524		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	20,792			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	1	-	-	-			-	-		
	1	226,560	-	-			-	-		
	1	268,249	-	-			-	-		
	1	193,981	-	-			-	-		
	1	221,665	-	-			-	-		
	-	-	1	13,903			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
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	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total	# 5	$910,455	# 10	$34,695	# 15	$945,150	# 1	$255,524	# 16	$1,200,674
(ii) Average		$182,091		$3,470		$63,010		$255,524		$75,042

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 5	# 10	# 15
(ii) Percentage	33.3333%	66.6667%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$182,091	$3,470	
(ii) Difference (Col. 2 minus Col. 1)			($178,621)

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	33.3333%	66.6667%	
(ii) Number	# 0.3333	# 0.6667	# 1

e. Pending Average from Above; Commuted and Compromised less Awarded Difference

(i) Pending Ave.	$255,524	$255,524	
(ii) C/C Difference	$0	($178,621)	
(iii) (e-i) + (e-ii)	$255,524	$76,903	
(iv) Total (d-ii) x (e-iii)	$85,175	$51,268	
(v) Total of (e-iv)			$136,443

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 5	$910,455	$182,091	# 0.3333	$85,175	$255,524	# 5.3333	$995,629	$186,681
(ii) Comm./Comp.	# 10	$34,695	$3,470	# 0.6667	$51,268	$76,903	# 10.6667	$85,964	$8,059
(iii) Total	# 15	$945,150	$63,010	# 1.0000	$136,443	$136,443	# 16.0000	$1,081,593	$67,600

(iv) Average Severity before Adjustment	$75,042
(v) Impact	($7,443)

Source: Exhibit IX-A

State O. D. Severity- Social Security Offset

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	1	32,115			-	-		
	1	-	-	-			-	-		
	-	-	1	-			-	-		
	-	-	1	47,750			-	-		
	1	203,274	-	-			-	-		
	1	-	-	-			-	-		
	-	-	1	886			-	-		
	1	158,018	-	-			-	-		
	-	-	1	-			-	-		
	-	-	-	-			1	293,203		
	-	-	1	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
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	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total	# 4	$361,292	# 6	$80,751	# 10	$442,043	# 1	$293,203	# 11	$735,246
(ii) Average		$90,323		$13,459		$44,204		$293,203		$66,841

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 4	# 6	# 10
(ii) Percentage	40.0000%	60.0000%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$90,323	$13,459	
(ii) Difference (Col. 2 minus Col. 1)			($76,864)

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	40.0000%	60.0000%	
(ii) Number	# 0.4000	# 0.6000	# 1

e. Pending Average from Above; Commuted and Compromised less Awarded Difference

(i) Pending Ave.	$293,203	$293,203	
(ii) C/C Difference	$0	($76,864)	
(iii) (e-i) + (e-ii)	$293,203	$216,339	
(iv) Total (d-ii) x (e-iii)	$117,281	$129,803	
(v) Total of (e-iv)			$247,084

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 4	$361,292	$90,323	# 0.4000	$117,281	$293,203	# 4.4000	$478,573	$108,767
(ii) Comm./Comp.	# 6	$80,751	$13,459	# 0.6000	$129,803	$216,339	# 6.6000	$210,554	$31,902
(iii) Total	# 10	$442,043	$44,204	# 1.0000	$247,084	$247,084	# 11.0000	$689,128	$62,648

(iv) Average Severity before Adjustment	$66,841
(v) Impact	($4,193)

Source: Exhibit IX-A

State O.D. Severity- Private Pension Offset

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	1	151,510	-	-			-	-		
	1	176,673	-	-			-	-		
	1	214,685	-	-			-	-		
	-	-	1	65,181			-	-		
	1	-	-	-			-	-		
	1	136,662	-	-			-	-		
	1	135,497	-	-			-	-		
	1	147,278	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
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	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total	# 7	$962,305	# 1	$65,181	# 8	$1,027,486	# 0	$0	# 8	$1,027,486
(ii) Average		$137,472		$65,181		$128,436		$0		$128,436

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 7	# 1	# 8
(ii) Percentage	87.5000%	12.5000%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$137,472	$65,181	
(ii) Difference (Col. 2 minus Col. 1)			($72,291)

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	87.5000%	12.5000%	
(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	($72,291)	
(iii) (e-i) + (e-ii)	$0	$0	limited to zero: negative offset is impossible
(iv) Total (d-ii) x (e-iii)	$0	$0	
(v) Total of (e-iv)			$0

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 7	$962,305	$137,472	# 0.0000	$0	$0	# 7.0000	$962,305	$137,472
(ii) Comm./Comp.	# 1	$65,181	$65,181	# 0.0000	$0	$0	# 1.0000	$65,181	$65,181
(iii) Total	# 8	$1,027,486	$128,436	# 0.0000	$0	$0	# 8.0000	$1,027,486	$128,436
(iv) Average Severity before Adjustment									$128,436
(v) Impact									$0

Source: Exhibit IX-A

State O.D. Severity- Private Pension Offset

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	1	43,242			-	-		
	-	-	1	42,015			-	-		
	-	-	1	65,008			-	-		
	-	-	1	113,636			-	-		
	1	313,272	-	-			-	-		
	1	262,270	-	-			-	-		
	1	289,556	-	-			-	-		
	-	-	1	-			-	-		
	-	-	-	-			1	334,037		
	-	-	1	-			-	-		
	1	183,110	-	-			-	-		
	-	-	1	-			-	-		
	1	264,049	-	-			-	-		
	1	298,691	-	-			-	-		
	-	-	-	-			1	198,345		
	-	-	1	127,830			-	-		
	-	-	1	84,935			-	-		
	-	-	1	86,382			-	-		
	-	-	1	12,630			-	-		
	-	-	1	20,221			-	-		
	-	-	1	76			-	-		
	-	-	1	-			-	-		
	-	-	1	134,676			-	-		
	-	-	1	63,996			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	-	-	1	48,904			-	-		
	-	-	1	123			-	-		
	-	-	1	-			-	-		
	-	-	1	71,805			-	-		
	-	-	1	-			-	-		
	-	-	1	131			-	-		
	-	-	1	-			-	-		
	-	-	1	122,539			-	-		
	-	-	1	-			-	-		
	-	-	1	145,113			-	-		
	-	-	1	55,132			-	-		
	-	-	1	86,902			-	-		
	1	317,343	-	-			-	-		
	1	323,611	-	-			-	-		
	1	227,580	-	-			-	-		
	1	-	-	-			-	-		
	-	-	1	-			-	-		
(i) Total	# 10	$2,479,482	# 31	$1,325,296	# 41	$3,804,777	# 2	$532,381	# 43	$4,337,159
(ii) Average		$247,948		$42,751		$92,799		$266,191		$100,864

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 10	# 31	# 41
(ii) Percentage	24.3902%	75.6098%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$247,948	$42,751	
(ii) Difference (Col. 2 minus Col. 1)			($205,197)

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	24.3902%	75.6098%	
(ii) Number	# 0.4878	# 1.5122	# 2

e. Pending Average from Above; Commuted and Compromised less Awarded Difference

(i) Pending Ave.	$266,191	$266,191	
(ii) C/C Difference	$0	($205,197)	
(iii) (e-i) + (e-ii)	$266,191	$60,994	
(iv) Total (d-ii) x (e-iii)	$129,849	$92,235	
(v) Total of (e-iv)			$222,084

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 10	$2,479,482	$247,948	# 0.4878	$129,849	$266,191	# 10.4878	$2,609,331	$248,797
(ii) Comm./Comp.	# 31	$1,325,296	$42,751	# 1.5122	$92,235	$60,994	# 32.5122	$1,417,530	$43,600
(iii) Total	# 41	$3,804,777	$92,799	# 2.0000	$222,084	$111,042	# 43.0000	$4,026,861	$93,648

(iv) Average Severity before Adjustment	$100,864
(v) Impact	($7,216)

Source: Exhibit IX-A

State O.D. Severity- Private Pension Offset

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	1	117,926			-	-		
	1	-	-	-			-	-		
	1	155,318	-	-			-	-		
	1	146,849	-	-			-	-		
	1	145,851	-	-			-	-		
	-	-	1	44,908			-	-		
	-	-	1	-			-	-		
	-	-	1	45,635			-	-		
	-	-	1	18,440			-	-		
	-	-	1	11,878			-	-		
	-	-	1	53,404			-	-		
	-	-	1	74,188			-	-		
	-	-	1	74,198			-	-		
	-	-	1	27,608			-	-		
	-	-	1	50,499			-	-		
	1	-	-	-			-	-		
	1	123,116	-	-			-	-		
	1	-	-	-			-	-		
	1	136,666	-	-			-	-		
	1	-	-	-			-	-		
	1	134,955	-	-			-	-		
	1	146,051	-	-			-	-		
	1	152,155	-	-			-	-		
	1	175,731	-	-			-	-		
	1	-	-	-			-	-		
	1	192,116	-	-			-	-		
	1	126,173	-	-			-	-		
	1	-	-	-			-	-		
	1	90,650	-	-			-	-		
	1	292,901	-	-			-	-		
	1	77,967	-	-			-	-		
	1	207,804	-	-			-	-		
	1	172,194	-	-			-	-		
	1	-	-	-			-	-		
	-	-	1	-			-	-		
	1	90,160	-	-			-	-		
(i) Total	# 24	$2,566,656	# 12	$518,684	# 36	$3,085,340	# 0	$0	# 36	$3,085,340
(ii) Average		$106,944		$43,224		$85,704		$0		$85,704

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 24	# 12	# 36
(ii) Percentage	66.6667%	33.3333%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$106,944	$43,224	
(ii) Difference (Col. 2 minus Col. 1)			($63,720)

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	66.6667%	33.3333%	
(ii) Number	# 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	($63,720)		
(iii) (e-i) + (e-ii)	$0	$0	limited to zero: negative offset is impossible	
(iv) Total (d-ii) x (e-iii)	$0	$0		
(v) Total of (e-iv)				$0

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 24	$2,566,656	$106,944	# 0.0000	$0	$0	# 24.0000	$2,566,656	$106,944
(ii) Comm./Comp.	# 12	$518,684	$43,224	# 0.0000	$0	$0	# 12.0000	$518,684	$43,224
(iii) Total	# 36	$3,085,340	$85,704	# 0.0000	$0	$0	# 36.0000	$3,085,340	$85,704
(iv) Average Severity before Adjustment									$85,704
(v) Impact									$0

Source: Exhibit IX-A

State O.D. Severity- Private Pension Offset

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	-	-			1	215,586		
	-	-	1	-			-	-		
	-	-	1	116,868			-	-		
	-	-	1	-			-	-		
	-	-	1	56,590			-	-		
	-	-	1	98,288			-	-		
	-	-	1	5,822			-	-		
	-	-	1	73,612			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	1	354,242	-	-			-	-		
	1	169,491	-	-			-	-		
	1	146,361	-	-			-	-		
	1	130,347	-	-			-	-		
	1	143,501	-	-			-	-		
	-	-	1	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total	# 5	$943,942	# 10	$351,180	# 15	$1,295,122	# 1	$215,586	# 16	$1,510,708
(ii) Average		$188,788		$35,118		$86,341		$215,586		$94,419

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 5	# 10	# 15
(ii) Percentage	33.3333%	66.6667%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$188,788	$35,118	
(ii) Difference (Col. 2 minus Col. 1)			($153,670)

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	33.3333%	66.6667%	
(ii) Number	# 0.3333	# 0.6667	# 1

e. Pending Average from Above; Commuted and Compromised less Awarded Difference

(i) Pending Ave.	$215,586	$215,586	
(ii) C/C Difference	$0	($153,670)	
(iii) (e-i) + (e-ii)	$215,586	$61,915	
(iv) Total (d-ii) x (e-iii)	$71,862	$41,277	
(v) Total of (e-iv)			$113,139

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 5	$943,942	$188,788	# 0.3333	$71,862	$215,586	# 5.3333	$1,015,804	$190,463
(ii) Comm./Comp.	# 10	$351,180	$35,118	# 0.6667	$41,277	$61,915	# 10.6667	$392,457	$36,793
(iii) Total	# 15	$1,295,122	$86,341	# 1.0000	$113,139	$113,139	# 16.0000	$1,408,261	$88,016

(iv) Average Severity before Adjustment	$94,419
(v) Impact	($6,403)

Source: Exhibit IX-A

State O.D. Severity- Private Pension Offset

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	1	3,306			-	-		
	1	358,109	-	-			-	-		
	-	-	1	-			-	-		
	-	-	1	-			-	-		
	1	67,416	-	-			-	-		
	1	87,052	-	-			-	-		
	-	-	1	-			-	-		
	1	83,141	-	-			-	-		
	-	-	1	40,718			-	-		
	-	-	-	-			1	278,228		
	-	-	1	35,913			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total	# 4	$595,718	# 6	$79,938	# 10	$675,656	# 1	$278,228	# 11	$953,884
(ii) Average		$148,930		$13,323		$67,566		$278,228		$86,717

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 4	# 6	# 10
(ii) Percentage	40.0000%	60.0000%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$148,930	$13,323	
(ii) Difference (Col. 2 minus Col. 1)			($135,607)

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	40.0000%	60.0000%	
(ii) Number	# 0.4000	# 0.6000	# 1

e. Pending Average from Above; Commuted and Compromised less Awarded Difference

(i) Pending Ave.	$278,228	$278,228	
(ii) C/C Difference	$0	($135,607)	
(iii) (e-i) + (e-ii)	$278,228	$142,621	
(iv) Total (d-ii) x (e-iii)	$111,291	$85,573	
(v) Total of (e-iv)			$196,864

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 4	$595,718	$148,930	# 0.4000	$111,291	$278,228	# 4.4000	$707,009	$160,684
(ii) Comm./Comp.	# 6	$79,938	$13,323	# 0.6000	$85,573	$142,621	# 6.6000	$165,510	$25,077
(iii) Total	# 10	$675,656	$67,566	# 1.0000	$196,864	$196,864	# 11.0000	$872,520	$79,320

(iv) Average Severity before Adjustment	$86,717
(v) Impact	($7,397)

Source: Exhibit IX-A

Federal Excess Before Offsets

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded-Permanent Basis (1)		Commuted and Compromised-As Settled (2)		Total Awarded-Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	1	22	-	-			-	-		
	1	0	-	-			-	-		
	1	-	-	-			-	-		
	-	-	1	201,556			-	-		
	1	-	-	-			-	-		
	1	45	-	-			-	-		
	1	-	-	-			-	-		
	1	15	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total	# 7	$82	# 1	$201,556	# 8	$201,638	# 0	$0	# 8	$201,638
(ii) Average		$12		$201,556		$25,205		$0		$25,205

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 7	# 1	# 8
(ii) Percentage	87.5000%	12.5000%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$12	$201,556	
(ii) Difference (Col. 2 minus Col. 1)			$201,544

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	87.5000%	12.5000%		
(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	$201,544	
(iii) (e-i) + (e-ii)	$0	$201,544	
(iv) Total (d-ii) x (e-iii)	$0	$0	
(v) Total of (e-iv)			$0

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 7	$82	$12	# 0.0000	$0	$0	# 7.0000	$82	$12
(ii) Comm./Comp.	# 1	$201,556	$201,556	# 0.0000	$0	$0	# 1.0000	$201,556	$201,556
(iii) Total	# 8	$201,638	$25,205	# 0.0000	$0	$0	# 8.0000	$201,638	$25,205

(iv) Average Severity before Adjustment	$25,205
(v) Impact	$0

Source: Exhibit IX-A

Federal Excess Before Offsets

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded-Permanent Basis (1)		Commuted and Compromised-As Settled (2)		Total Awarded-Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	1	214,409			-	-		
	-	-	1	210,298			-	-		
	-	-	1	95,162			-	-		
	-	-	1	242,907			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	-	-	1	652,538			-	-		
	-	-	-	-			1	-		
	-	-	1	340,930			-	-		
	1	-	-	-			-	-		
	-	-	1	342,459			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	-	-	-	-			1	-		
	-	-	1	196,938			-	-		
	-	-	1	198,265			-	-		
	-	-	1	201,905			-	-		
	-	-	1	225,360			-	-		
	-	-	1	253,967			-	-		
	-	-	1	264,692			-	-		
	-	-	1	442,743			-	-		
	-	-	1	211,230			-	-		
	-	-	1	175,656			-	-		
	-	-	1	268,817			-	-		
	-	-	1	292,387			-	-		
	-	-	1	232,071			-	-		
	-	-	1	265,376			-	-		
	-	-	1	464,418			-	-		
	-	-	1	252,652			-	-		
	-	-	1	499,081			-	-		
	-	-	1	242,678			-	-		
	-	-	1	394,439			-	-		
	-	-	1	199,063			-	-		
	-	-	1	446,682			-	-		
	-	-	1	159,946			-	-		
	-	-	1	271,783			-	-		
	-	-	1	107,467			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	-	-	1	418,983			-	-		
(i) Total	# 10	$0	# 31	$8,785,303	# 41	$8,785,303	# 2	$0	# 43	$8,785,303
(ii) Average		$0		$283,397		$214,276		$0		$204,309

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 10	# 31	# 41
(ii) Percentage	24.3902%	75.6098%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$0	$283,397	
(ii) Difference (Col. 2 minus Col. 1)			$283,397

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	24.3902%	75.6098%	
(ii) Number	# 0.4878	# 1.5122	# 2

e. Pending Average from Above; Commuted and Compromised less Awarded Difference

(i) Pending Ave.	$0	$0	
(ii) C/C Difference	$0	$283,397	
(iii) (e-i) + (e-ii)	$0	$283,397	
(iv) Total (d-ii) x (e-iii)	$0	$428,551	
(v) Total of (e-iv)			$428,551

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 10	$0	$0	# 0.4878	$0	$0	# 10.4878	$0	$0
(ii) Comm./Comp.	# 31	$8,785,303	$283,397	# 1.5122	$428,551	$283,397	# 32.5122	$9,213,854	$283,397
(iii) Total	# 41	$8,785,303	$214,276	# 2.0000	$428,551	$214,276	# 43.0000	$9,213,854	$214,276
(iv) Average Severity before Adjustment									$204,309
(v) Impact									$9,966

Source: Exhibit IX-A

Federal Excess Before Offsets

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	1	133,272			-	-		
	1	61,705	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	34	-	-			-	-		
	-	-	1	95,555			-	-		
	-	-	1	251,071			-	-		
	-	-	1	115,020			-	-		
	-	-	1	285,296			-	-		
	-	-	1	217,960			-	-		
	-	-	1	97,677			-	-		
	-	-	1	257,760			-	-		
	-	-	1	163,398			-	-		
	-	-	1	146,746			-	-		
	-	-	1	98,089			-	-		
	1	-	-	-			-	-		
	1	9	-	-			-	-		
	1	-	-	-			-	-		
	1	23,133	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	118	-	-			-	-		
	1	-	-	-			-	-		
	1	7	-	-			-	-		
	1	-	-	-			-	-		
	1	86	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	-	-	1	75,536			-	-		
	1	2,051	-	-			-	-		
(i) Total	# 24	$87,144	# 12	$1,937,380	# 36	$2,024,524	# 0	$0	# 36	$2,024,524
(ii) Average		$3,631		$161,448		$56,237		$0		$56,237

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 24	# 12	# 36
(ii) Percentage	66.6667%	33.3333%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$3,631	$161,448	
(ii) Difference (Col. 2 minus Col. 1)			$157,817

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	66.6667%	33.3333%	
(ii) Number	# 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	$157,817	
(iii) (e-i) + (e-ii)	$0	$157,817	
(iv) Total (d-ii) x (e-iii)	$0	$0	
(v) Total of (e-iv)			$0

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 24	$87,144	$3,631	# 0.0000	$0	$0	# 24.0000	$87,144	$3,631
(ii) Comm./Comp.	# 12	$1,937,380	$161,448	# 0.0000	$0	$0	# 12.0000	$1,937,380	$161,448
(iii) Total	# 36	$2,024,524	$56,237	# 0.0000	$0	$0	# 36.0000	$2,024,524	$56,237

(iv) Average Severity before Adjustment	$56,237
(v) Impact	$0

Source: Exhibit IX-A

Federal Excess Before Offsets

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded-Permanent Basis (1)		Commuted and Compromised-As Settled (2)		Total Awarded-Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	-	-			1	-		
	0	-	1	484,076			0	-		
	0	-	1	88,795			0	-		
	0	-	1	325,088			0	-		
	0	-	1	92,290			0	-		
	0	-	1	213,853			0	-		
	0	-	1	285,624			0	-		
	0	-	1	88,331			0	-		
	0	-	1	273,727			0	-		
	0	-	1	242,471			0	-		
	1	-	0	-			0	-		
	1	1	0	-			0	-		
	1	12	0	-			0	-		
	1	387	0	-			0	-		
	1	28	0	-			0	-		
	0	-	1	299,333			0	-		
	0	-	0	-			0	-		
	0	-	0	-			0	-		
	0	-	0	-			0	-		
	0	-	0	-			0	-		
	0	-	0	-			0	-		
	0	-	0	-			0	-		
	0	-	0	-			0	-		
	0	-	0	-			0	-		
	0	-	0	-			0	-		
	0	-	0	-			0	-		
	0	-	0	-			0	-		
	0	-	0	-			0	-		
	0	-	0	-			0	-		
	0	-	0	-			0	-		
(i) Total	# 5	$428	# 10	$2,393,588	# 15	$2,394,016	# 1	$0	# 16	$2,394,016
(ii) Average		$86		$239,359		$159,601		$0		$149,626

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 5	# 10	# 15
(ii) Percentage	33.3333%	66.6667%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$86	$239,359	
(ii) Difference (col. 2 minus Col.1)			$239,273

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	33.3333%	66.6667%	
(ii) Number	# 0.3333	# 0.6667	# 1

e. Pending Average from Above; Commuted and Compromised less Awarded Difference

(i) Pending Ave.	$0	$0	
(ii) C/C Difference	$0	$239,273	
(iii) (e-i) + (e-ii)	$0	$239,273	
(iv) Total (d-ii) x (e-iii)	$0	$159,515	
(v) Total of (e-iv)			$159,515

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 5	$428	$86	# 0.3333	$0	$0	# 5.3333	$428	$80
(ii) Comm./Comp.	# 10	$2,393,588	$239,359	# 0.6667	$159,515	$239,273	# 10.6667	$2,553,103	$239,353
(iii) Total	# 15	$2,394,016	$159,601	# 1.0000	$159,515	$159,515	# 16.0000	$2,553,532	$159,596

(iv) Average Severity before Adjustment	$149,626
(v) Impact	$9,970

Source: Exhibit IX-A

Federal Excess Before Offsets

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	1	298,597			-	-		
	1	-	-	-			-	-		
	-	-	1	350,505			-	-		
	-	-	1	109,491			-	-		
	1	14,519	-	-			-	-		
	1	-	-	-			-	-		
	-	-	1	192,993			-	-		
	1	89	-	-			-	-		
	-	-	1	117,821			-	-		
	-	-	-	-			1	-		
	-	-	1	163,037			-	-		
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	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total	# 4	$14,608	# 6	$1,232,444	# 10	$1,247,052	# 1	$0	# 11	$1,247,052
(ii) Average		$3,652		$205,407		$124,705		$0		$113,368

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 4	# 6	# 10
(ii) Percentage	40.0000%	60.0000%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$3,652	$205,407	
(ii) Difference (col. 2 minus Col.1)			$201,755

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	40.0000%	60.0000%	
(ii) Number	# 0.4000	# 0.6000	# 1

e. Pending Average from Above; Commuted and Compromised less Awarded Difference

(i) Pending Ave.	$0	$0	
(ii) C/C Difference	$0	$201,755	
(iii) (e-i) + (e-ii)	$0	$201,755	
(iv) Total (d-ii) x (e-iii)	$0	$121,053	
(v) Total of (e-iv)			$121,053

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 4	$14,608	$3,652	# 0.4000	$0	$0	# 4.4000	$14,608	$3,320
(ii) Comm./Comp.	# 6	$1,232,444	$205,407	# 0.6000	$121,053	$201,755	# 6.6000	$1,353,497	$205,075
(iii) Total	# 10	$1,247,052	$124,705	# 1.0000	$121,053	$121,053	# 11.0000	$1,368,105	$124,373

(iv) Average Severity before Adjustment	$113,368
(v) Impact	$11,005

Source: Exhibit IX-A

Federal Excess After Social Security Offset

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded-Permanent Basis (1)		Commuted and Compromised-As Settled (2)		Total Awarded-Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	1	46,341	-	-			-	-		
	1	27,171	-	-			-	-		
	1	17,037	-	-			-	-		
	-	-	1	201,556			-	-		
	1	-	-	-			-	-		
	1	45	-	-			-	-		
	1	-	-	-			-	-		
	1	15	-	-			-	-		
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	-	-	-	-			-	-		
(i) Total	# 7	$90,609	# 1	$201,556	# 8	$292,164	# 0	$0	# 8	$292,164
(ii) Average		$12,944		$201,556		$36,521		$0		$36,521

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 7	# 1	# 8
(ii) Percentage	87.5000%	12.5000%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$12,944	$201,556	
(ii) Difference (Col. 2 minus Col. 1)			$188,612

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	87.5000%	12.5000%	
(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	$188,612	
(iii) (e-i) + (e-ii)	$0	$188,612	
(iv) Total (d-ii) x (e-iii)	$0	$0	
(v) Total of (e-iv)			$0

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 7	$90,609	$12,944	# 0.0000	$0	$0	# 7.0000	$90,609	$12,944
(ii) Comm./Comp.	# 1	$201,556	$201,556	# 0.0000	$0	$0	# 1.0000	$201,556	$201,556
(iii) Total	# 8	$292,164	$36,521	# 0.0000	$0	$0	# 8.0000	$292,164	$36,521

(iv) Average Severity before Adjustment	$36,521
(v) Impact	$0

Source: Exhibit IX-A

Federal Excess After Social Security Offset

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded-Permanent Basis (1)		Commuted and Compromised-As Settled (2)		Total Awarded-Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	1	214,409			-	-		
	-	-	1	210,298			-	-		
	-	-	1	95,162			-	-		
	-	-	1	242,907			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	3,202	-	-			-	-		
	-	-	1	652,538			-	-		
	-	-	-	-			1	-		
	-	-	1	343,054			-	-		
	1	-	-	-			-	-		
	-	-	1	369,909			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	-	-	-	-			1	-		
	-	-	1	196,938			-	-		
	-	-	1	198,265			-	-		
	-	-	1	201,905			-	-		
	-	-	1	225,360			-	-		
	-	-	1	270,468			-	-		
	-	-	1	287,874			-	-		
	-	-	1	442,822			-	-		
	-	-	1	211,230			-	-		
	-	-	1	175,656			-	-		
	-	-	1	297,985			-	-		
	-	-	1	314,340			-	-		
	-	-	1	232,071			-	-		
	-	-	1	306,352			-	-		
	-	-	1	464,418			-	-		
	-	-	1	252,652			-	-		
	-	-	1	499,081			-	-		
	-	-	1	287,288			-	-		
	-	-	1	394,439			-	-		
	-	-	1	199,063			-	-		
	-	-	1	446,682			-	-		
	-	-	1	159,946			-	-		
	-	-	1	271,783			-	-		
	-	-	1	107,467			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	4,269	-	-			-	-		
	1	-	-	-			-	-		
	-	-	1	418,983			-	-		
(i) Total	# 10	$7,471	# 31	$8,991,345	# 41	$8,998,815	# 2	$0	# 43	$8,998,815
(ii) Average		$747		$290,043		$219,483		$0		$209,275

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 10	# 31	# 41
(ii) Percentage	24.3902%	75.6098%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$747	$290,043	
(ii) Difference (Col. 2 minus Col. 1)			$289,296

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	24.3902%	75.6098%	
(ii) Number	# 0.4878	# 1.5122	# 2

e. Pending Average from Above; Commuted and Compromised less Awarded Difference

(i) Pending Ave.	$0	$0	
(ii) C/C Difference	$0	$289,296	
(iii) (e-i) + (e-ii)	$0	$289,296	
(iv) Total (d-ii) x (e-iii)	$0	$437,472	
(v) Total of (e-iv)			$437,472

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 10	$7,471	$747	# 0.4878	$0	$0	# 10.4878	$7,471	$712
(ii) Comm./Comp.	# 31	$8,991,345	$290,043	# 1.5122	$437,472	$289,296	# 32.5122	$9,428,817	$290,009
(iii) Total	# 41	$8,998,815	$219,483	# 2.0000	$437,472	$218,736	# 43.0000	$9,436,288	$219,449
(iv) Average Severity before Adjustment									$209,275
(v) Impact									$10,174

Source: Exhibit IX-A

Federal Excess After Social Security Offset

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	1	133,272			-	-		
	1	61,705	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	34	-	-			-	-		
	-	-	1	95,555			-	-		
	-	-	1	251,071			-	-		
	-	-	1	115,020			-	-		
	-	-	1	285,296			-	-		
	-	-	1	217,960			-	-		
	-	-	1	97,677			-	-		
	-	-	1	257,760			-	-		
	-	-	1	163,398			-	-		
	-	-	1	146,746			-	-		
	-	-	1	98,089			-	-		
	1	-	-	-			-	-		
	1	9	-	-			-	-		
	1	-	-	-			-	-		
	1	23,133	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	5,326	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	118	-	-			-	-		
	1	-	-	-			-	-		
	1	7	-	-			-	-		
	1	-	-	-			-	-		
	1	86	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	-	-	1	75,536			-	-		
	1	109,483	-	-			-	-		
(i) Total	# 24	$199,902	# 12	$1,937,380	# 36	$2,137,282	# 0	$0	# 36	$2,137,282
(ii) Average		$8,329		$161,448		$59,369		$0		$59,369

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 24	# 12	# 36
(ii) Percentage	66.6667%	33.3333%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$8,329	$161,448	
(ii) Difference (Col. 2 minus Col. 1)			$153,119

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	66.6667%	33.3333%	
(ii) Number	# 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	$153,119	
(iii) (e-i) + (e-ii)	$0	$153,119	
(iv) Total (d-ii) x (e-iii)	$0	$0	
(v) Total of (e-iv)			$0

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 24	$199,902	$8,329	# 0.0000	$0	$0	# 24.0000	$199,902	$8,329
(ii) Comm./Comp.	# 12	$1,937,380	$161,448	# 0.0000	$0	$0	# 12.0000	$1,937,380	$161,448
(iii) Total	# 36	$2,137,282	$59,369	# 0.0000	$0	$0	# 36.0000	$2,137,282	$59,369
(iv) Average Severity before Adjustment									$59,369
(v) Impact									$0

Source: Exhibit IX-A

Federal Excess After Social Security Offset

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	-	-			1	1,898		
	-	-	1	484,076			-	-		
	-	-	1	88,795			-	-		
	-	-	1	345,880			-	-		
	-	-	1	92,290			-	-		
	-	-	1	213,853			-	-		
	-	-	1	285,624			-	-		
	-	-	1	88,331			-	-		
	-	-	1	273,727			-	-		
	-	-	1	242,471			-	-		
	1	-	-	-			-	-		
	1	19,329	-	-			-	-		
	1	54,412	-	-			-	-		
	1	49,055	-	-			-	-		
	1	40,972	-	-			-	-		
	-	-	1	313,236			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
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	-	-	-	-			-	-		
(i) Total	# 5	$163,767	# 10	$2,428,283	# 15	$2,592,050	# 1	$1,898	# 16	$2,593,948
(ii) Average		$32,753		$242,828		$172,803		$1,898		$162,122

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 5	# 10	# 15
(ii) Percentage	33.3333%	66.6667%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$32,753	$242,828	
(ii) Difference (col. 2 minus Col.1)			$210,075

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	33.3333%	66.6667%	
(ii) Number	# 0.3333	# 0.6667	# 1

e. Pending Average from Above; Commuted and Compromised less Awarded Difference

(i) Pending Ave.	$1,898	$1,898	
(ii) C/C Difference	$0	$210,075	
(iii) (e-i) + (e-ii)	$1,898	$211,973	
(iv) Total (d-ii) x (e-iii)	$633	$141,316	
(v) Total of (e-iv)			$141,948

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 5	$163,767	$32,753	# 0.3333	$633	$1,898	# 5.3333	$164,400	$30,825
(ii) Comm./Comp.	# 10	$2,428,283	$242,828	# 0.6667	$141,316	$211,973	# 10.6667	$2,569,599	$240,900
(iii) Total	# 15	$2,592,050	$172,803	# 1.0000	$141,948	$141,948	# 16.0000	$2,733,998	$170,875

(iv) Average Severity before Adjustment	$162,122
(v) Impact	$8,753

Source: Exhibit IX-A

Federal Excess After Social Security Offset

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	1	319,077			-	-		
	1	-	-	-			-	-		
	-	-	1	350,505			-	-		
	-	-	1	147,248			-	-		
	1	158,269	-	-			-	-		
	1	-	-	-			-	-		
	-	-	1	193,879			-	-		
	1	56,932	-	-			-	-		
	-	-	1	117,821			-	-		
	-	-	-	-			1	4,376		
	-	-	1	163,037			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
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(i) Total	# 4	$215,201	# 6	$1,291,567	# 10	$1,506,768	# 1	$4,376	# 11	$1,511,144
(ii) Average		$53,800		$215,261		$150,677		$4,376		$137,377

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 4	# 6	# 10
(ii) Percentage	40.0000%	60.0000%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$53,800	$215,261	
(ii) Difference (col. 2 minus Col.1)			$161,461

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	40.0000%	60.0000%	
(ii) Number	# 0.4000	# 0.6000	# 1

e. Pending Average from Above; Commuted and Compromised less Awarded Difference

(i) Pending Ave.	$4,376	$4,376	
(ii) C/C Difference	$0	$161,461	
(iii) (e-i) + (e-ii)	$4,376	$165,837	
(iv) Total (d-ii) x (e-iii)	$1,750	$99,502	
(v) Total of (e-iv)			$101,252

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 4	$215,201	$53,800	# 0.4000	$1,750	$4,376	# 4.4000	$216,951	$49,307
(ii) Comm./Comp.	# 6	$1,291,567	$215,261	# 0.6000	$99,502	$165,837	# 6.6000	$1,391,069	$210,768
(iii) Total	# 10	$1,506,768	$150,677	# 1.0000	$101,252	$101,252	# 11.0000	$1,608,021	$146,184

(iv) Average Severity before Adjustment	$137,377
(v) Impact	$8,807

Source: Exhibit IX-A

Federal Excess After Social Security and Private Pension Offsets

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded-Permanent Basis (1)		Commuted and Compromised-As Settled (2)		Total Awarded-Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	1	176,555	-	-			-	-		
	1	159,050	-	-			-	-		
	1	156,736	-	-			-	-		
	-	-	1	260,911			-	-		
	1	-	-	-			-	-		
	1	5,970	-	-			-	-		
	1	334	-	-			-	-		
	1	2,990	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
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	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total	# 7	$501,636	# 1	$260,911	# 8	$762,547	# 0	$0	# 8	$762,547
(ii) Average		$71,662		$260,911		$95,318		$0		$95,318

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 7	# 1	# 8
(ii) Percentage	87.5000%	12.5000%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$71,662	$260,911	
(ii) Difference (Col. 2 minus Col. 1)			$189,249

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	87.5000%	12.5000%	
(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	$189,249	
(iii) (e-i) + (e-ii)	$0	$189,249	
(iv) Total (d-ii) x (e-iii)	$0	$0	
(v) Total of (e-iv)			$0

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 7	$501,636	$71,662	# 0.0000	$0	$0	# 7.0000	$501,636	$71,662
(ii) Comm./Comp.	# 1	$260,911	$260,911	# 0.0000	$0	$0	# 1.0000	$260,911	$260,911
(iii) Total	# 8	$762,547	$95,318	# 0.0000	$0	$0	# 8.0000	$762,547	$95,318
(iv) Average Severity before Adjustment									$95,318
(v) Impact									$0

Source: Exhibit IX-A

Federal Excess After Social Security and Private Pension Offsets

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	1	257,651			-	-		
	-	-	1	228,554			-	-		
	-	-	1	146,933			-	-		
	-	-	1	242,907			-	-		
	1	1	-	-			-	-		
	1	0	-	-			-	-		
	1	119,692	-	-			-	-		
	-	-	1	652,538			-	-		
	-	-	-	-			1	-		
	-	-	1	343,054			-	-		
	1	2	-	-			-	-		
	-	-	1	369,909			-	-		
	1	0	-	-			-	-		
	1	0	-	-			-	-		
	-	-	-	-			1	0		
	-	-	1	293,391			-	-		
	-	-	1	283,200			-	-		
	-	-	1	287,552			-	-		
	-	-	1	237,990			-	-		
	-	-	1	286,958			-	-		
	-	-	1	287,951			-	-		
	-	-	1	442,822			-	-		
	-	-	1	213,042			-	-		
	-	-	1	239,652			-	-		
	-	-	1	297,985			-	-		
	-	-	1	314,340			-	-		
	-	-	1	280,953			-	-		
	-	-	1	306,475			-	-		
	-	-	1	464,418			-	-		
	-	-	1	322,533			-	-		
	-	-	1	499,081			-	-		
	-	-	1	287,418			-	-		
	-	-	1	394,439			-	-		
	-	-	1	261,856			-	-		
	-	-	1	446,682			-	-		
	-	-	1	159,946			-	-		
	-	-	1	279,101			-	-		
	-	-	1	108,502			-	-		
	1	24	-	-			-	-		
	1	0	-	-			-	-		
	1	94,167	-	-			-	-		
	1	-	-	-			-	-		
	-	-	1	418,983			-	-		
(i) Total	# 10	$213,886	# 31	$9,656,817	# 41	$9,870,703	# 2	$0	# 43	$9,870,703
(ii) Average		$21,389		$311,510		$240,749		$0		$229,551

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 10	# 31	# 41
(ii) Percentage	24.3902%	75.6098%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$21,389	$311,510	
(ii) Difference (Col. 2 minus Col. 1)			$290,122

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	24.3902%	75.6098%	
(ii) Number	# 0.4878	# 1.5122	# 2

e. Pending Average from Above; Commuted and Compromised less Awarded Difference

(i) Pending Ave.	$0	$0	
(ii) C/C Difference	$0	$290,122	
(iii) (e-i) + (e-ii)	$0	$290,122	
(iv) Total	$0	$438,720	
(d-ii) x (e-iii)			
(v) Total of (e-iv)			$438,720

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 10	$213,886	$21,389	# 0.4878	$0	$0	# 10.4878	$213,886	$20,394
(ii) Comm./Comp.	# 31	$9,656,817	$311,510	# 1.5122	$438,720	$290,122	# 32.5122	$10,095,538	$310,515
(iii) Total	# 41	$9,870,703	$240,749	# 2.0000	$438,720	$219,360	# 43.0000	$10,309,424	$239,754

(iv) Average Severity before Adjustment	$229,551
(v) Impact	$10,203

Source: Exhibit IX-A

Federal Excess After Social Security and Private Pension Offsets

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded-Permanent Basis (1)		Commuted and Compromised-As Settled (2)		Total Awarded-Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	1	133,272			-	-		
	1	61,705	-	-			-	-		
	1	0	-	-			-	-		
	1	0	-	-			-	-		
	1	4,083	-	-			-	-		
	-	-	1	140,463			-	-		
	-	-	1	251,071			-	-		
	-	-	1	115,020			-	-		
	-	-	1	303,736			-	-		
	-	-	1	229,838			-	-		
	-	-	1	147,769			-	-		
	-	-	1	294,446			-	-		
	-	-	1	237,596			-	-		
	-	-	1	174,353			-	-		
	-	-	1	148,589			-	-		
	1	-	-	-			-	-		
	1	1,667	-	-			-	-		
	1	-	-	-			-	-		
	1	36,764	-	-			-	-		
	1	-	-	-			-	-		
	1	0	-	-			-	-		
	1	4	-	-			-	-		
	1	11	-	-			-	-		
	1	73,225	-	-			-	-		
	1	-	-	-			-	-		
	1	-	-	-			-	-		
	1	10,163	-	-			-	-		
	1	-	-	-			-	-		
	1	2,948	-	-			-	-		
	1	1	-	-			-	-		
	1	6,743	-	-			-	-		
	1	-	-	-			-	-		
	1	8	-	-			-	-		
	1	-	-	-			-	-		
	-	-	1	75,536			-	-		
	1	196,559	-	-			-	-		
(i) Total	# 24	$393,882	# 12	$2,251,687	# 36	$2,645,568	# 0	$0	# 36	$2,645,568
(ii) Average		$16,412		$187,641		$73,488		$0		$73,488

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 24	# 12	# 36
(ii) Percentage	66.6667%	33.3333%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$16,412	$187,641	
(ii) Difference (Col. 2 minus Col. 1)			$171,229

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	66.6667%	33.3333%	
(ii) Number	# 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	$171,229	
(iii) (e-i) + (e-ii)	$0	$171,229	
(iv) Total (d-ii) x (e-iii)	$0	$0	
(v) Total of (e-iv)			$0

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 24	$393,882	$16,412	# 0.0000	$0	$0	# 24.0000	$393,882	$16,412
(ii) Comm./Comp.	# 12	$2,251,687	$187,641	# 0.0000	$0	$0	# 12.0000	$2,251,687	$187,641
(iii) Total	# 36	$2,645,568	$73,488	# 0.0000	$0	$0	# 36.0000	$2,645,568	$73,488
(iv) Average Severity before Adjustment									$73,488
(v) Impact									$0

Source: Exhibit IX-A

Federal Excess After Social Security and Private Pension Offsets

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis (1)		Commuted and Compromised- As Settled (2)		Total Awarded- Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	-	-			1	51,515		
	-	-	1	484,076			-	-		
	-	-	1	170,895			-	-		
	-	-	1	345,880			-	-		
	-	-	1	148,880			-	-		
	-	-	1	286,673			-	-		
	-	-	1	291,446			-	-		
	-	-	1	147,001			-	-		
	-	-	1	273,727			-	-		
	-	-	1	242,471			-	-		
	1	2	-	-			-	-		
	1	138,291	-	-			-	-		
	1	183,948	-	-			-	-		
	1	166,932	-	-			-	-		
	1	164,568	-	-			-	-		
	-	-	1	313,236			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
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	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total	# 5	$653,742	# 10	$2,704,284	# 15	$3,358,026	# 1	$51,515	# 16	$3,409,541
(ii) Average		$130,748		$270,428		$223,868		$51,515		$213,096

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 5	# 10	# 15
(ii) Percentage	33.3333%	66.6667%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$130,748	$270,428	
(ii) Difference (Col. 2 minus Col. 1)			$139,680

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	33.3333%	66.6667%	
(ii) Number	# 0.3333	# 0.6667	# 1

e. Pending Average from Above; Commuted and Compromised less Awarded Difference

(i) Pending Ave.	$51,515	$51,515	
(ii) C/C Difference	$0	$139,680	
(iii) (e-i) + (e-ii)	$51,515	$191,195	
(iv) Total (d-ii) x (e-iii)	$17,172	$127,463	
(v) Total of (e-iv)			$144,635

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 5	$653,742	$130,748	# 0.3333	$17,172	$51,515	# 5.3333	$670,913	$125,796
(ii) Comm./Comp.	# 10	$2,704,284	$270,428	# 0.6667	$127,463	$191,195	# 10.6667	$2,831,747	$265,476
(iii) Total	# 15	$3,358,026	$223,868	# 1.0000	$144,635	$144,635	# 16.0000	$3,502,661	$218,916

(iv) Average Severity before Adjustment	$213,096
(v) Impact	$5,820

Source: Exhibit IX-A

Federal Excess After Social Security and Private Pension Offsets

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded-Permanent Basis (1)		Commuted and Compromised-As Settled (2)		Total Awarded-Permanent plus Commuted/Comp. (3) = (1) + (2)		Pending, on Permanent Basis (4)		Total Claims (5)	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) List	-	-	1	322,330			-	-		
	1	114	-	-			-	-		
	-	-	1	350,505			-	-		
	-	-	1	147,248			-	-		
	1	224,779	-	-			-	-		
	1	2	-	-			-	-		
	-	-	1	193,879			-	-		
	1	136,012	-	-			-	-		
	-	-	1	158,539			-	-		
	-	-	-	-			1	134,503		
	-	-	1	198,950			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
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	-	-	-	-			-	-		
	-	-	-	-			-	-		
	-	-	-	-			-	-		
(i) Total	# 4	$360,907	# 6	$1,371,452	# 10	$1,732,359	# 1	$134,503	# 11	$1,866,862
(ii) Average		$90,227		$228,575		$173,236		$134,503		$169,715

b. Percentage of Awarded and Commuted/Compromised within Total Awarded

(i) Number	# 4	# 6	# 10
(ii) Percentage	40.0000%	60.0000%	100%

c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim

(i) Average	$90,227	$228,575	
(ii) Difference (Col. 2 minus Col. 1)			$138,349

d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix

(i) Awarded Mix	40.0000%	60.0000%	
(ii) Number	# 0.4000	# 0.6000	# 1

e. Pending Average from Above; Commuted and Compromised less Awarded Difference

(i) Pending Ave.	$134,503	$134,503	
(ii) C/C Difference	$0	$138,349	
(iii) (e-i) + (e-ii)	$134,503	$272,852	
(iv) Total (d-ii) x (e-iii)	$53,801	$163,711	
(v) Total of (e-iv)			$217,513

f. Calculation of Impact of Adjustment

	Awarded			Pending			Total		
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average
(i) Permanent	# 4	$360,907	$90,227	# 0.4000	$53,801	$134,503	# 4.4000	$414,708	$94,252
(ii) Comm./Comp.	# 6	$1,371,452	$228,575	# 0.6000	$163,711	$272,852	# 6.6000	$1,535,164	$232,601
(iii) Total	# 10	$1,732,359	$173,236	# 1.0000	$217,513	$217,513	# 11.0000	$1,949,872	$177,261

(iv) Average Severity before Adjustment	$169,715
(v) Impact	$7,546

Source: Exhibit IX-A

COAL MINE COMPENSATION RATING BUREAU
Wage Level Adjustment to Current Level
State Occupational Disease Model

a) Average Weekly Wage (Smoothed):

	Year	U/G Anthracite	U/G Bituminous	Surface Anthracite	Surface Bituminous	Wage Level Decrease	
Pre Act 57:	1990	$510.82	706.51	509.07	538.34	5.1817%	
	1991	527.86	728.86	520.23	555.86	5.1817%	
	1992	545.46	751.92	531.63	573.96	5.1817%	
	1993	563.65	775.71	543.27	592.64	5.1817%	
	1994	582.45	800.25	555.18	611.93	5.1817%	
	1995	601.88	825.56	567.34	631.84	5.1817%	
Mixed Pre & Post Act 57:	1996	621.95	851.68	579.78	652.41	3.3220%	***
Post Act 57:	1997	642.70 *	878.63 *	592.48 *	673.64 *	0.0%	
	1998	664.13 *	906.42 *	605.46 *	695.57 *	0.0%	
	1999	686.28 *	935.10 *	618.73 *	718.21 *	0.0%	
	2000	709.17 *	964.68 *	632.29 *	741.58 *	0.0%	
	2001	732.83 *	995.20 *	646.14 *	765.72 *	0.0%	
	2002	757.27 *	1,026.69 *	660.30 *	790.64 *	0.0%	
	2003	782.53 *	1,059.17 *	674.77 *	816.37 *	0.0%	
	2004	808.63 *	1,092.67 *	689.55 *	842.95 *	0.0%	
	2005	835.60 *	1,127.24 *	704.66 *	870.38 *	0.0%	
	2006	863.46 *	1,162.91 *	720.10 *	898.71 *	0.0%	
	2007	892.26 *	1,199.70 *	735.88 *	927.96 *	0.0%	
	2008	922.02 *	1,237.65 *	752.01 *	958.16 *	0.0%	
	2009	952.78 *	1,276.80 *	768.48 *	989.35 *	0.0%	
	2010	984.55 *	1,317.20 *	785.32 *	1,021.55 *	0.0%	
	2011	1,017.39 *	1,358.87 *	802.53 *	1,054.80 *	0.0%	
	2012	1,051.32 *	1,401.86 *	820.11 *	1,089.13 *	0.0%	
	2013	1,086.39 *	1,446.21 *	838.09 *	1,124.58 *	0.0%	
	Average:					1.4338%	
	Projected to:						
Pre Act 57:	4/1/2016	1,153.54	1,578.78	1,023.74	1,207.89		
Post Act 57:	4/1/2016	1,093.77 *	1,496.97 *	970.69 *	1,145.30 *		

b) Conversion Calculation:

Pre Act 57:	1996	$621.95	851.68	579.78	652.41	
Pre Act 57:	1997	642.70	878.63	592.48	673.64	
Pre Act 57:	1998	664.13	906.42	605.46	695.57	
Pre Act 57:	1999	686.28	935.10	618.73	718.21	
Pre Act 57:	2000	709.17	964.68	632.29	741.58	
Pre Act 57:	2001	732.83	995.20	646.14	765.72	
Pre Act 57:	2002	757.27	1,026.69	660.30	790.64	
Pre Act 57:	2003	782.53	1,059.17	674.77	816.37	
Pre Act 57:	2004	808.63	1,092.67	689.55	842.95	
Pre Act 57:	2005	835.60	1,127.24	704.66	870.38	
Pre Act 57:	2006	863.46	1,162.91	720.10	898.71	
Pre Act 57:	2007	892.26	1,199.70	735.88	927.96	
Pre Act 57:	2008	922.02	1,237.65	752.01	958.16	
Pre Act 57:	2009	952.78	1,276.80	768.48	989.35	
Pre Act 57:	2010	984.55	1,317.20	785.32	1,021.55	
Pre Act 57:	2011	1,017.39	1,358.87	802.53	1,054.80	
Pre Act 57:	2012	1,051.32	1,401.86	820.11	1,089.13	
Pre Act 57:	2013	1,086.39	1,446.21	838.09	1,124.58	
Pre Act 57:	4/1/2016	1,153.54	1,578.78	1,023.74	1,207.89	
Conversion Factor:		5.1817%	5.1817%	5.1817%	5.1817%	
						Note:
Post Act 57:	1996	$589.73	$807.55	$549.73	$618.60	Pre Act 57 times (1.0 - Factor)
Post Act 57:	1997	609.40	833.10	561.78	638.73	Pre Act 57 times (1.0 - Factor)
Post Act 57:	1998	629.72	859.45	574.09	659.52	Pre Act 57 times (1.0 - Factor)
Post Act 57:	1999	650.72	886.64	586.67	680.99	Pre Act 57 times (1.0 - Factor)
Post Act 57:	2000	672.43	914.70	599.52	703.15	Pre Act 57 times (1.0 - Factor)
Post Act 57:	2001	694.85	943.63	612.66	726.04	Pre Act 57 times (1.0 - Factor)
Post Act 57:	2002	718.03	973.49	626.08	749.67	Pre Act 57 times (1.0 - Factor)
Post Act 57:	2003	741.98	1,004.28	639.80	774.07	Pre Act 57 times (1.0 - Factor)
Post Act 57:	2004	766.72	1,036.06	653.82	799.27	Pre Act 57 times (1.0 - Factor)
Post Act 57:	2005	792.30	1,068.83	668.15	825.28	Pre Act 57 times (1.0 - Factor)
Post Act 57:	2006	818.72	1,102.65	682.79	852.14	Pre Act 57 times (1.0 - Factor)
Post Act 57:	2007	846.03	1,137.53	697.75	879.88	Pre Act 57 times (1.0 - Factor)
Post Act 57:	2008	874.25	1,173.52	713.04	908.51	Pre Act 57 times (1.0 - Factor)
Post Act 57:	2009	903.41	1,210.64	728.66	938.08	Pre Act 57 times (1.0 - Factor)
Post Act 57:	2010	933.54	1,248.95	744.63	968.62	Pre Act 57 times (1.0 - Factor)
Post Act 57:	2011	964.67	1,288.46	760.95	1,000.14	Pre Act 57 times (1.0 - Factor)
Post Act 57:	2012	996.85	1,329.22	777.62	1,032.70	Pre Act 57 times (1.0 - Factor)
Post Act 57:	2013	1,030.09	1,371.27	794.66	1,066.31	Pre Act 57 times (1.0 - Factor)
Post Act 57:	4/1/2016	1,093.77	1,496.97	970.69	1,145.30	Pre Act 57 times (1.0 - Factor)

c) Wage Level Adjustment Examples:

(i) Year	1993	1995	1997	1999	
(ii) Wage on claim record	$400.00	$450.00	$420.00	$430.00	
Wage Adjustment:					
(iii) Projection to 04/01/16	$1,153.54	$1,578.78	$970.69	$1,145.30	
(iv) Wage during year	563.65	825.56	592.48	718.21	
(v) Adjustment Factor	2.046546	1.912362	1.638353	1.594669	(iii) divided by (iv)
(vi) Adjusted to Level	$818.62	$860.56	$688.11	$685.71	(ii) times (v)

* Post Act 57 for 1997-2013 and Projected to 04/01/2016
** 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 234/365ths of 1996 was Pre Act 57.

Source: Average Weekly Wage (Smoothed) - Exhibit VII-H, pages 1, 2, 3 and 4 - Column (8)
Projected 04/01/2016 Weekly Wage - Exhibit VII-H, pages 1, 2, 3 and 4 - Column (6)
Wage level decrease - Exhibit VII-G, Page 2.

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

(a) Wage Ranges		Average Benefits Before Offset	Average Benefits After Offset	State OD Claim Count
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 57	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 method
$.00-289.94 - Claims at 90% under either method
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

	Estimates
(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.

COAL MINE COMPENSATION RATING BUREAU

Wage Level Adjustment to Current Level - State Occupational Disease Model

Anthracite Underground (1011)

	(1) Statewide Avg Wage	(2) Claimants' Actual Avg Wage	(3) (2) Adjusted For Act 57	(4) (3)/(1)	(5) (3) Ex. High & Low	(6) (1) Adjusted To Claimants' Wage Level	(7) (5) & (6) Adjusted Avg Wages	(8) Exponentially Fitted Wages
1990	419.00	539.87	539.87	1.2885	539.87		539.87	510.82
1991	436.00	0.00				512.16	512.16	527.86
1992	455.00	608.33	608.33	1.3370	608.33		608.33	545.46
1993	475.00	419.67	419.67	0.8835 Low		557.98	557.98	563.65
1994	493.00	0.00				579.12	579.12	582.45
1995	509.00	0.00				597.92	597.92	601.88
1996	527.00	0.00				619.06	619.06	621.95
1997	542.00	0.00				636.68	636.68	642.70
1998	561.00	0.00				659.00	659.00	664.13
1999	588.00	501.00	528.38	0.8986	528.38		528.38	686.28
2000	611.00	0.00				717.73	717.73	709.17
2001	644.00	0.00				756.50	756.50	732.83
2002	662.00	0.00				777.64	777.64	757.27
2003	675.00	0.00				792.91	792.91	782.53
2004	690.00	0.00				810.54	810.54	808.63
2005	716.00	0.00				841.08	841.08	835.60
2006	745.00	0.00				875.14	875.14	863.46
2007	779.00	0.00				915.08	915.08	892.26
2008	807.00	0.00				947.97	947.97	922.02
2009	836.00	0.00				982.04	982.04	952.78
2010	845.00	0.00				992.61	992.61	984.55
2011	858.00	1400.00	1476.51	1.7209 High		1007.88	1007.88	1017.39
2012	888.00	0.00				1043.12	1043.12	1051.32
2013	917.00	0.00				1077.19	1077.19	1086.39
2014	932.00							
			High	1.7209				
			Low	0.8835				
			Average Ratio Claimant/State - High & Low	1.1747				

Projected	
2015	960.00
2016	989.00
2017	1,018.00
4/1/2016	982.00

Projected Avg. Wage at Claimants' Level

982.00 * 1.1747 = $1,153.54

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)

COAL MINE COMPENSATION RATING BUREAU

Wage Level Adjustment to Current Level - State Occupational Disease Mode

Bituminous Underground (1002)

	(1) Statewide Avg Wage	(2) Claimants' Actual Avg Wage	(3) (2) Adjusted For Act 57	(4) (3)/(1)	(5) (3) Ex. High & Low	(6) (1) Adjusted To Claimants' Wage Level	(7) (5) & (6) Adjusted Avg Wages	(8) Exponentially Fitted Wages
1990	419.00	779.92	779.92	1.8614	779.92		779.92	706.51
1991	436.00	827.00	827.00	1.8968	827.00		827.00	728.86
1992	455.00	702.04	702.04	1.5429	702.04		702.04	751.92
1993	475.00	729.40	729.40	1.5356	729.40		729.40	775.71
1994	493.00	1043.85	1043.85	2.1173	1043.85		1043.85	800.25
1995	509.00	1525.00	1525.00	2.9961 High		818.33	818.33	825.56
1996	527.00	706.64	706.64	1.3409	706.64		706.64	851.68
1997	542.00	672.19	708.92	1.3080	708.92		708.92	878.63
1998	561.00	1058.08	1115.90	1.9891	1115.90		1115.90	906.42
1999	588.00	675.00	711.89	1.2107	711.89		711.89	935.10
2000	611.00	902.80	952.14	1.5583	952.14		952.14	964.68
2001	644.00	604.79	637.84	0.9904 Low		1035.37	1035.37	995.20
2002	662.00	800.15	843.88	1.2747	843.88		843.88	1026.69
2003	675.00	1324.39	1396.77	2.0693	1396.77		1396.77	1059.17
2004	690.00	1038.34	1095.08	1.5871	1095.08		1095.08	1092.67
2005	716.00	877.22	925.16	1.2921	925.16		925.16	1127.24
2006	745.00	0.00				1197.75	1197.75	1162.91
2007	779.00	0.00				1252.41	1252.41	1199.70
2008	807.00	1164.02	1227.63	1.5212	1227.63		1227.63	1237.65
2009	836.00	0.00				1344.05	1344.05	1276.80
2010	845.00	0.00				1358.52	1358.52	1317.20
2011	858.00	1271.94	1341.45	1.5635	1341.45		1341.45	1358.87
2012	888.00	1310.62	1382.24	1.5566	1382.24		1382.24	1401.86
2013	917.00	1489.73	1571.14	1.7133	1571.14		1571.14	1446.21
2014	932.00							
			High	2.9961				
			Low	0.9904				
		Average Ratio Claimant/State - High & Low		1.6077				

Projected	
2015	960.00
2016	989.00
2017	1,018.00
4/1/2016	982.00

Projected Avg. Wage at Claimants' Level

982.00 * 1.6077 = $1,578.78

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 use
(7)Adjusted Wages using Cols. (5) & (6)
(8) Fitted Wages using Regression on raw data inCol.(7)

COAL MINE COMPENSATION RATING BUREAU

Wage Level Adjustment to Current Level - State Occupational Disease Mode

Anthracite Surface (1016)

	(1) Statewide Avg Wage	(2) Claimants' Actual Avg Wage	(3) (2) Adjusted For Act 57	(4) (3)/(1)	(5) (3) Ex. High & Low	(6) (1) Adjusted To Claimants' Wage Level	(7) (5) & (6) Adjusted Avg Wages	(8) Exponentially Fitted Wages
1990	419.00	549.31	549.31	1.3110	549.31		549.31	509.07
1991	436.00	492.75	492.75	1.1302	492.75		492.75	520.23
1992	455.00	565.40	565.40	1.2426	565.40		565.40	531.63
1993	475.00	544.73	544.73	1.1468	544.73		544.73	543.27
1994	493.00	543.95	543.95	1.1033	543.95		543.95	555.18
1995	509.00	645.11	645.11	1.2674	645.11		645.11	567.34
1996	527.00	453.71	453.71	0.8609	453.71		453.71	579.78
1997	542.00	530.26	559.24	1.0318	559.24		559.24	592.48
1998	561.00	744.92	785.63	1.4004	785.63		785.63	605.46
1999	588.00	571.47	602.70	1.0250	602.70		602.70	618.73
2000	611.00	133.68	140.99	0.2307 Low		636.97	636.97	632.29
2001	644.00	517.49	545.77	0.8475	545.77		545.77	646.14
2002	662.00	589.00	621.19	0.9384	621.19		621.19	660.30
2003	675.00	633.40	668.01	0.9897	668.01		668.01	674.77
2004	690.00	1568.35	1654.06	2.3972 High		719.33	719.33	689.55
2005	716.00	575.91	607.38	0.8483	607.38		607.38	704.66
2006	745.00	0.00				776.67	776.67	720.10
2007	779.00	733.08	773.14	0.9925	773.14		773.14	735.88
2008	807.00	775.13	817.49	1.0130	817.49		817.49	752.01
2009	836.00	0.00				871.53	871.53	768.48
2010	845.00	0.00				880.92	880.92	785.32
2011	858.00	466.84	492.35	0.5738	492.35		492.35	802.53
2012	888.00	0.00				925.74	925.74	820.11
2013	917.00	0.00				955.98	955.98	838.09
2014	932.00							
			High	2.3972				
			Low	0.2307				
		Average Ratio Claimant/State - High & Low		1.0425				

Projected	
2015	960.00
2016	989.00
2017	1,018.00

Projected Avg. Wage at Claimants' Level

4/1/2016 982.00 982.00 * 1.0425 = $1,023.74

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 use
(7)Adjusted Wages using Cols. (5) & (6)
(8) Fitted Wages using Regression on raw data inCol.(7)

COAL MINE COMPENSATION RATING BUREAU

Wage Level Adjustment to Current Level - State Occupational Disease Mode

Bituminous Surface (1013)

	(1) Statewide Avg Wage	(2) Claimants' Actual Avg Wage	(3) (2) Adjusted For Act 57	(4) (3)/(1)	(5) (3) Ex. High & Low	(6) (1) Adjusted To Claimants' Wage Level	(7) (5) & (6) Adjusted Avg Wages	(8) Exponentially Fitted Wages
1990	419.00	555.88	555.88	1.3267	555.88		555.88	538.34
1991	436.00	612.13	612.13	1.4040	612.13		612.13	555.86
1992	455.00	652.89	652.89	1.4349	652.89		652.89	573.96
1993	475.00	705.41	705.41	1.4851 High		584.26	584.26	592.64
1994	493.00	621.91	621.91	1.2615	621.91		621.91	611.93
1995	509.00	477.90	477.90	0.9389 Low		626.08	626.08	631.84
1996	527.00	628.07	628.07	1.1918	628.07		628.07	652.41
1997	542.00	698.16	736.31	1.3585	736.31		736.31	673.64
1998	561.00	500.00	527.32	0.9400	527.32		527.32	695.57
1999	588.00	569.19	600.30	1.0209	600.30		600.30	718.21
2000	611.00	0.00				751.55	751.55	741.58
2001	644.00	0.00				792.14	792.14	765.72
2002	662.00	0.00				814.28	814.28	790.64
2003	675.00	0.00				830.27	830.27	816.37
2004	690.00	0.00				848.72	848.72	842.95
2005	716.00	676.00	712.94	0.9957	712.94		712.94	870.38
2006	745.00	0.00				916.37	916.37	898.71
2007	779.00	0.00				958.19	958.19	927.96
2008	807.00	0.00				992.63	992.63	958.16
2009	836.00	0.00				1028.30	1028.30	989.35
2010	845.00	0.00				1039.37	1039.37	1021.55
2011	858.00	1111.56	1172.31	1.3663	1172.31		1172.31	1054.80
2012	888.00	0.00				1092.27	1092.27	1089.13
2013	917.00	0.00				1127.94	1127.94	1124.58
2014	932.00							
			High	1.4851				
			Low	0.9389				
	Average Ratio Claimant/State - High & Low			1.2300				

Projected	
2015	960.00
2016	989.00
2017	1,018.00

Projected Avg. Wage at Claimants' Level

4/1/2016 982.00 982.00 * 1.23 = $1,207.89

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)
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 use
(7)Adjusted Wages using Cols. (5) & (6)
(8) Fitted Wages using Regression on raw data inCol.(7)

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.

Year	Annual Changes
1985	3.1%
1986	1.3%
1987	4.2%
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%
Average All years	2.8%
Average latest 10 years	2.4%
Average latest 5 years	1.7%
Average latest 3 years	1.6%
Selected Annual Change Last Year's Selection was 2.5%	2.5%

Source: Social Security Administration Web Site

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.

	Monthly Wage Amounts Break Points:							
Year	90% of First:	Percent Change	Plus 32% of next:	Percent Change	Plus 15% of next:	Percent Change	Annual SS Wage Base	Percent Change
1985	280		1,411		1,609		39,600	
1986	297	6.1%	1,493	5.8%	1,710	6.3%	42,000	6.1%
1987	310	4.4%	1,556	4.2%	1,784	4.3%	43,800	4.3%
1988	319	2.9%	1,603	3.0%	1,828	2.5%	45,000	2.7%
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%
2013	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%
Average All years		3.7%		3.7%		3.8%		3.7%
Average latest 10 years		2.8%		2.8%		2.8%		2.8%
Average latest 5 years		1.7%		1.7%		2.6%		2.1%
Average latest 3 years		2.5%		2.5%		2.5%		2.5%
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
2015	826	Actual	4,154	Actual	4,895	Actual	118,500	Actual
2016	847	2.5%	4,258	2.5%	5,017	2.5%	121,500	2.5%
2017	868	2.5%	4,364	2.5%	5,142	2.5%	124,500	2.5%
Average Break Point For Policies effective between 4-1-2015 and 4-1-2016	842		4,232		4,987		120,800	

Note: Weighted average of the three calendar years: 2015, 2016, 2017.

Weights:	2015	28.125%
	2016	68.750%
	2017	3.125%
		100.00%

Notes:

The above weights assume 1-year policies effective between 4-1-2015 and 4-1-2016

E.G.: 28.125% of the losses will occur between 4-1-2015 and 12-31-2015.
68.750% of the losses will occur between 1-1-2016 and 12-31-2016.
3.125% of the losses will occur between 1-1-2017 and 3-31-2017.

Source: *Social Se* curity Administration Web Site

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 4-1-2016 with a 4-1-2015 filing effective date.)

		Monthly Wages		
	Yearly Maximum	First Break Point	Second Break Point	Third Break Point
Wage Amount:	120,800	842	4,232	4,987
Factor:		90%	32%	15%

II. Example Calculations

Example Number	Monthly Wage	Adjusted Monthly Wage (a)	PIA at each Breakpoint First (b)	Second (c)	Third (d)	Total PIA
1	2,000	2,000	842	1,158	0	
			90%	32%	15%	
			758	371	0	1,128
2	4,000	4,000	842	3,158	0	
			90%	32%	15%	
			758	1,011	0	1,768
3	6,000	6,000	842	4,232	926	
			90%	32%	15%	
			758	1,354	139	2,251
4	8,000	8,000	842	4,232	2,926	
			90%	32%	15%	
			758	1,354	439	2,551
5	10,000	10,000	842	4,232	4,926	
			90%	32%	15%	
			758	1,354	739	2,851
6	12,000	10,067	842	4,232	4,987	
			90%	32%	15%	
			758	1,354	748	2,860

Notes:
(a) Monthly Wage limited to Monthly Maximum ($120,800/12 = $10,067)
(b) minimum of adjusted monthly wage and $842
(c) minimum of (adjusted monthly wage less $842) and $4,232
(d) minimum of (adjusted monthly wage less $842 less $4,232) and $4,987

Source: Exhibit VII-J, Page 2

Coal Mine Compensation Rating Bureau

Federal Excess Occupational Disease After Administration / Law Change Frequencies by Classification

ANTHRACITE UNDERGROUND (0160)

	Counts										
	(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
1994	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
1995	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-	-
1997	-	-	-	-	-	-	-	-	-	-	-
1998	-	-	-	-	-	-	-	-	-	-	-
1999	1	-	-	1	-	0.15	0.03	0.03	0.97	-	-
2000	-	-	-	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	0.0194	0.0077
2013	-	-	-	-	-	-	-	-	-	0.0158	0.0063
Total	1	-	-	1	-	0.15	0.03	0.03	0.97	0.0351	0.0140

Year	(12) Total Awarded (8)+(11)	(13) Payroll ($M)	(14) Frequency (12)/(13)	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Per 100 Miner Years
1994	# 0.0000	$ 1.3107	-	493	1.041	49.1	-
1995	-	1.4935	-	509	1.041	54.2	-
1996	-	1.6127	-	527	1.041	56.5	-
1997	-	1.5716	-	542	1.041	53.6	-
1998	-	1.7623	-	561	1.041	58.0	-
1999	0.0300	1.8142	0.0165	588	1.041	57.0	0.0526
2000	-	1.3702	-	611	1.041	41.4	-
2001	-	1.6365	-	644	1.041	46.9	-
2002	-	1.3865	-	662	1.041	38.7	-
2003	-	1.3543	-	675	1.041	37.1	-
2004	-	1.3453	-	690	1.041	36.0	-
2005	-	1.4176	-	716	1.041	36.6	-
2006	-	1.4425	-	745	1.041	35.8	-
2007	-	1.6625	-	779	1.041	39.4	-
2008	-	2.1367	-	807	1.041	48.9	-
2009	-	1.3359	-	836	1.041	29.5	-
2010	-	1.2996	-	845	1.041	28.4	-
2011	-	1.2579	-	858	1.041	27.1	-
2012	0.0077	1.0293	0.0075	888	1.041	21.4	0.0360
2013	0.0063	0.3823	0.0164	917	1.041	7.7	0.0815
Total	0.0440	28.6221	0.0015			803.3	0.0055

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): 0.2354
IBNR Award Ratio(2001 & Subseq.): 0.3979

BITUMINOUS UNDERGROUND(0158)

	Counts										
	(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
1994	# 1	# 1	# 0	# 0	# 0.00	# 0.00	# 0.00	# 1.00	# 0.00	# 0.0000	# 0.0000
1995	1	-	1	-	0.30	-	-	0.30	0.70	-	-
1996	1	-	-	1	-	0.15	0.03	0.03	0.97	-	-
1997	2	-	-	2	-	0.30	0.06	0.06	1.94	-	-
1998	-	-	-	-	-	-	-	-	-	-	-
1999	2	1	-	1	-	0.15	0.03	1.03	0.97	-	-
2000	2	1	-	1	-	0.15	0.03	1.03	0.97	-	-
2001	2	-	-	2	-	0.10	0.10	0.10	1.90	-	-
2002	1	-	-	1	-	0.05	0.05	0.05	0.95	-	-
2003	-	-	-	-	-	-	-	-	-	-	-
2004	1	-	-	1	-	0.05	0.05	0.05	0.95	-	-
2005	1	1	-	-	-	-	-	1.00	-	0.0332	0.0132
2006	-	-	-	-	-	-	-	-	-	0.0778	0.0310
2007	-	-	-	-	-	-	-	-	-	0.1464	0.0582
2008	2	1	-	1	-	0.05	0.05	1.05	0.95	0.2639	0.1050
2009	-	-	-	-	-	-	-	-	-	0.3908	0.1555
2010	-	-	-	-	-	-	-	-	-	0.6796	0.2704
2011	1	1	-	-	-	-	-	1.00	-	1.1380	0.4528
2012	3	1	1	1	0.30	0.05	0.05	1.35	1.65	1.5336	0.6102
2013	1	-	1	-	0.30	-	-	0.30	0.70	2.2130	0.8806
Total	21	7	3	11	0.90	1.05	0.45	8.35	12.65	6.4763	2.5770

Year	(12) Total Awarded (8)+(11)	(13) Payroll ($M)	(14) Frequency (12)/(13)	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Per 100 Miner Years
1994	# 1.0000	$ 60.5909	0.0165	493	1.426	1,657.4	0.0603
1995	0.3000	65.2711	0.0046	509	1.426	1,729.3	0.0173
1996	0.0300	75.2230	0.0004	527	1.426	1,924.9	0.0016
1997	0.0600	70.3967	0.0009	542	1.426	1,751.6	0.0034
1998	-	61.0873	-	561	1.426	1,468.5	-
1999	1.0300	58.6852	0.0176	588	1.426	1,345.9	0.0765
2000	1.0300	47.5206	0.0217	611	1.426	1,048.9	0.0982
2001	0.1000	48.5226	0.0021	644	1.426	1,016.1	0.0098
2002	0.0500	40.8380	0.0012	662	1.426	831.9	0.0060
2003	-	36.4984	-	675	1.426	729.2	-
2004	0.0500	46.0739	0.0011	690	1.426	900.5	0.0056
2005	1.0132	66.2758	0.0153	716	1.426	1,248.3	0.0812
2006	0.0310	70.4659	0.0004	745	1.426	1,275.6	0.0024
2007	0.0582	79.9043	0.0007	779	1.426	1,383.3	0.0042
2008	1.1550	101.3540	0.0114	807	1.426	1,693.7	0.0682
2009	0.1555	101.3481	0.0015	836	1.426	1,634.9	0.0095
2010	0.2704	125.3936	0.0022	845	1.426	2,001.2	0.0135
2011	1.4528	148.4857	0.0098	858	1.426	2,333.9	0.0622
2012	1.9602	153.6022	0.0128	888	1.426	2,332.7	0.0840
2013	1.1806	141.4496	0.0083	917	1.426	2,080.2	0.0568
Total	10.9270	1,598.9869	0.0068			30,388.0	0.0360

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): 0.2354
IBNR Award Ratio(2001 & Subseq.): 0.3979

ANTHRACITE SURFACE(0153)

Year	Counts (1) Reported	(2) Awarded	(3) Pending	(4) Denied	(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR	(11) IBNR Awarded (10)xAwd Ratio
1994	# 5	# 0	# 0	# 5	# 0.00	# 0.75	# 0.15	# 0.15	# 4.85	# 0.0000	# 0.0000
1995	3	1	-	2	-	0.30	0.06	1.06	1.94	-	-
1996	1	-	-	1	-	0.15	0.03	0.03	0.97	-	-
1997	3	1	-	2	-	0.30	0.06	1.06	1.94	-	-
1998	1	-	1	-	0.30	-	-	0.30	0.70	-	-
1999	-	-	-	-	-	-	-	-	-	-	-
2000	1	-	1	-	0.30	-	-	0.30	0.70	-	-
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	-	1	1	0.30	0.05	0.05	0.35	1.65	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	0.0272	0.0108
2011	1	-	-	1	-	0.05	0.05	0.05	0.95	0.0844	0.0336
2012	-	-	-	-	-	-	-	-	-	0.1716	0.0683
2013	-	-	-	-	-	-	-	-	-	0.3686	0.1467
Total	22	5	3	14	0.90	1.70	0.50	6.40	15.60	0.6518	0.2593

Year	(12) Total Awarded (8)+(11)	(13) Payroll ($M)	(14) Frequency (12)/(13)	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Per 100 Miner Years
1994	# 0.1500	$ 30.2105	0.0050	493	1.041	1,132.0	0.0133
1995	1.0600	20.2889	0.0522	509	1.041	736.4	0.1439
1996	0.0300	16.1922	0.0019	527	1.041	567.6	0.0053
1997	1.0600	17.7831	0.0596	542	1.041	606.1	0.1749
1998	0.3000	17.3763	0.0173	561	1.041	572.2	0.0524
1999	-	18.4411	-	588	1.041	579.4	-
2000	0.3000	16.8078	0.0178	611	1.041	508.2	0.0590
2001	1.0000	12.9237	0.0774	644	1.041	370.7	0.2698
2002	-	11.0466	-	662	1.041	308.3	-
2003	1.0500	11.9282	0.0880	675	1.041	326.5	0.3216
2004	1.0000	12.3597	0.0809	690	1.041	330.9	0.3022
2005	-	12.1409	-	716	1.041	313.2	-
2006	0.0500	12.0653	0.0041	745	1.041	299.2	0.0167
2007	0.3500	14.8666	0.0235	779	1.041	352.5	0.0993
2008	-	16.2202	-	807	1.041	371.3	-
2009	-	15.8935	-	836	1.041	351.2	-
2010	0.0108	13.3192	0.0008	845	1.041	291.2	0.0037
2011	0.0836	19.5074	0.0043	858	1.041	420.0	0.0199
2012	0.0683	24.7347	0.0028	888	1.041	514.6	0.0133
2013	0.1467	20.2615	0.0072	917	1.041	408.2	0.0359
Total	6.6593	334.3674	0.0199			9,359.7	0.0711

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): 0.2354
IBNR Award Ratio(2001 & Subseq.): 0.3979

BITUMINOUS SURFACE(0156)

	Counts										
	(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
1994	# 3	# 1	# 0	# 2	# 0.00	# 0.30	# 0.06	# 1.06	# 1.94	# 0.0000	# 0.0000
1995	2	-	-	2	-	0.30	0.06	0.06	1.94	-	-
1996	2	-	-	2	-	0.30	0.06	0.06	1.94	-	-
1997	2	-	-	2	-	0.30	0.06	0.06	1.94	-	-
1998	1	-	-	1	-	0.15	0.03	0.03	0.97	-	-
1999	1	-	-	1	-	0.15	0.03	0.03	0.97	-	-
2000	-	-	-	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	0.0306	0.0122
2012	-	-	-	-	-	-	-	-	-	0.0618	0.0246
2013	-	-	-	-	-	-	-	-	-	0.0818	0.0325
Total	11	1	-	10	-	1.50	0.30	1.30	9.70	0.1742	0.0693

Year	(12) Total Awarded (8)+(11)	(13) Payroll ($M)	(14) Frequency (12)/(13)	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Per 100 Miner Years
1994	# 1.0600	$ 92.4646	0.0115	493	1.041	3,464.8	0.0306
1995	0.0600	78.7526	0.0008	509	1.041	2,858.2	0.0021
1996	0.0600	77.8284	0.0008	527	1.041	2,728.2	0.0022
1997	0.0600	67.9058	0.0009	542	1.041	2,314.5	0.0026
1998	0.0300	63.6516	0.0005	561	1.041	2,096.0	0.0014
1999	0.0300	54.1623	0.0006	588	1.041	1,701.6	0.0018
2000	-	49.9356	-	611	1.041	1,509.8	-
2001	-	58.1513	-	644	1.041	1,668.1	-
2002	-	53.5021	-	662	1.041	1,493.0	-
2003	-	47.8737	-	675	1.041	1,310.2	-
2004	-	56.2173	-	690	1.041	1,505.1	-
2005	-	64.8716	-	716	1.041	1,673.7	-
2006	-	63.7985	-	745	1.041	1,582.0	-
2007	-	64.8081	-	779	1.041	1,536.9	-
2008	-	74.6012	-	807	1.041	1,707.7	-
2009	-	63.3067	-	836	1.041	1,398.9	-
2010	-	74.2552	-	845	1.041	1,623.4	-
2011	0.0122	87.7305	0.0001	858	1.041	1,888.9	0.0006
2012	0.0246	77.8710	0.0003	888	1.041	1,620.0	0.0015
2013	0.0325	64.8375	0.0005	917	1.041	1,306.2	0.0025
Total	1.3693	1,336.5256	0.0010			36,987.2	0.0037

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): 0.2354
IBNR Award Ratio(2001 & Subseq.): 0.3979

Coal Mine Compensation Rating Bureau

Federal Excess Occupational Disease After Administration / Law Change Frequencies by Classification

FOUR STANDARD CLASSES

Year	Counts (1) Reported	(2) Awarded	(3) Pending	(4) Denied	(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR	(11) IBNR Awarded (10)xAwd Ratio
1994	# 9	# 2	# 0	# 7	# 0.00	# 1.05	# 0.21	# 2.21	# 6.79	# 0.0000	# 0.0000
1995	6	1	1	4	0.30	0.60	0.12	1.42	4.58	-	-
1996	4	-	-	4	-	0.60	0.12	0.12	3.88	-	-
1997	7	1	-	6	-	0.90	0.18	1.18	5.82	-	-
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	3	1	1	1	0.30	0.15	0.03	1.33	1.67	-	-
2001	3	1	-	2	-	0.10	0.10	1.10	1.90	-	-
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	-	1	-	0.05	0.05	1.05	0.95	-	-
2005	1	1	-	-	-	-	-	1.00	-	0.0332	0.0132
2006	1	-	-	1	-	0.05	0.05	0.05	0.95	0.0778	0.0310
2007	2	-	1	1	0.30	0.05	0.05	0.35	1.65	0.1464	0.0582
2008	2	1	-	1	-	0.05	0.05	1.05	0.95	0.2639	0.1050
2009	-	-	-	-	-	-	-	-	-	0.3908	0.1555
2010	-	-	-	-	-	-	-	-	-	0.7068	0.2812
2011	2	1	-	1	-	0.05	0.05	1.05	0.95	1.2530	0.4986
2012	3	1	1	1	0.30	0.05	0.05	1.35	1.65	1.7862	0.7108
2013	1	-	1	-	0.30	-	-	0.30	0.70	2.6792	1.0661
Total	55	13	6	36	1.80	4.40	1.28	16.08	38.92	7.3374	2.9197

Year	(12) Total Awarded (8)+(11)	(13) Payroll ($M)	(14) Frequency (12)/(13)	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Per 100 Miner Years
1994	# 2.2100	$ 184.5767	0.0120	493		6,303.3	0.0351
1995	1.4200	165.8061	0.0086	509		5,378.1	0.0264
1996	0.1200	170.8563	0.0007	527		5,277.2	0.0023
1997	1.1800	157.6572	0.0075	542		4,725.8	0.0250
1998	0.3300	143.8775	0.0023	561		4,194.7	0.0079
1999	1.0900	133.1028	0.0082	588		3,683.9	0.0296
2000	1.3300	115.6342	0.0115	611		3,108.3	0.0428
2001	1.1000	121.2341	0.0091	644		3,101.8	0.0355
2002	0.0500	106.7732	0.0005	662		2,671.9	0.0019
2003	1.0500	97.6546	0.0108	675		2,403.0	0.0437
2004	1.0500	115.9962	0.0091	690		2,772.5	0.0379
2005	1.0132	144.7059	0.0070	716		3,271.8	0.0310
2006	0.0810	147.7722	0.0005	745		3,192.6	0.0025
2007	0.4082	161.2415	0.0025	779		3,312.1	0.0123
2008	1.1550	194.3121	0.0059	807		3,821.6	0.0302
2009	0.1555	181.8842	0.0009	836		3,414.5	0.0046
2010	0.2812	214.2676	0.0013	845		3,944.2	0.0071
2011	1.5486	256.9815	0.0060	858		4,669.9	0.0332
2012	2.0608	257.2372	0.0080	888		4,488.7	0.0459
2013	1.3661	226.9309	0.0060	917		3,802.3	0.0359
Total	18.9997	3,298.5020	0.0058			77,538.2	0.0245

IBNR Award Ratio(2000 & Prior): 0.2354
IBNR Award Ratio(2001 & Subseq.): 0.3979

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.(15): Exhibit XII-D
Col.(16): N/A
Col.(17): Total of 4 std. classes
Col.(18): (12) / (17) x 100

COKE(0154)

	Counts										
	(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
1994	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
1995	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-	-
1997	-	-	-	-	-	-	-	-	-	-	-
1998	-	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	-	0.0008	0.0003
2005	-	-	-	-	-	-	-	-	-	0.0017	0.0007
2006	-	-	-	-	-	-	-	-	-	0.0027	0.0011
2007	-	-	-	-	-	-	-	-	-	0.0048	0.0019
2008	-	-	-	-	-	-	-	-	-	0.0055	0.0022
2009	-	-	-	-	-	-	-	-	-	0.0042	0.0017
2010	-	-	-	-	-	-	-	-	-	0.0060	0.0024
2011	-	-	-	-	-	-	-	-	-	0.0056	0.0022
2012	-	-	-	-	-	-	-	-	-	0.0134	0.0053
2013	-	-	-	-	-	-	-	-	-	0.0164	0.0065
Total	-	-	-	-	-	-	-	-	-	0.0611	0.0243

Year	(12) Total Awarded (8)+(11)	(13) Payroll ($M)	(14) Frequency (12)/(13)	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Per 100 Miner Years
1994	# 0.0000	$ 54.7213	-	493	1.041	2,050.5	-
1995	-	55.0002	-	509	1.041	1,996.1	-
1996	-	54.5712	-	527	1.041	1,912.9	-
1997	-	53.1191	-	542	1.041	1,810.5	-
1998	-	13.3539	-	561	1.041	439.7	-
1999	-	12.2935	-	588	1.041	386.2	-
2000	-	12.0926	-	611	1.041	365.6	-
2001	-	10.3758	-	644	1.041	297.6	-
2002	-	10.4850	-	662	1.041	292.6	-
2003	-	11.5341	-	675	1.041	315.7	-
2004	0.0003	12.0491	0.0000	690	1.041	322.6	0.0001
2005	0.0007	12.8610	0.0001	716	1.041	331.8	0.0002
2006	0.0011	12.7374	0.0001	745	1.041	315.8	0.0003
2007	0.0019	13.6699	0.0001	779	1.041	324.2	0.0006
2008	0.0022	9.7611	0.0002	807	1.041	223.4	0.0010
2009	0.0017	5.1736	0.0003	836	1.041	114.3	0.0015
2010	0.0024	5.4357	0.0004	845	1.041	118.8	0.0020
2011	0.0022	3.5991	0.0006	858	1.041	77.5	0.0029
2012	0.0053	5.7381	0.0009	888	1.041	119.4	0.0045
2013	0.0065	4.7919	0.0014	917	1.041	96.5	0.0068
Total	0.0243	373.3636	0.0001			11,911.7	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

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): 0.2354
IBNR Award Ratio(2001 & Subseq.): 0.3979

AUGER(0157)

Year	Counts (1) Reported	(2) Awarded	(3) Pending	(4) Denied	(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR	(11) IBNR Awarded (10)xAwd Ratio
1994	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
1995	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-	-
1997	-	-	-	-	-	-	-	-	-	-	-
1998	-	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	-	0.0001	0.0000
2005	-	-	-	-	-	-	-	-	-	0.0001	0.0000
2006	-	-	-	-	-	-	-	-	-	0.0002	0.0001
2007	-	-	-	-	-	-	-	-	-	0.0004	0.0002
2008	-	-	-	-	-	-	-	-	-	0.0014	0.0006
2009	-	-	-	-	-	-	-	-	-	0.0008	0.0003
2010	-	-	-	-	-	-	-	-	-	0.0009	0.0004
2011	-	-	-	-	-	-	-	-	-	0.0018	0.0007
2012	-	-	-	-	-	-	-	-	-	0.0019	0.0007
2013	-	-	-	-	-	-	-	-	-	0.0038	0.0015
Total	-	-	-	-	-	-	-	-	-	0.0113	0.0045

Year	(12) Total Awarded (8)+(11)	(13) Payroll ($M)	(14) Frequency (12)/(13)	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Per 100 Miner Years
1994	# 0.0000	$ 1.4850	-	493	1.041	55.6	-
1995	-	1.4996	-	509	1.041	54.4	-
1996	-	0.8466	-	527	1.041	29.7	-
1997	-	1.1935	-	542	1.041	40.7	-
1998	-	1.2379	-	561	1.041	40.8	-
1999	-	1.1369	-	588	1.041	35.7	-
2000	-	1.2059	-	611	1.041	36.5	-
2001	-	1.4291	-	644	1.041	41.0	-
2002	-	1.1508	-	662	1.041	32.1	-
2003	-	1.1022	-	675	1.041	30.2	-
2004	0.0000	1.0588	0.0000	690	1.041	28.3	0.0001
2005	0.0000	1.0265	0.0000	716	1.041	26.5	0.0002
2006	0.0001	1.0668	0.0001	745	1.041	26.5	0.0004
2007	0.0002	1.1212	0.0001	779	1.041	26.6	0.0006
2008	0.0006	2.5068	0.0002	807	1.041	57.4	0.0010
2009	0.0003	0.9470	0.0003	836	1.041	20.9	0.0014
2010	0.0004	0.8275	0.0004	845	1.041	18.1	0.0019
2011	0.0007	1.1763	0.0006	858	1.041	25.3	0.0028
2012	0.0007	0.8082	0.0009	888	1.041	16.8	0.0045
2013	0.0015	1.0938	0.0014	917	1.041	22.0	0.0068
Total	0.0045	23.9204	0.0002			665.1	0.0007

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): 0.2354
IBNR Award Ratio(2001 & Subseq.): 0.3979

ANTHRACITE CO-GEN(0181)

	Counts										
	(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
1994	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
1995	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-	-
1997	-	-	-	-	-	-	-	-	-	-	-
1998	-	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-	-
2003	1	-	-	1	-	0.05	0.05	0.05	0.95	-	-
2004	-	-	-	-	-	-	-	-	-	0.0005	0.0002
2005	-	-	-	-	-	-	-	-	-	0.0010	0.0004
2006	-	-	-	-	-	-	-	-	-	0.0018	0.0007
2007	-	-	-	-	-	-	-	-	-	0.0032	0.0013
2008	-	-	-	-	-	-	-	-	-	0.0045	0.0018
2009	-	-	-	-	-	-	-	-	-	0.0065	0.0026
2010	-	-	-	-	-	-	-	-	-	0.0094	0.0037
2011	-	-	-	-	-	-	-	-	-	0.0181	0.0072
2012	-	-	-	-	-	-	-	-	-	0.0239	0.0095
2013	-	-	-	-	-	-	-	-	-	0.0297	0.0118
Total	1	-	-	1	-	0.05	0.05	0.05	0.95	0.0986	0.0392

Year	(12) Total Awarded (8)+(11)	(13) Payroll ($M)	(14) Frequency (12)/(13)	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Per 100 Miner Years
1994	# 0.0000	$ 3.7045	# 0.0000	493	1.041	138.8	-
1995	-	3.4818	-	509	1.041	126.4	-
1996	-	3.7590	-	527	1.041	131.8	-
1997	-	3.5202	-	542	1.041	120.0	-
1998	-	3.4588	-	561	1.041	113.9	-
1999	-	3.6043	-	588	1.041	113.2	-
2000	-	4.4735	-	611	1.041	135.3	-
2001	-	4.6618	-	644	1.041	133.7	-
2002	-	5.6588	-	662	1.041	157.9	-
2003	0.0500	7.0096	0.0071	675	1.041	191.8	0.0261
2004	0.0002	7.3515	0.0000	690	1.041	196.8	0.0001
2005	0.0004	7.8553	0.0001	716	1.041	202.7	0.0002
2006	0.0007	8.4125	0.0001	745	1.041	208.6	0.0003
2007	0.0013	9.1867	0.0001	779	1.041	217.9	0.0006
2008	0.0018	7.5214	0.0002	807	1.041	172.2	0.0010
2009	0.0026	7.5347	0.0003	836	1.041	166.5	0.0016
2010	0.0037	7.9580	0.0005	845	1.041	174.0	0.0021
2011	0.0072	10.9816	0.0007	858	1.041	236.4	0.0030
2012	0.0095	9.3118	0.0010	888	1.041	193.7	0.0049
2013	0.0118	7.9583	0.0015	917	1.041	160.3	0.0074
Total	0.0892	127.4041	0.0007			3,291.9	0.0027

IBNR Award Ratio(2000 & Prior): 0.2354
IBNR Award Ratio(2001 & Subseq.): 0.3979

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

BITUMINOUS CO-GEN(0182)

	Counts										
	(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
1994	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
1995	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-	-
1997	-	-	-	-	-	-	-	-	-	-	-
1998	-	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	-	0.0004	0.0002
2005	-	-	-	-	-	-	-	-	-	0.0011	0.0004
2006	-	-	-	-	-	-	-	-	-	0.0020	0.0008
2007	1	-	-	1	-	0.05	0.05	0.05	0.95	0.0038	0.0015
2008	-	-	-	-	-	-	-	-	-	0.0048	0.0019
2009	-	-	-	-	-	-	-	-	-	0.0064	0.0025
2010	-	-	-	-	-	-	-	-	-	0.0097	0.0039
2011	-	-	-	-	-	-	-	-	-	0.0140	0.0056
2012	-	-	-	-	-	-	-	-	-	0.0210	0.0084
2013	-	-	-	-	-	-	-	-	-	0.0449	0.0179
Total	1	-	-	1	-	0.05	0.05	0.05	0.95	0.1082	0.0430

Year	(12) Total Awarded (8)+(11)	(13) Payroll ($M)	(14) Frequency (12)/(13)	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Per 100 Miner Years
1994	# 0.0000	$ 0.3776	# 0.0000	493	1.426	10.3	-
1995	-	0.3602	-	509	1.426	9.5	-
1996	-	0.3702	-	527	1.426	9.5	-
1997	-	0.8561	-	542	1.426	21.3	-
1998	-	1.1612	-	561	1.426	27.9	-
1999	-	1.4943	-	588	1.426	34.3	-
2000	-	1.8707	-	611	1.426	41.3	-
2001	-	2.1213	-	644	1.426	44.4	-
2002	-	2.3861	-	662	1.426	48.6	-
2003	-	3.0525	-	675	1.426	61.0	-
2004	0.0002	6.3745	0.0000	690	1.426	124.6	0.0001
2005	0.0004	8.5248	0.0001	716	1.426	160.6	0.0003
2006	0.0008	9.4236	0.0001	745	1.426	170.6	0.0005
2007	0.0515	10.8291	0.0048	779	1.426	187.5	0.0275
2008	0.0019	8.4819	0.0002	807	1.426	141.7	0.0013
2009	0.0025	7.8664	0.0003	836	1.426	126.9	0.0020
2010	0.0039	8.7327	0.0004	845	1.426	139.4	0.0028
2011	0.0056	9.1024	0.0006	858	1.426	143.1	0.0039
2012	0.0084	9.0477	0.0009	888	1.426	137.4	0.0061
2013	0.0179	13.1334	0.0014	917	1.426	193.1	0.0093
Total	0.0930	105.5667	0.0009			1,833.0	0.0051

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): 0.2354
IBNR Award Ratio(2001 & Subseq.): 0.3979

ANTHRACITE PREP PLANT(0183)

	Counts										
	(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
1994	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
1995	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-	-
1997	1	1	-	-	-	-	-	1.00	-	-	-
1998	-	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	-	0.0007	0.0003
2005	-	-	-	-	-	-	-	-	-	0.0017	0.0007
2006	-	-	-	-	-	-	-	-	-	0.0026	0.0010
2007	1	-	-	1	-	0.05	0.05	0.05	0.95	0.0051	0.0020
2008	-	-	-	-	-	-	-	-	-	0.0090	0.0036
2009	-	-	-	-	-	-	-	-	-	0.0138	0.0055
2010	1	1	-	-	-	-	-	1.00	-	0.0160	0.0064
2011	-	-	-	-	-	-	-	-	-	0.0279	0.0111
2012	-	-	-	-	-	-	-	-	-	0.0504	0.0201
2013	-	-	-	-	-	-	-	-	-	0.0707	0.0281
Total	3	2	-	1	-	0.05	0.05	2.05	0.95	0.1979	0.0787

Year	(12) Total Awarded (8)+(11)	(13) Payroll ($M)	(14) Frequency (12)/(13)	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Per 100 Miner Years
1994	# 0.0000	$ 0.0000	# 0.0000	493	1.041	-	-
1995	-	-	-	509	1.041	-	-
1996	-	0.2211	-	527	1.041	7.8	-
1997	1.0000	1.1494	0.8700	542	1.041	39.2	2.5510
1998	-	1.0329	-	561	1.041	34.0	-
1999	-	1.2311	-	588	1.041	38.7	-
2000	-	1.3195	-	611	1.041	39.9	-
2001	-	2.2163	-	644	1.041	63.6	-
2002	-	2.3228	-	662	1.041	64.8	-
2003	-	3.4080	-	675	1.041	93.3	-
2004	0.0003	4.4067	0.0001	690	1.041	118.0	0.0002
2005	0.0007	5.1701	0.0001	716	1.041	133.4	0.0005
2006	0.0010	4.8859	0.0002	745	1.041	121.2	0.0009
2007	0.0520	5.8173	0.0089	779	1.041	138.0	0.0377
2008	0.0036	5.7335	0.0006	807	1.041	131.2	0.0027
2009	0.0055	6.2646	0.0009	836	1.041	138.4	0.0040
2010	1.0064	4.8769	0.2064	845	1.041	106.6	0.9440
2011	0.0111	6.1233	0.0018	858	1.041	131.8	0.0084
2012	0.0201	7.5690	0.0027	888	1.041	157.5	0.0127
2013	0.0281	7.0537	0.0040	917	1.041	142.1	0.0198
Total	2.1287	70.8021	0.0301			1,699.5	0.1253

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): 0.2354
IBNR Award Ratio(2001 & Subseq.): 0.3979

BITUMINOUS PREP PLANT(0184)

	Counts										
	(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
1994	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
1995	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-	-
1997	-	-	-	-	-	-	-	-	-	-	-
1998	-	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-	-
2000	1	-	-	1	-	0.15	0.03	0.03	0.97	-	-
2001	-	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	-	-	-	0.0012	0.0005
2005	-	-	-	-	-	-	-	-	-	0.0024	0.0009
2006	-	-	-	-	-	-	-	-	-	0.0036	0.0014
2007	-	-	-	-	-	-	-	-	-	0.0067	0.0027
2008	-	-	-	-	-	-	-	-	-	0.0120	0.0048
2009	-	-	-	-	-	-	-	-	-	0.0162	0.0064
2010	-	-	-	-	-	-	-	-	-	0.0292	0.0116
2011	-	-	-	-	-	-	-	-	-	0.0542	0.0216
2012	-	-	-	-	-	-	-	-	-	0.0796	0.0317
2013	-	-	-	-	-	-	-	-	-	0.1161	0.0462
Total	1	-	-	1	-	0.15	0.03	0.03	0.97	0.3211	0.1278

Year	(12) Total Awarded (8)+(11)	(13) Payroll ($M)	(14) Frequency (12)/(13)	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Per 100 Miner Years
1994	# 0.0000	$ 0.0000	# 0.0000	493	1.426	-	-
1995	-	-	-	509	1.426	-	-
1996	-	3.0666	-	527	1.426	78.5	-
1997	-	13.7836	-	542	1.426	343.0	-
1998	-	11.1121	-	561	1.426	267.1	-
1999	-	10.6918	-	588	1.426	245.2	-
2000	0.0300	8.5748	0.0035	611	1.426	189.3	0.0158
2001	-	10.1550	-	644	1.426	212.7	-
2002	-	10.0945	-	662	1.426	205.6	-
2003	-	10.1952	-	675	1.426	203.7	-
2004	0.0005	13.4602	0.0000	690	1.426	263.1	0.0002
2005	0.0009	16.5483	0.0001	716	1.426	311.7	0.0003
2006	0.0014	17.0510	0.0001	745	1.426	308.7	0.0005
2007	0.0027	18.8952	0.0001	779	1.426	327.1	0.0008
2008	0.0048	21.2503	0.0002	807	1.426	355.1	0.0013
2009	0.0064	19.8280	0.0003	836	1.426	319.9	0.0020
2010	0.0116	26.3131	0.0004	845	1.426	419.9	0.0028
2011	0.0216	35.1551	0.0006	858	1.426	552.6	0.0039
2012	0.0317	34.2117	0.0009	888	1.426	519.6	0.0061
2013	0.0462	33.3031	0.0014	917	1.426	489.8	0.0094
Total	0.1578	313.6896	0.0005			5,612.6	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): 0.2354
IBNR Award Ratio(2001 & Subseq.): 0.3979

TOTAL OTHER CLASSES

Year	Counts (1) Reported	(2) Awarded	(3) Pending	(4) Denied	(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR	(11) IBNR Awarded (10)xAwd Ratio
1994	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
1995	-	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-	-
1997	1	1	-	-	-	-	-	1.00	-	-	-
1998	-	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-	-
2000	1	-	-	1	-	0.15	0.03	0.03	0.97	-	-
2001	-	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-	-
2003	1	-	-	1	-	0.05	0.05	0.05	0.95	-	-
2004	-	-	-	-	-	-	-	-	-	0.0037	0.0015
2005	-	-	-	-	-	-	-	-	-	0.0081	0.0032
2006	-	-	-	-	-	-	-	-	-	0.0130	0.0052
2007	2	-	-	2	-	0.10	0.10	0.10	1.90	0.0240	0.0096
2008	-	-	-	-	-	-	-	-	-	0.0371	0.0148
2009	-	-	-	-	-	-	-	-	-	0.0478	0.0190
2010	1	1	-	-	-	-	-	1.00	-	0.0711	0.0283
2011	-	-	-	-	-	-	-	-	-	0.1216	0.0484
2012	-	-	-	-	-	-	-	-	-	0.1902	0.0757
2013	-	-	-	-	-	-	-	-	-	0.2815	0.1120
Total	6	2	-	4	-	0.30	0.18	2.18	3.82	0.7982	0.3176

Year	(12) Total Awarded (8)+(11)	(13) Payroll ($M)	(14) Frequency (12)/(13)	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Per 100 Miner Years
1994	# 0.0000	$ 60.2884	# 0.0000	493		2,255.2	-
1995	-	60.3418	-	509		2,186.4	-
1996	-	62.8347	-	527		2,170.2	-
1997	1.0000	73.6219	0.0136	542		2,374.7	0.0421
1998	-	31.3568	-	561		923.4	-
1999	-	30.4519	-	588		853.3	-
2000	0.0300	29.5370	0.0010	611		807.9	0.0037
2001	-	30.9593	-	644		793.0	-
2002	-	32.0980	-	662		801.6	-
2003	0.0500	36.3016	0.0014	675		895.7	0.0056
2004	0.0015	44.7008	0.0000	690		1,053.4	0.0001
2005	0.0032	51.9860	0.0001	716		1,166.7	0.0003
2006	0.0052	53.5772	0.0001	745		1,151.4	0.0004
2007	0.1096	59.5194	0.0018	779		1,221.3	0.0090
2008	0.0148	55.2550	0.0003	807		1,081.0	0.0014
2009	0.0190	47.6143	0.0004	836		886.9	0.0021
2010	1.0283	54.1439	0.0190	845		976.8	0.1053
2011	0.0484	66.1378	0.0007	858		1,166.7	0.0041
2012	0.0757	66.6865	0.0011	888		1,144.4	0.0066
2013	0.1120	67.3342	0.0017	917		1,103.8	0.0101
Total	2.4976	1,014.7465	0.0025			25,013.8	0.0100

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

Col.(15): Exhibit XII-D
Col.(16): N/A
Col.(17): Total of other classes
Col.(18): (12) / (17) x 100

IBNR Award Ratio(2000 & Prior): 0.2354
IBNR Award Ratio(2001 & Subseq.): 0.3979

Coal Mine Compensation Rating Bureau

Federal Excess Occupational Disease After Administration / Law Change Frequencies by Classification

GRAND TOTAL

Year	Counts (1) Reported	(2) Awarded	(3) Pending	(4) Denied	(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR	(11) IBNR Awarded (10)xAwd Ratio
1994	# 9	# 2	# 0	# 7	# 0.00	# 1.05	# 0.21	# 2.21	# 6.79	# 0.0000	# 0.0000
1995	6	1	1	4	0.30	0.60	0.12	1.42	4.58	-	-
1996	4	-	-	4	-	0.60	0.12	0.12	3.88	-	-
1997	8	2	-	6	-	0.90	0.18	2.18	5.82	-	-
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	1	1	2	0.30	0.30	0.06	1.36	2.64	-	-
2001	3	1	-	2	-	0.10	0.10	1.10	1.90	-	-
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	0.0037	0.0015
2005	1	1	-	-	-	-	-	1.00	-	0.0412	0.0164
2006	1	-	-	1	-	0.05	0.05	0.05	0.95	0.0908	0.0361
2007	4	-	1	3	0.30	0.15	0.15	0.45	3.55	0.1704	0.0678
2008	2	1	-	1	-	0.05	0.05	1.05	0.95	0.3010	0.1198
2009	-	-	-	-	-	-	-	-	-	0.4386	0.1745
2010	1	1	-	-	-	-	-	1.00	-	0.7779	0.3095
2011	2	1	-	1	-	0.05	0.05	1.05	0.95	1.3747	0.5470
2012	3	1	1	1	0.30	0.05	0.05	1.35	1.65	1.9764	0.7865
2013	1	-	1	-	0.30	-	-	0.30	0.70	2.9608	1.1781
Total	61	15	6	40	1.80	4.70	1.46	18.26	42.74	8.1355	3.2373

Year	(12) Total Awarded (8)+(11)	(13) Payroll ($M)	(14) Frequency (12)/(13)	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Per 100 Miner Years
1994	# 2.2100	$ 244.8651	# 0.0090	493		8,558.5	0.0258
1995	1.4200	226.1479	0.0063	509		7,564.5	0.0188
1996	0.1200	233.6910	0.0005	527		7,447.4	0.0016
1997	2.1800	231.2791	0.0094	542		7,100.5	0.0307
1998	0.3300	175.2343	0.0019	561		5,118.1	0.0064
1999	1.0900	163.5547	0.0067	588		4,537.2	0.0240
2000	1.3600	145.1712	0.0094	611		3,916.2	0.0347
2001	1.1000	152.1934	0.0072	644		3,894.8	0.0282
2002	0.0500	138.8712	0.0004	662		3,473.5	0.0014
2003	1.1000	133.9562	0.0082	675		3,298.7	0.0333
2004	1.0515	160.6970	0.0065	690		3,825.9	0.0275
2005	1.0164	196.6919	0.0052	716		4,438.5	0.0229
2006	0.0861	201.3494	0.0004	745		4,344.0	0.0020
2007	0.5178	220.7609	0.0023	779		4,533.4	0.0114
2008	1.1698	249.5671	0.0047	807		4,902.6	0.0239
2009	0.1745	229.4985	0.0008	836		4,301.4	0.0041
2010	1.3095	268.4115	0.0049	845		4,921.0	0.0266
2011	1.5970	323.1193	0.0049	858		5,836.6	0.0274
2012	2.1365	323.9237	0.0066	888		5,633.1	0.0379
2013	1.4781	294.2651	0.0050	917		4,906.1	0.0301
Total	21.4973	4,313.2485	0.0050			102,552.0	0.0210

IBNR Award Ratio(2000 & Prior): 0.2354
IBNR Award Ratio(2001 & Subseq.): 0.3979

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

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 2013

	Federal Basic Severities		
	Indemnity	Medical	Total
Underground Anthracite Class 160			
Total	6,407,218	685,503	7,092,722
Number of Claims	19	19	19
Average	337,222	36,079	373,301
Underground Bituminous Class 158			
Total	17,378,283	1,553,870	18,932,153
Number of Claims	53	53	53
Average	327,892	29,318	357,210
Surface Anthracite Class 153			
Total	9,919,603	991,862	10,911,466
Number of Claims	37	37	37
Average	268,097	26,807	294,904
Surface Bituminous Class 156			
Total	16,877,876	1,605,313	18,483,189
Number of Claims	54	54	54
Average	312,553	29,728	342,281
Four Standard Classes Combined			
Total	50,582,981	4,836,548	55,419,529
Number of Claims	163	163	163
Average	310,325	29,672	339,997
Other Classes			
Total	1,889,510	237,862	2,127,372
Number of Claims	8	8	8
Average	236,189	29,733	265,921
All Classes Combined			
Total	52,472,492	5,074,410	57,546,901
Number of Claims	171	171	171
Average	306,857	29,675	336,532

Source: Exhibit IX-B

FEDERAL BASIC OCCUPATIONAL DISEASE

ANTHRACITE UNDERGROUND (0160)

Year	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	0.500 Award Ratio	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	10-Year Payroll Weighted Frequency
2004	0	0	0	0	0.0276	0.0276	0.013805	1,345,321	0.013805	690	1.041	36.0	0.0383	
2005	0	0	0	0	0.0892	0.0892	0.044595	1,417,568	0.044595	716	1.041	36.6	0.1218	
2006	1	1	0	0	0.1586	0.1586	0.079280	1,442,524	1.079280	745	1.041	35.8	3.0147	
2007	0	0	0	0	0.2772	0.2772	0.138590	1,662,537	0.138590	779	1.041	39.4	0.3518	
2008	1	0	1	0	0.5336	1.5336	0.766790	2,136,713	0.766790	807	1.041	48.9	1.5681	
2009	1	0	0	1	0.4591	0.4591	0.229525	1,335,866	0.229525	836	1.041	29.5	0.7781	
2010	0	0	0	0	0.5888	0.5888	0.294420	1,299,588	0.294420	845	1.041	28.4	1.0367	
2011	1	0	1	0	0.7135	1.7135	0.856735	1,257,944	0.856735	858	1.041	27.1	3.1614	
2012	0	0	0	0	0.7435	0.7435	0.371735	1,029,260	0.371735	888	1.041	21.4	1.7371	
2013	1	0	1	0	0.3628	1.3628	0.681390	382,329	0.681390	917	1.041	7.7	8.8492	
TOTAL	5	1	3	1	3.9537	6.9537	3.476865	13,309,650	4.476865			310.8	20.6572	
AVERAGE													2.0657	

BITUMINOUS UNDERGROUND (0158)

Year	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	0.118 Award Ratio	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Payroll Weighted Frequency
2004	2	1	0	1	2.6875	2.6875	0.317124	46,073,900	1.317124	690	1.426	900.5	0.1463	
2005	1	0	0	1	4.4113	4.4113	0.520535	66,275,755	0.520535	716	1.426	1,248.3	0.0417	
2006	2	1	0	1	5.2920	5.2920	0.624455	70,465,937	1.624455	745	1.426	1,275.6	0.1273	
2007	3	0	1	2	6.7303	7.7303	0.912180	79,904,266	0.912180	779	1.426	1,383.3	0.0659	
2008	0	0	0	0	9.5496	9.5496	1.126849	101,353,977	1.126849	807	1.426	1,693.7	0.0665	
2009	4	0	0	4	10.6679	10.6679	1.258813	101,348,140	1.258813	836	1.426	1,634.9	0.0770	
2010	2	0	1	1	14.7149	15.7149	1.854363	125,393,576	1.854363	845	1.426	2,001.2	0.0927	
2011	3	0	1	2	19.4591	20.4591	2.414168	148,485,709	2.414168	858	1.426	2,333.9	0.1034	
2012	4	0	1	3	22.2969	23.2969	2.749033	153,602,187	2.749033	888	1.426	2,332.7	0.1178	
2013	2	0	2	0	23.0421	25.0421	2.954971	141,449,556	2.954971	917	1.426	2,080.2	0.1421	
TOTAL	23	2	6	15	118.8516	124.8516	14.732491	1,034,353,003	16.732491			16,884.3	0.9807	
AVERAGE													0.0981	

ANTHRACITE SURFACE (0153)

Year	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	0.417 Award Ratio	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Payroll Weighted Frequency
2004	4	2	0	2	0.9528	0.9528	0.397322	12,359,731	2.397322	690	1.041	330.9	0.7245	
2005	2	1	0	1	1.1063	1.1063	0.461319	12,140,911	1.461319	716	1.041	313.2	0.4666	
2006	1	0	0	1	1.3026	1.3026	0.543172	12,065,323	0.543172	745	1.041	299.2	0.1815	
2007	2	2	0	0	1.8626	1.8626	0.776717	14,866,556	2.776717	779	1.041	352.5	0.7877	
2008	1	0	0	1	2.3688	2.3688	0.987790	16,220,231	0.987790	807	1.041	371.3	0.2660	
2009	1	0	0	1	2.6531	2.6531	1.106347	15,893,528	1.106347	836	1.041	351.2	0.3150	
2010	0	0	0	0	2.5357	2.5357	1.057391	13,319,185	1.057391	845	1.041	291.2	0.3631	
2011	1	0	0	1	4.1957	4.1957	1.749590	19,507,428	1.749590	858	1.041	420.0	0.4166	
2012	0	0	0	0	6.1671	6.1671	2.571685	24,734,711	2.571685	888	1.041	514.6	0.4997	
2013	1	0	1	0	5.8910	6.8910	2.873560	20,261,498	2.873560	917	1.041	408.2	0.7040	
TOTAL	13	5	1	7	29.0357	30.0357	12.524891	161,369,102	17.524891			3,652.3	4.7247	
AVERAGE													0.4725	

BITUMINOUS SURFACE (0156)

Year	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	0.167 Award Ratio	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Payroll Weighted Frequency
2004	2	0	1	1	1.5207	2.5207	0.420954	56,217,298	0.420954	690	1.041	1,505.1	0.0280	
2005	1	0	0	1	2.0856	2.0856	0.348299	64,871,562	0.348299	716	1.041	1,673.7	0.0208	
2006	4	0	1	3	2.3963	3.3963	0.567177	63,798,502	0.567177	745	1.041	1,582.0	0.0359	
2007	4	1	0	3	2.7887	2.7887	0.465711	64,808,093	1.465711	779	1.041	1,536.9	0.0954	
2008	3	1	2	0	3.7316	5.7316	0.957169	74,601,231	1.957169	807	1.041	1,707.7	0.1146	
2009	0	0	0	0	3.6344	3.6344	0.606951	63,306,695	0.606951	836	1.041	1,398.9	0.0434	
2010	1	0	0	1	4.8184	4.8184	0.804676	74,255,177	0.804676	845	1.041	1,623.4	0.0496	
2011	1	0	0	1	6.3920	6.3920	1.067471	87,730,506	1.067471	858	1.041	1,888.9	0.0565	
2012	8	1	3	4	6.4578	9.4578	1.579459	77,870,990	2.579459	888	1.041	1,620.0	0.1592	
2013	2	0	1	1	6.0779	7.0779	1.182004	64,837,518	1.182004	917	1.041	1,306.2	0.0905	
TOTAL	26	3	8	15	39.9034	47.9034	7.999871	692,297,572	10.999871			15,842.8	0.6939	
AVERAGE													0.0694	

FOUR STANDARD CLASSES

YEAR	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	0.224 Award Ratio	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Weighted Frequency
2004	8	3	1	4	5.1886	6.1886	1.386244	115,996,250	4.149204	690		2,772.5	0.1497	
2005	4	1	0	3	7.6924	7.6924	1.723098	144,705,796	2.374747	716		3,271.8	0.0726	
2006	8	2	1	5	9.1494	10.1494	2.273463	147,772,286	3.814084	745		3,192.6	0.1195	
2007	9	3	1	5	11.6588	12.6588	2.835580	161,241,452	5.293198	779		3,312.1	0.1598	
2008	5	1	3	1	16.1835	19.1835	4.297104	194,312,152	4.838598	807		3,821.6	0.1266	
2009	6	0	0	6	17.4145	17.4145	3.900850	181,884,229	3.201637	836		3,414.5	0.0938	
2010	3	0	1	2	22.6579	23.6579	5.299372	214,267,526	4.010850	845		3,944.2	0.1017	
2011	6	0	2	4	30.7602	32.7602	7.338289	256,981,587	6.087964	858		4,669.9	0.1304	
2012	12	1	4	7	35.6653	39.6653	8.885029	257,237,148	8.271912	888		4,488.7	0.1843	
2013	6	0	5	1	35.3738	40.3738	9.043733	226,930,901	7.691925	917		3,802.3	0.2023	
TOTAL	67	11	18	38	191.7445	209.7445	38.734118	1,901,329,327	49.734118			36,690.2	1.3407	
AVERAGE													0.1341	0.133193

Source: Claim counts - CMCRB OD Database as of 4/30/2014
IBNR: Exhibit VIII-C-7, p1
Payroll- Exhibit X-A
The Award Ratio is equal to Awarded ÷ (Awarded plus Denied). Other Classes use the Total Award Ratio: 0.220=11 / [11 + 39]
The Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G
Estimated Miner Years = Payroll / (SAWW x Adj. Factor x 52)
Freqency per 100 Miner Years = (Expected Ult. Awarded / Est. Miner Years) x 100

FEDERAL BASIC OCCUPATIONAL DISEASE

COKE (0154)

Year	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	0.220 Award Ratio	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	10-Year Payroll Weighted Frequency
2004	0	0	0	0	0.1139	0.1139	0.025058	12,049,126	0.025058	690	1.041	322.6	0.0078	
2005	0	0	0	0	0.1393	0.1393	0.030646	12,860,979	0.030646	716	1.041	331.8	0.0092	
2006	0	0	0	0	0.1562	0.1562	0.034364	12,737,394	0.034364	745	1.041	315.8	0.0109	
2007	0	0	0	0	0.1872	0.1872	0.041184	13,669,925	0.041184	779	1.041	324.2	0.0127	
2008	0	0	0	0	0.1478	0.1478	0.032516	9,761,146	0.032516	807	1.041	223.4	0.0146	
2009	0	0	0	0	0.0861	0.0861	0.018942	5,173,552	0.018942	836	1.041	114.3	0.0166	
2010	0	0	0	0	0.0987	0.0987	0.021714	5,435,658	0.021714	845	1.041	118.8	0.0183	
2011	0	0	0	0	0.0725	0.0725	0.015950	3,599,086	0.015950	858	1.041	77.5	0.0206	
2012	0	0	0	0	0.1272	0.1272	0.027984	5,738,105	0.027984	888	1.041	119.4	0.0234	
2013	0	0	0	0	0.1170	0.1170	0.025740	4,791,910	0.025740	917	1.041	96.5	0.0267	
TOTAL	0	0	0	0	1.2459	1.2459	0.274098	85,816,881	0.274098			2,044.3	0.1608	
AVERAGE													0.0161	

AUGER (0157)

IBNR Factor adjusted by 0.4000

YEAR	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	0.220 Award Ratio	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Weighted Frequency
2004	0	0	0	0	0.0200	0.0200	0.004400	1,058,799	0.004400	690	1.041	28.3	0.0155	
2005	0	0	0	0	0.0222	0.0222	0.004884	1,026,537	0.004884	716	1.041	26.5	0.0184	
2006	0	0	0	0	0.0262	0.0262	0.005764	1,066,831	0.005764	745	1.041	26.5	0.0218	
2007	0	0	0	0	0.0307	0.0307	0.006754	1,121,156	0.006754	779	1.041	26.6	0.0254	
2008	0	0	0	0	0.0759	0.0759	0.016698	2,506,758	0.016698	807	1.041	57.4	0.0291	
2009	0	0	0	0	0.0315	0.0315	0.006930	946,963	0.006930	836	1.041	20.9	0.0332	
2010	0	0	0	0	0.0301	0.0301	0.006622	827,496	0.006622	845	1.041	18.1	0.0366	
2011	0	0	0	0	0.0474	0.0474	0.010428	1,176,255	0.010428	858	1.041	25.3	0.0412	
2012	0	0	0	0	0.0358	0.0358	0.007876	808,208	0.007876	888	1.041	16.8	0.0469	
2013	0	0	0	0	0.0534	0.0534	0.011748	1,093,790	0.011748	917	1.041	22.0	0.0534	
TOTAL	0	0	0	0	0.3732	0.3732	0.082104	11,632,793	0.082104			268.4	0.3215	
AVERAGE													0.0322	

ANTHRACITE CO-GEN (0181)

IBNR Factor adjusted by 0.5000

YEAR	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	0.220 Award Ratio	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Weighted Frequency
2004	0	0	0	0	0.1738	0.1738	0.038236	7,351,514	0.038236	690	1.041	196.8	0.0194	
2005	1	0	0	1	0.2127	0.2127	0.046794	7,855,289	0.046794	716	1.041	202.7	0.0231	
2006	0	0	0	0	0.2579	0.2579	0.056738	8,412,527	0.056738	745	1.041	208.6	0.0272	
2007	0	0	0	0	0.3146	0.3146	0.069212	9,186,706	0.069212	779	1.041	217.9	0.0318	
2008	0	0	0	0	0.2846	0.2846	0.062612	7,521,400	0.062612	807	1.041	172.2	0.0364	
2009	0	0	0	0	0.3135	0.3135	0.068970	7,534,735	0.068970	836	1.041	166.5	0.0414	
2010	0	0	0	0	0.3614	0.3614	0.079508	7,958,048	0.079508	845	1.041	174.0	0.0457	
2011	0	0	0	0	0.5532	0.5532	0.121704	10,981,642	0.121704	858	1.041	236.4	0.0515	
2012	0	0	0	0	0.5160	0.5160	0.113520	9,311,812	0.113520	888	1.041	193.7	0.0586	
2013	0	0	0	0	0.4856	0.4856	0.106832	7,958,314	0.106832	917	1.041	160.3	0.0666	
TOTAL	1	0	0	1	3.4733	3.4733	0.764126	84,071,987	0.764126			1,929.1	0.4017	
AVERAGE													0.0402	

BITUMINOUS CO-GEN (0182)

IBNR Factor adjusted by 0.5000

YEAR	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	0.220 Award Ratio	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Weighted Frequency
2004	0	0	0	0	0.1507	0.1507	0.033154	6,374,483	0.033154	690	1.426	124.6	0.0266	
2005	0	0	0	0	0.2309	0.2309	0.050798	8,524,752	0.050798	716	1.426	160.6	0.0316	
2006	0	0	0	0	0.2889	0.2889	0.063558	9,423,575	0.063558	745	1.426	170.6	0.0373	
2007	0	0	0	0	0.3708	0.3708	0.081576	10,829,140	0.081576	779	1.426	187.5	0.0435	
2008	0	0	0	0	0.3210	0.3210	0.070620	8,481,888	0.070620	807	1.426	141.7	0.0498	
2009	0	0	0	0	0.3273	0.3273	0.072006	7,866,413	0.072006	836	1.426	126.9	0.0567	
2010	0	0	0	0	0.3966	0.3966	0.087252	8,732,701	0.087252	845	1.426	139.4	0.0626	
2011	0	0	0	0	0.4585	0.4585	0.100870	9,102,411	0.100870	858	1.426	143.1	0.0705	
2012	0	0	0	0	0.5013	0.5013	0.110286	9,047,745	0.110286	888	1.426	137.4	0.0803	
2013	0	0	0	0	0.8014	0.8014	0.176308	13,133,423	0.176308	917	1.426	193.1	0.0913	
TOTAL	0	0	0	0	3.8474	3.8474	0.846428	91,516,531	0.846428			1,524.9	0.5502	
AVERAGE													0.0550	

Source: Claim counts - CMCRB OD Database as of 4/30/2014
IBNR: Exhibit VIII-C-7, p1
Payroll- Exhibit X-A-1
The Award Ratio is equal to Awarded ÷ (Awarded plus Denied). Other Classes use the Total Award Ratio: 0.220=11 / [11 + 39]
The Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G
Estimated Miner Years = Payroll / (SAWW x Adj. Factor x 52)
Freqency per 100 Miner Years = (Expected Ult. Awarded / Est. Miner Years) x 100

FEDERAL BASIC OCCUPATIONAL DISEASE

ANTHRACITE PREP PLANT (0183)

Year	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	0.220 Award Ratio	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	10-Year Payroll Weighted Frequency
2004	1	0	1	0	0.2083	1.2083	0.265826	4,406,653	0.265826	690	1.041	118.0	0.2253	
2005	0	0	0	0	0.2800	0.2800	0.061600	5,170,069	0.061600	716	1.041	133.4	0.0462	
2006	0	0	0	0	0.2996	0.2996	0.065912	4,885,882	0.065912	745	1.041	121.2	0.0544	
2007	0	0	0	0	0.3984	0.3984	0.087648	5,817,291	0.087648	779	1.041	138.0	0.0635	
2008	0	0	0	0	0.4340	0.4340	0.095480	5,733,543	0.095480	807	1.041	131.2	0.0728	
2009	0	0	0	0	0.5213	0.5213	0.114686	6,264,606	0.114686	836	1.041	138.4	0.0829	
2010	0	0	0	0	0.4429	0.4429	0.097438	4,876,927	0.097438	845	1.041	106.6	0.0914	
2011	0	0	0	0	0.6169	0.6169	0.135718	6,123,259	0.135718	858	1.041	131.8	0.1030	
2012	0	0	0	0	0.8388	0.8388	0.184536	7,569,023	0.184536	888	1.041	157.5	0.1172	
2013	0	0	0	0	0.8608	0.8608	0.189376	7,053,691	0.189376	917	1.041	142.1	0.1333	
TOTAL	1	0	1	0	4.9010	5.9010	1.298220	57,900,944	1.298220			1,318.2	0.9900	
Average													0.0990	

BITUMINOUS PREP PLANT (0184)

IBNR Factor adjusted by 0.5000

YEAR	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	0.220 Award Ratio	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Weighted Frequency
2004	0	0	0	0	0.3182	0.3182	0.070004	13,460,201	0.070004	690	1.426	263.1	0.0266	
2005	1	0	1	0	0.4481	1.4481	0.318582	16,548,307	0.318582	716	1.426	311.7	0.1022	
2006	0	0	0	0	0.5228	0.5228	0.115016	17,050,967	0.115016	745	1.426	308.7	0.0373	
2007	0	0	0	0	0.6470	0.6470	0.142340	18,895,192	0.142340	779	1.426	327.1	0.0435	
2008	0	0	0	0	0.8042	0.8042	0.176924	21,250,256	0.176924	807	1.426	355.1	0.0498	
2009	0	0	0	0	0.8250	0.8250	0.181500	19,828,012	0.181500	836	1.426	319.9	0.0567	
2010	0	0	0	0	1.1949	1.1949	0.262878	26,313,130	0.262878	845	1.426	419.9	0.0626	
2011	1	0	1	0	1.7709	2.7709	0.609598	35,155,068	0.609598	858	1.426	552.6	0.1103	
2012	0	0	0	0	1.8957	1.8957	0.417054	34,211,729	0.417054	888	1.426	519.6	0.0803	
2013	0	0	0	0	2.0322	2.0322	0.447084	33,303,121	0.447084	917	1.426	489.8	0.0913	
TOTAL	2	0	2	0	10.4590	12.4590	2.740980	236,015,983	2.740980			3,867.5	0.6606	
Average													0.0661	

TOTAL OTHER CLASSES

YEAR	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	0.220 Award Ratio	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Weighted Frequency
2004	1	0	1	0	0.9849	1.9849	0.436678	44,700,776	0.436678	690		1,053.4	0.0415	
2005	2	0	1	1	1.3332	2.3332	0.513304	51,985,933	0.513304	716		1,166.7	0.0440	
2006	0	0	0	0	1.5516	1.5516	0.341352	53,577,176	0.341352	745		1,151.4	0.0296	
2007	0	0	0	0	1.9487	1.9487	0.428714	59,519,410	0.428714	779		1,221.3	0.0351	
2008	0	0	0	0	2.0675	2.0675	0.454850	55,254,991	0.454850	807		1,081.0	0.0421	
2009	0	0	0	0	2.1047	2.1047	0.463034	47,614,281	0.463034	836		886.9	0.0522	
2010	0	0	0	0	2.5246	2.5246	0.555412	54,143,960	0.555412	845		976.8	0.0569	
2011	1	0	1	0	3.5194	4.5194	0.994268	66,137,721	0.994268	858		1,166.7	0.0852	
2012	0	0	0	0	3.9148	3.9148	0.861256	66,686,622	0.861256	888		1,144.4	0.0753	
2013	0	0	0	0	4.3504	4.3504	0.957088	67,334,249	0.957088	917		1,103.8	0.0867	
TOTAL	4	0	3	1	24.2998	27.2998	6.005956	566,955,119	6.005956			10,952.4	0.5486	
Average													0.0549	0.055542

GRAND TOTAL

YEAR	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	0.220 Award Ratio	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Weighted Frequency
2004	9	3	2	4	6.1735	8.1735	1.798168	160,697,026	4.585882	690		3,825.9	0.1199	
2005	6	1	1	4	9.0256	10.0256	2.205632	196,691,729	2.888051	716		4,438.5	0.0651	
2006	8	2	1	5	10.7010	11.7010	2.574218	201,349,462	4.155436	745		4,344.0	0.0957	
2007	9	3	1	5	13.6075	14.6075	3.213659	220,760,862	5.721912	779		4,533.4	0.1262	
2008	5	1	3	1	18.2510	21.2510	4.675220	249,567,143	5.293448	807		4,902.6	0.1080	
2009	6	0	0	6	19.5192	19.5192	4.294226	229,498,510	3.664671	836		4,301.4	0.0852	
2010	3	0	1	2	25.1825	26.1825	5.760152	268,411,486	4.566262	845		4,921.0	0.0928	
2011	7	0	3	4	34.2796	37.2796	8.201516	323,119,308	7.082232	858		5,836.6	0.1213	
2012	12	1	4	7	39.5801	43.5801	9.587624	323,923,770	9.133168	888		5,633.1	0.1621	
2013	6	0	5	1	39.7242	44.7242	9.839326	294,265,150	8.649013	917		4,906.1	0.1763	
TOTAL	71	11	21	39	216.0443	237.0443	52.149742	2,468,284,446	55.740074			47,642.6	1.1526	
Average													0.1153	0.115357

Source: Claim counts - CMCRB OD Database as of 4/30/2014
IBNR: Exhibit VIII-C-7, p1
Payroll- Exhibit X-A-1
The Award Ratio is equal to Awarded ÷ (Awarded plus Denied). Other Classes use the Total Award Ratio: 0.220=11 / [11 + 39]
The Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G
Estimated Miner Years = Payroll / (SAWW x Adj. Factor x 52)
Freqency per 100 Miner Years = (Expected Ult. Awarded / Est. Miner Years) x 100

COAL MINE COMPENSATION RATING BUREAU
FEDERAL OCCUPATIONAL DISEASE
ANTHRACITE UNDERGROUND (0160)

Claims with File Dates on or before 12-31-2013, Valued as of 4-30-2014

Incremental Frequency and IBNR

Reported Claims

Months	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	Year																										
12	3	4	5	4	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
24	3	5	5	5	1	1	2	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	
36	3	5	7	7	1	1	2	1	0	0	0	0	0	1	2	0	0	0	0	1	0	0	1	0	1		
48	3	5	8	9	1	1	2	1	0	0	0	0	0	1	2	0	0	0	0	1	0	0	1	0			
60	3	5	11	9	1	2	2	1	0	0	0	0	1	1	2	0	0	0	0	1	0	0	1				
72	4	5	11	10	1	2	2	1	1	0	0	0	1	1	3	0	0	0	0	1	0	1					
84	5	7	11	13	1	2	2	1	1	0	0	0	1	1	4	0	0	0	0	1	0						
96	6	7	12	14	1	2	2	1	1	0	0	0	1	1	4	0	1	0	0	1							
108	7	7	12	14	1	2	2	1	1	0	0	0	1	1	4	0	1	0	0								
120	9	7	12	14	1	2	2	1	1	0	0	0	1	1	4	0	1	0									
132	9	7	12	14	1	2	2	1	1	0	0	0	1	1	4	0	1										
144	9	7	12	14	1	2	2	1	1	0	0	0	1	1	4	0											
156	9	8	12	14	1	2	2	1	2	0	0	0	2	1	4												
168	10	8	12	14	1	2	2	1	2	0	0	0	2	1													
180	10	9	12	14	1	2	2	1	2	0	0	1	3														
192	11	9	12	14	1	2	2	1	2	0	0	1															
204	11	9	12	14	1	2	2	1	2	0	0																
216	11	9	12	14	1	2	2	1	2	0																	
228	11	9	12	15	2	2	2	1	2																		
240	11	9	12	15	2	2	2	1																			

Incremental Changes

12-24													0	1	0	0	0	0	0	1	0	0	0	0	0	0	
24-36												0	0	0	2	0	0	0	0	0	0	0	0	0	1		
36-48											0	0	0	0	0	0	0	0	0	0	0	0	0	0			
48-60										0	0	0	1	0	0	0	0	0	0	0	0	0	0				
60-72									1	0	0	0	0	0	1	0	0	0	0	0	0	1					
72-84								0	0	0	0	0	0	0	1	0	0	0	0	0	0						
84-96							0	0	0	0	0	0	0	0	0	0	1	0	0	0							
96-108						0	0	0	0	0	0	0	0	0	0	0	0	0	0								
108-120					0	0	0	0	0	0	0	0	0	0	0	0	0	0									
120-132				0	0	0	0	0	0	0	0	0	0	0	0	0	0										
132-144			0	0	0	0	0	0	0	0	0	0	0	0	0	0											
144-156		1	0	0	0	0	0	0	1	0	0	0	1	0	0												
156-168	1	0	0	0	0	0	0	0	0	0	0	0	0	0													
168-180	0	1	0	0	0	0	0	0	0	0	0	1	1														
180-192	1	0	0	0	0	0	0	0	0	0	0	0															
192-204	0	0	0	0	0	0	0	0	0	0	0																
204-216	0	0	0	0	0	0	0	0	0	0																	
216-228	0	0	0	1	1	0	0	0	0																		
228-240	0	0	0	0	0	0	0	0																			

Payroll ($Millions)	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average	Smoothed
	4.06188	2.74569	2.06629	1.54705	0.71815	0.93280	1.18200	1.31068	1.49352	1.61270	1.57161	1.76229	1.81416	1.37016	1.63652	1.38655	1.35427	1.34532	1.41757	1.44252	1.66254	2.13671	1.33587	1.29959	1.25794	1.02926	0.38233		
12-24														0.72984	0.00000	0.00000	0.00000	0.00000	0.00000	0.69323	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		0.10947	0.22654
24-36													0.00000	0.00000	1.22211	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.79495			0.15516	0.15516
36-48												0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000				0.00000	0.11407
48-60											0.00000	0.00000	0.55122	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000					0.04240	0.10947
60-72										0.00000	0.00000	0.00000	0.00000	0.00000	0.61105	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.46801						0.08300	0.09391
72-84									0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.61105	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000							0.04700	0.08300
84-96								0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.73841	0.00000	0.00000	0.00000								0.05680	0.05680
96-108							0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000									0.00000	0.04700
108-120						0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000										0.00000	0.04240
120-132					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000											0.00000	0.02052
132-144				0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000												0.00000	0.00000
144-156			0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.66956	0.00000	0.00000	0.00000	0.55122	0.00000	0.00000													0.09391	0.00000
156-168		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000														0.00000	0.00000
168-180	0.00000	0.36421	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.56744	0.55122															0.11407	0.00000
180-192	0.24619	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																0.02052	0.00000
192-204	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																	0.00000	0.00000
204-216	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																		0.00000	0.00000
216-228	0.00000	0.00000	0.00000	0.64639	1.39247	0.00000	0.00000	0.00000	0.00000																			0.22654	0.00000
228-240	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																				0.00000	0.00000
																											Total=	0.94887	0.94887

IBNR Claims

Cumulative Factor									0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.02052	0.06292	0.10992	0.16672	0.24972	0.34363	0.45310	0.56717	0.72233	0.94887
times Payroll									0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.02761	0.08919	0.15856	0.27718	0.53358	0.45905	0.58884	0.71347	0.74347	0.36278

Source: Coal Mine Compensation Rating Bureau Database as of 4-30-2014
Payrolls: Exhibit X-A-1 & X-A-2

COAL MINE COMPENSATION RATING BUREAU
FEDERAL OCCUPATIONAL DISEASE
BITUMINOUS UNDERGROUND (0158)

Claims with File Dates on or before 12-31-2013, Valued as of 4-30-2014

Incremental Frequency and IBNR

Reported Claims

Months	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
													Year														
12	4	4	4	3	2	2	1	4	3	0	0	1	2	3	1	1	0	0	0	1	0	0	0	0	2	2	2
24	8	7	5	3	6	4	1	4	3	2	1	2	4	5	1	3	0	0	0	1	0	0	1	2	2	4	
36	8	9	5	7	7	5	2	7	5	2	4	5	6	5	2	5	0	1	0	1	2	0	1	2	3		
48	8	10	5	8	9	9	3	8	6	2	5	5	7	5	2	6	0	2	0	2	2	0	4	2			
60	9	10	5	9	9	11	4	9	7	3	6	5	7	5	3	7	0	2	0	2	3	0	4				
72	9	10	6	10	9	14	4	9	8	4	7	5	7	5	4	7	0	2	0	2	3	0					
84	9	10	6	12	10	14	4	9	8	4	8	5	7	7	4	7	0	2	1	2	3						
96	11	11	7	12	10	14	5	9	8	5	8	5	8	7	4	8	0	2	1	2							
108	13	11	8	13	11	15	5	11	8	5	8	5	9	7	6	8	1	2	1								
120	13	12	9	14	12	19	5	11	8	5	8	5	10	7	6	12	1	2									
132	13	12	9	14	12	19	5	11	8	5	9	5	11	9	7	12	1										
144	13	12	10	14	13	19	6	11	8	5	10	5	15	12	7	14											
156	13	12	10	16	14	19	6	11	8	5	10	5	16	12	7												
168	13	12	10	16	14	20	6	11	9	5	10	6	16	14													
180	13	13	10	17	14	20	7	12	9	5	10	6	17														
192	13	14	11	17	15	21	7	13	9	5	10	7															
204	13	16	11	17	19	21	8	13	10	6	10																
216	13	16	12	17	19	21	8	14	10	8																	
228	13	16	12	17	19	23	9	15	10																		
240	14	16	12	17	19	25	9	17																			

Incremental Changes

12-24													2	2	0	2	0	0	0	0	0	0	1	2	0	2	
24-36												3	2	0	1	2	0	1	0	0	2	0	0	0	1		
36-48											1	0	1	0	0	1	0	1	0	1	0	0	3	0			
48-60										1	1	0	0	0	1	1	0	0	0	0	1	0	0				
60-72									1	1	1	0	0	0	1	0	0	0	0	0	0	0					
72-84								0	0	0	1	0	0	2	0	0	0	0	1	0	0						
84-96							1	0	0	1	0	0	1	0	0	1	0	0	0	0							
96-108						1	0	2	0	0	0	0	1	0	2	0	1	0	0								
108-120					1	4	0	0	0	0	0	0	1	0	0	4	0	0									
120-132				0	0	0	0	0	0	0	1	0	1	2	1	0	0										
132-144			1	0	1	0	1	0	0	0	1	0	4	3	0	2											
144-156		0	0	2	1	0	0	0	0	0	0	0	1	0	0												
156-168	0	0	0	0	0	1	0	0	1	0	0	1	0	2													
168-180	0	1	0	1	0	0	1	1	0	0	0	0	1														
180-192	0	1	1	0	1	1	0	1	0	0	0	1															
192-204	0	2	0	0	4	0	1	0	1	1	0																
204-216	0	0	1	0	0	0	0	1	0	2																	
216-228	0	0	0	0	0	2	1	1	0																		
228-240	1	0	0	0	0	2	0	2																			

Payroll	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
($Millions)	42.07670	51.13343	58.50753	63.27152	58.31824	63.40130	52.75653	60.59094	65.27115	75.22304	70.39669	61.08733	58.68524	47.52056	48.52263	40.83800	36.49841	46.07390	66.27576	70.46594	79.90427	101.35398	101.34814	125.39358	148.48571	153.60219	141.44956		
																												Average	Smoothed
12-24														0.04209	0.00000	0.04897	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00987	0.01595	0.00000	0.01302		0.00999	0.01774
24-36													0.03408	0.00000	0.02061	0.04897	0.00000	0.02170	0.00000	0.00000	0.02503	0.00000	0.00000	0.00000	0.00673			0.01209	0.01411
36-48												0.00000	0.01704	0.00000	0.00000	0.02449	0.00000	0.02170	0.00000	0.01419	0.00000	0.00000	0.02960	0.00000				0.00823	0.01370
48-60											0.01421	0.00000	0.00000	0.00000	0.02061	0.02449	0.00000	0.00000	0.00000	0.00000	0.01251	0.00000	0.00000					0.00552	0.01209
60-72										0.01329	0.01421	0.00000	0.00000	0.00000	0.02061	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000						0.00370	0.01104
72-84									0.00000	0.00000	0.01421	0.00000	0.00000	0.04209	0.00000	0.00000	0.00000	0.00000	0.01509	0.00000	0.00000							0.00549	0.00999
84-96								0.00000	0.00000	0.01329	0.00000	0.00000	0.01704	0.00000	0.00000	0.02449	0.00000	0.00000	0.00000	0.00000								0.00422	0.00913
96-108							0.00000	0.03301	0.00000	0.00000	0.00000	0.00000	0.01704	0.00000	0.04122	0.00000	0.02740	0.00000	0.00000									0.00913	0.00854
108-120						0.06309	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01704	0.00000	0.00000	0.09795	0.00000	0.00000										0.01370	0.00823
120-132					0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01421	0.00000	0.01704	0.04209	0.02061	0.00000	0.00000											0.00723	0.00744
132-144				0.00000	0.01715	0.00000	0.01895	0.00000	0.00000	0.00000	0.01421	0.00000	0.06816	0.06313	0.00000	0.04897												0.01774	0.00723
144-156			0.00000	0.03161	0.01715	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01704	0.00000	0.00000													0.00506	0.00689
156-168		0.00000	0.00000	0.00000	0.00000	0.01577	0.00000	0.00000	0.01532	0.00000	0.00000	0.01637	0.00000	0.04209														0.00689	0.00676
168-180	0.00000	0.01956	0.00000	0.01580	0.00000	0.00000	0.01895	0.01650	0.00000	0.00000	0.00000	0.00000	0.01704															0.00676	0.00602
180-192	0.00000	0.01956	0.01709	0.00000	0.01715	0.01577	0.00000	0.01650	0.00000	0.00000	0.00000	0.01637																0.00854	0.00552
192-204	0.00000	0.03911	0.00000	0.00000	0.06859	0.00000	0.01895	0.00000	0.01532	0.01329	0.00000																	0.01411	0.00549
204-216	0.00000	0.00000	0.01709	0.00000	0.00000	0.00000	0.00000	0.01650	0.00000	0.02659																		0.00602	0.00506
216-228	0.00000	0.00000	0.00000	0.00000	0.00000	0.03155	0.01895	0.01650	0.00000																			0.00744	0.00422
228-240	0.02377	0.00000	0.00000	0.00000	0.00000	0.03155	0.00000	0.03301																				0.01104	0.00370
																											Total=	0.16290	0.16290

IBNR Claims

Cumulative Factor									0.00370	0.00792	0.01298	0.01847	0.02399	0.03001	0.03677	0.04366	0.05089	0.05833	0.06656	0.07510	0.08423	0.09422	0.10526	0.11735	0.13105	0.14516	0.16290
times Payroll									0.24150	0.59577	0.91375	1.12828	1.40786	1.42609	1.78418	1.78299	1.85740	2.68749	4.41131	5.29199	6.73034	9.54957	10.66791	14.71494	19.45905	22.29689	23.04213

Source: Coal Mine Compensation Rating Bureau Database as of 4-30-2014
Payrolls: Exhibit X-A-1 & X-A-2

COAL MINE COMPENSATION RATING BUREAU
FEDERAL OCCUPATIONAL DISEASE
ANTHRACITE SURFACE (0153)

Claims with File Dates on or before 12-31-2013, Valued as of 4-30-2014

Incremental Frequency and IBNR

Reported Claims

Months	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
12	20	10	13	5	11	5	10	11	2	5	4	4	0	1	2	3	0	2	1	0	2	0	0	0	0	0	1
24	20	14	15	15	16	10	14	14	6	6	7	6	0	4	2	3	1	3	2	0	2	1	0	0	1	0	
36	22	14	17	17	17	11	16	17	10	6	7	6	0	4	2	4	3	3	2	0	2	1	1	0	1		
48	22	14	18	20	20	13	21	19	12	6	8	7	0	5	4	5	3	3	2	1	2	1	1	0			
60	23	14	18	22	22	14	21	21	13	6	8	7	0	5	5	5	3	4	2	1	2	1	1				
72	24	15	19	23	24	14	22	21	13	8	8	8	0	5	5	6	3	4	2	1	2	1					
84	27	17	20	24	25	14	23	21	15	8	8	8	0	5	5	6	4	4	2	1	2						
96	31	19	20	26	25	14	24	21	16	9	8	8	0	5	5	6	4	4	2	1							
108	33	22	20	26	25	14	24	21	19	9	8	8	0	5	6	6	4	4	2								
120	38	23	21	26	25	14	24	22	21	9	8	8	1	7	6	6	4	4									
132	38	24	22	26	25	14	24	23	21	9	8	8	1	7	7	6	4										
144	39	24	22	26	25	14	24	23	21	9	8	9	1	7	7	6											
156	39	24	22	26	26	14	24	23	21	9	9	9	1	7	7												
168	39	24	24	27	26	14	25	24	23	9	9	9	1	7													
180	40	24	25	28	26	14	25	24	24	10	9	9	1														
192	41	24	25	28	26	14	25	24	24	10	9	9															
204	42	24	26	28	26	14	25	24	24	11	9																
216	42	24	26	28	26	14	25	24	24	11																	
228	42	25	27	28	26	15	25	24	24																		
240	42	25	27	29	26	15	25	25																			

Incremental Changes

12-24													0	3	0	0	1	1	1	0	0	1	0	0	1	0	
24-36												0	0	0	0	1	2	0	0	0	0	0	1	0	0		
36-48											1	1	0	1	2	1	0	0	0	1	0	0	0	0			
48-60										0	0	0	0	0	1	0	0	1	0	0	0	0	0				
60-72									0	2	0	1	0	0	0	1	0	0	0	0	0	0					
72-84								0	2	0	0	0	0	0	0	0	1	0	0	0	0						
84-96							1	0	1	1	0	0	0	0	0	0	0	0	0	0							
96-108						0	0	0	3	0	0	0	0	0	1	0	0	0	0								
108-120					0	0	0	1	2	0	0	0	1	2	0	0	0	0									
120-132				0	0	0	0	1	0	0	0	0	0	0	1	0	0										
132-144			0	0	0	0	0	0	0	0	0	1	0	0	0	0											
144-156		0	0	0	1	0	0	0	0	0	1	0	0	0	0												
156-168	0	0	2	1	0	0	1	1	2	0	0	0	0	0													
168-180	1	0	1	1	0	0	0	0	1	1	0	0	0														
180-192	1	0	0	0	0	0	0	0	0	0	0	0															
192-204	1	0	1	0	0	0	0	0	0	1	0																
204-216	0	0	0	0	0	0	0	0	0	0																	
216-228	0	1	1	0	0	1	0	0	0																		
228-240	0	0	0	1	0	0	0	1																			

Payroll ($Millions)	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average	Smoothed
	25.00816	23.09936	27.04451	32.39289	30.95658	29.47612	30.10339	30.21045	20.28889	16.19217	17.78314	17.37629	18.44114	16.80781	12.92375	11.04657	11.92821	12.35973	12.14091	12.06532	14.86656	16.22023	15.89353	13.31919	19.50743	24.73471	20.26150		
12-24														0.17849	0.00000	0.00000	0.08383	0.08091	0.08237	0.00000	0.00000	0.06165	0.00000	0.00000	0.05126	0.00000		0.04142	0.04142
24-36													0.00000	0.00000	0.00000	0.09053	0.16767	0.00000	0.00000	0.00000	0.00000	0.00000	0.06292	0.00000	0.00000			0.02470	0.03425
36-48												0.05755	0.00000	0.05950	0.15475	0.09053	0.00000	0.00000	0.00000	0.08288	0.00000	0.00000	0.00000	0.00000				0.03425	0.02470
48-60											0.00000	0.00000	0.00000	0.00000	0.07738	0.00000	0.00000	0.08091	0.00000	0.00000	0.00000	0.00000	0.00000					0.01218	0.02345
60-72										0.12352	0.00000	0.05755	0.00000	0.00000	0.00000	0.09053	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000						0.02089	0.02089
72-84									0.09858	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.08383	0.00000	0.00000	0.00000	0.00000							0.01403	0.02075
84-96								0.00000	0.04929	0.06176	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000								0.00854	0.01733
96-108							0.00000	0.00000	0.14786	0.00000	0.00000	0.00000	0.00000	0.00000	0.07738	0.00000	0.00000	0.00000	0.00000									0.01733	0.01684
108-120						0.00000	0.00000	0.03310	0.09858	0.00000	0.00000	0.00000	0.05423	0.11899	0.00000	0.00000	0.00000	0.00000										0.02345	0.01403
120-132					0.00000	0.00000	0.00000	0.03310	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.07738	0.00000	0.00000											0.00850	0.01269
132-144				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												0.00443	0.01261
144-156			0.00000	0.00000	0.03230	0.00000	0.00000	0.00000	0.00000	0.00000	0.05623	0.00000	0.00000	0.00000	0.00000													0.00681	0.01218
156-168		0.00000	0.07395	0.03087	0.00000	0.00000	0.03322	0.03310	0.09858	0.00000	0.00000	0.00000	0.00000	0.00000														0.02075	0.00854
168-180	0.03999	0.00000	0.03698	0.03087	0.00000	0.00000	0.00000	0.00000	0.04929	0.06176	0.00000	0.00000	0.00000															0.01684	0.00850
180-192	0.03999	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																0.00333	0.00800
192-204	0.03999	0.00000	0.03698	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06176	0.00000																	0.01261	0.00681
204-216	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																		0.00000	0.00443
216-228	0.00000	0.04329	0.03698	0.00000	0.00000	0.03393	0.00000	0.00000	0.00000																			0.01269	0.00333
228-240	0.00000	0.00000	0.00000	0.03087	0.00000	0.00000	0.00000	0.03310																				0.00800	0.00000
																											Total=	0.29075	0.29075

IBNR Claims

Cumulative Factor									0.00000	0.00333	0.00776	0.01457	0.02257	0.03107	0.03961	0.05179	0.06440	0.07709	0.09112	0.10796	0.12529	0.14604	0.16693	0.19038	0.21508	0.24933	0.29075
times Payroll									0.00000	0.05392	0.13800	0.25317	0.41622	0.52222	0.51191	0.57210	0.76818	0.95281	1.10628	1.30257	1.86263	2.36880	2.65311	2.53571	4.19566	6.16711	5.89103

Source: Coal Mine Compensation Rating Bureau Database as of 4-30-2014
Payrolls: Exhibit X-A-1 & X-A-2

COAL MINE COMPENSATION RATING BUREAU
FEDERAL OCCUPATIONAL DISEASE
BITUMINOUS SURFACE (0156)

Claims with File Dates on or before 12-31-2013, Valued as of 4-30-2014

Incremental Frequency and IBNR

Reported Claims

Months	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
12	14	7	10	10	6	6	1	1	5	4	2	0	0	3	0	1	0	1	0	0	2	0	0	1	0	3	2
24	18	7	12	18	12	13	3	5	7	5	3	2	2	3	1	2	0	1	0	1	2	1	0	1	1	8	
36	18	7	14	19	17	17	5	6	8	5	3	2	2	3	1	2	1	1	1	1	2	1	0	1	1		
48	19	8	14	22	20	19	6	7	10	6	5	2	2	5	1	2	1	1	1	2	3	1	0	1			
60	20	8	16	22	21	19	8	8	11	7	5	2	2	6	1	2	1	1	1	2	3	1	0				
72	20	8	16	23	23	20	9	9	13	8	5	3	2	7	1	2	1	1	1	2	4	3					
84	20	8	18	26	25	20	9	10	14	9	7	3	2	7	2	2	1	1	1	4	4						
96	20	8	18	28	27	20	9	11	15	10	7	4	2	7	2	2	1	1	1	4							
108	21	9	19	28	27	22	10	12	18	10	7	5	2	7	2	2	2	1	1								
120	21	9	20	29	30	23	10	13	21	10	8	5	2	7	2	3	3	2									
132	21	10	20	29	30	23	10	13	21	11	8	5	2	7	3	4	3										
144	21	10	20	30	30	23	10	13	21	11	8	6	2	7	3	4											
156	21	11	20	31	31	23	10	13	21	11	8	6	2	7	3												
168	22	12	20	33	31	24	10	14	22	12	8	6	2	7													
180	22	14	21	33	33	24	11	14	22	13	8	6	2														
192	23	14	21	34	33	24	11	14	22	13	9	6															
204	23	14	21	36	34	25	13	15	22	13	10																
216	23	14	21	36	34	26	13	15	24	14																	
228	23	14	21	36	34	26	13	15	24																		
240	23	14	22	37	35	27	13	15																			

Incremental Changes

12-24													2	0	1	1	0	0	0	1	0	1	0	0	1	5	
24-36												0	0	0	0	0	1	0	1	0	0	0	0	0	0		
36-48											2	0	0	2	0	0	0	0	0	1	1	0	0	0			
48-60										1	0	0	0	1	0	0	0	0	0	0	0	0	0				
60-72									2	1	0	1	0	1	0	0	0	0	0	0	1	2					
72-84								1	1	1	2	0	0	0	1	0	0	0	0	2	0						
84-96							0	1	1	1	0	1	0	0	0	0	0	0	0	0							
96-108						2	1	1	3	0	0	1	0	0	0	0	1	0	0								
108-120					3	1	0	1	3	0	1	0	0	0	0	1	1	1									
120-132				0	0	0	0	0	0	1	0	0	0	0	1	1	0										
132-144			0	1	0	0	0	0	0	0	0	1	0	0	0	0											
144-156		1	0	1	1	0	0	0	0	0	0	0	0	0	0												
156-168	1	1	0	2	0	1	0	1	1	1	0	0	0	0													
168-180	0	2	1	0	2	0	1	0	0	1	0	0	0														
180-192	1	0	0	1	0	0	0	0	0	0	1	0															
192-204	0	0	0	2	1	1	2	1	0	0	1																
204-216	0	0	0	0	0	1	0	0	2	1																	
216-228	0	0	0	0	0	0	0	0	0																		
228-240	0	0	1	1	1	1	0	0																			

Payroll ($Millions)	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average	Smoothed
	134.30589	126.49321	125.36171	124.18907	104.58350	100.99938	94.55659	92.46464	78.75261	77.82841	67.90579	63.65156	54.16227	49.93562	58.15133	53.50209	47.87374	56.21730	64.87156	63.79850	64.80809	74.60123	63.30670	74.25518	87.73051	77.87099	64.83752		
12-24														0.00000	0.01720	0.01869	0.00000	0.00000	0.00000	0.01567	0.00000	0.01340	0.00000	0.00000	0.01140	0.06421		0.01081	0.01081
24-36													0.00000	0.00000	0.00000	0.00000	0.02089	0.00000	0.01542	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000			0.00279	0.01007
36-48												0.00000	0.00000	0.04005	0.00000	0.00000	0.00000	0.00000	0.00000	0.01567	0.01543	0.00000	0.00000	0.00000				0.00547	0.00797
48-60											0.00000	0.00000	0.00000	0.02003	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000					0.00154	0.00748
60-72										0.01285	0.00000	0.01571	0.00000	0.02003	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01543	0.02681						0.00699	0.00739
72-84									0.01270	0.01285	0.02945	0.00000	0.00000	0.00000	0.01720	0.00000	0.00000	0.00000	0.00000	0.03135	0.00000							0.00797	0.00699
84-96								0.01081	0.01270	0.01285	0.00000	0.01571	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000								0.00401	0.00547
96-108							0.01058	0.01081	0.03809	0.00000	0.00000	0.01571	0.00000	0.00000	0.00000	0.00000	0.02089	0.00000	0.00000									0.00739	0.00541
108-120						0.00990	0.00000	0.01081	0.03809	0.00000	0.01473	0.00000	0.00000	0.00000	0.00000	0.01869	0.02089	0.01779										0.01007	0.00510
120-132					0.00000	0.00000	0.00000	0.00000	0.00000	0.01285	0.00000	0.00000	0.00000	0.00000	0.01720	0.01869	0.00000											0.00375	0.00482
132-144				0.00805	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01571	0.00000	0.00000	0.00000	0.00000												0.00183	0.00444
144-156			0.00000	0.00805	0.00956	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000													0.00135	0.00401
156-168		0.00791	0.00000	0.01610	0.00000	0.00990	0.00000	0.01081	0.01270	0.01285	0.00000	0.00000	0.00000	0.00000														0.00541	0.00375
168-180	0.00000	0.01581	0.00798	0.00000	0.01912	0.00000	0.01058	0.00000	0.00000	0.01285	0.00000	0.00000	0.00000															0.00510	0.00279
180-192	0.00745	0.00000	0.00000	0.00805	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01473	0.00000																0.00252	0.00252
192-204	0.00000	0.00000	0.00000	0.01610	0.00956	0.00990	0.02115	0.01081	0.00000	0.00000	0.01473																	0.00748	0.00183
204-216	0.00000	0.00000	0.00000	0.00000	0.00000	0.00990	0.00000	0.00000	0.02540	0.01285																		0.00482	0.00154
216-228	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																			0.00000	0.00135
228-240	0.00000	0.00000	0.00798	0.00805	0.00956	0.00990	0.00000	0.00000																				0.00444	0.00000
																											Total=	0.09374	0.09374

IBNR Claims

Cumulative Factor									0.00000	0.00135	0.00289	0.00472	0.00724	0.01003	0.01378	0.01779	0.02223	0.02705	0.03215	0.03756	0.04303	0.05002	0.05741	0.06489	0.07286	0.08293	0.09374
times Payroll									0.00000	0.10507	0.19625	0.30044	0.39213	0.50085	0.80133	0.95180	1.06423	1.52068	2.08562	2.39627	2.78869	3.73155	3.63444	4.81842	6.39204	6.45784	6.07787

Source: Coal Mine Compensation Rating Bureau Database as of 4-30-2014
Payrolls: Exhibit X-A-1 & X-A-2

COAL MINE COMPENSATION RATING BUREAU
FEDERAL OCCUPATIONAL DISEASE
OTHER CLASSIFICATIONS - FEDERAL

Claims with File Dates on or before 12-31-2013, Valued as of 4-30-2014

Incremental Frequency and IBNR

Reported Claims

Months	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	Year																										
12	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0
24	0	0	0	0	0	1	1	0	0	0	2	2	1	0	0	1	0	1	1	0	0	0	0	0	0	0	
36	0	0	0	0	0	1	1	0	0	0	4	2	3	1	0	1	0	1	1	0	0	0	0	0	1		
48	0	0	0	0	0	1	1	0	0	0	4	2	3	1	0	1	0	1	1	0	0	0	0	0			
60	0	0	0	0	0	2	1	0	0	0	5	2	4	1	0	1	0	1	1	0	0	0	0				
72	0	0	0	0	0	2	1	0	0	0	6	2	4	1	0	2	0	1	1	0	0	0					
84	1	0	0	0	0	2	1	0	0	0	6	3	4	1	0	2	1	1	1	0	0						
96	1	0	0	0	0	2	1	0	0	0	6	3	4	1	0	2	1	1	2	0							
108	1	0	0	0	0	2	1	0	0	0	6	3	4	1	0	2	1	1	2								
120	1	0	0	0	0	2	1	0	0	0	6	3	4	1	0	2	1	1									
132	1	0	0	0	0	2	1	0	0	0	6	3	4	1	0	2	1										
144	1	0	0	0	0	2	1	0	0	0	6	3	5	1	0	2											
156	1	0	0	0	0	2	1	0	0	0	6	3	5	1	0												
168	1	0	0	0	0	2	1	0	0	0	6	3	5	1													
180	1	0	0	0	0	2	1	0	0	0	7	3	5														
192	1	0	0	0	0	2	1	0	0	0	7	3															
204	1	0	0	0	0	2	1	0	0	0	7																
216	1	0	0	0	0	2	1	0	0	0																	
228	1	0	0	0	0	2	1	0	0																		
240	1	0	0	0	0	2	1	0																			

Payroll ($Millions)	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	28.26926	20.12482	14.47189	64.28048	55.26295	47.49607	58.74792	60.28848	60.34187	62.83464	73.62183	31.35678	30.45186	29.53686	30.95943	32.09811	36.30165	44.70077	51.98594	53.57718	59.51942	55.25500	47.61428	54.14397	66.13773	66.68663	67.33424

Source: Coal Mine Compensation Rating Bureau Database as of 4-30-2014
Payrolls: Exhibit X-A-1 & X-A-2
File: 2-C:C:\Clients\Coal Mine\2014 Rate Filing\[08-C.xlsm]VIII-C-5
Run Date: 09-29-2014 03:00:15 PM

COAL MINE COMPENSATION RATING BUREAU
FEDERAL OCCUPATIONAL DISEASE
ALL CLASSIFICATIONS

Claims with File Dates on or before 12-31-2013, Valued as of 4-30-2014

Incremental Frequency and IBNR

Reported Claims

Months	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	Year																										
12	41	25	32	22	20	14	13	17	10	9	7	6	2	7	3	6	0	4	2	1	4	0	1	1	2	5	6
24	49	33	37	41	35	29	21	24	16	13	13	12	7	13	4	9	1	5	3	3	4	2	2	3	4	12	
36	51	35	43	50	42	35	26	31	23	13	18	15	11	14	7	12	4	6	4	3	6	2	3	3	7		
48	52	37	45	59	50	43	33	35	28	14	22	16	12	17	9	14	4	7	4	6	7	2	6	3			
60	55	37	50	62	53	48	36	39	31	16	24	16	14	18	11	15	4	8	4	6	8	2	6				
72	57	38	52	66	57	52	38	40	35	20	26	18	14	19	13	17	4	8	4	6	9	5					
84	62	42	55	75	61	52	39	41	38	21	29	19	14	21	15	17	6	8	5	8	9						
96	69	45	57	80	63	52	41	42	40	24	29	20	15	21	15	18	7	8	6	8							
108	75	49	59	81	64	55	42	45	46	24	29	21	16	21	18	18	9	8	6								
120	82	51	62	83	68	60	42	47	51	24	30	21	18	23	18	23	10	9									
132	82	53	63	83	68	60	42	48	51	25	31	21	19	25	21	24	10										
144	83	53	64	84	69	60	43	48	51	25	32	23	24	28	21	26											
156	83	55	64	87	72	60	43	48	52	25	33	23	26	28	21												
168	85	56	66	90	72	62	44	50	56	26	33	24	26	30													
180	86	60	68	92	74	62	46	51	57	28	34	25	28														
192	89	61	69	93	75	63	46	52	57	28	35	26															
204	90	63	70	95	80	64	49	53	58	30	36																
216	90	63	71	95	80	65	49	54	60	33																	
228	90	64	72	96	81	68	50	55	60																		
240	91	64	73	98	82	71	50	58																			

Incremental Changes

12-24													5	6	1	3	1	1	1	2	0	2	1	2	2	7	
24-36												3	4	1	3	3	3	1	1	0	2	0	1	0	3		
36-48											4	1	1	3	2	2	0	1	0	3	1	0	3	0			
48-60										2	2	0	2	1	2	1	0	1	0	0	1	0	0				
60-72									4	4	2	2	0	1	2	2	0	0	0	0	1	3					
72-84								1	3	1	3	1	0	2	2	0	2	0	1	2	0						
84-96							2	1	2	3	0	1	1	0	0	1	1	0	1	0							
96-108						3	1	3	6	0	0	1	1	0	3	0	2	0	0								
108-120					4	5	0	2	5	0	1	0	2	2	0	5	1	1									
120-132				0	0	0	0	1	0	1	1	0	1	2	3	1	0										
132-144			1	1	1	0	1	0	0	0	1	2	5	3	0	2											
144-156		2	0	3	3	0	0	0	1	0	1	0	2	0	0												
156-168	2	1	2	3	0	2	1	2	4	1	0	1	0	2													
168-180	1	4	2	2	2	0	2	1	1	2	1	1	2														
180-192	3	1	1	1	1	1	0	1	0	0	1	1															
192-204	1	2	1	2	5	1	3	1	1	2	1																
204-216	0	0	1	0	0	1	0	1	2	3																	
216-228	0	1	1	1	1	3	1	1	0																		
228-240	1	0	1	2	1	3	0	3																			

Payroll	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
($Millions)	233.72188	223.59651	227.45194	285.68101	249.83942	242.30566	237.34642	244.86518	226.14804	233.69095	231.27905	175.23425	163.55467	145.17101	152.19366	138.87131	133.95627	160.69703	196.69173	201.34946	220.76086	249.56714	229.49851	268.41149	323.11931	323.92377	294.26515		
																												Average	Smoothed
12-24														0.04133	0.00657	0.02160	0.00747	0.00622	0.00508	0.00993	0.00000	0.00801	0.00436	0.00745	0.00619	0.02161		0.01122	0.01122
24-36													0.02446	0.00689	0.01971	0.02160	0.02240	0.00622	0.00508	0.00000	0.00906	0.00000	0.00436	0.00000	0.00928			0.00993	0.01007
36-48												0.00571	0.00611	0.02067	0.01314	0.01440	0.00000	0.00622	0.00000	0.01490	0.00453	0.00000	0.01307	0.00000				0.00760	0.00993
48-60											0.00865	0.00000	0.01223	0.00689	0.01314	0.00720	0.00000	0.00622	0.00000	0.00000	0.00453	0.00000	0.00000					0.00453	0.00760
60-72										0.01712	0.00865	0.01141	0.00000	0.00689	0.01314	0.01440	0.00000	0.00000	0.00000	0.00000	0.00453	0.01202						0.00678	0.00753
72-84									0.01327	0.00428	0.01297	0.00571	0.00000	0.01378	0.01314	0.00000	0.01493	0.00000	0.00508	0.00993	0.00000							0.00716	0.00721
84-96								0.00408	0.00884	0.01284	0.00000	0.00571	0.00611	0.00000	0.00000	0.00720	0.00747	0.00000	0.00508	0.00000								0.00441	0.00716
96-108							0.00421	0.01225	0.02653	0.00000	0.00000	0.00571	0.00611	0.00000	0.01971	0.00000	0.01493	0.00000	0.00000									0.00688	0.00716
108-120						0.02064	0.00000	0.00817	0.02211	0.00000	0.00432	0.00000	0.01223	0.01378	0.00000	0.03600	0.00747	0.00622										0.01007	0.00688
120-132					0.00000	0.00000	0.00000	0.00408	0.00000	0.00428	0.00432	0.00000	0.00611	0.01378	0.01971	0.00720	0.00000											0.00458	0.00678
132-144				0.00350	0.00400	0.00000	0.00421	0.00000	0.00000	0.00000	0.00432	0.01141	0.03057	0.02067	0.00000	0.01440												0.00716	0.00660
144-156			0.00000	0.01050	0.01201	0.00000	0.00000	0.00000	0.00442	0.00000	0.00432	0.00000	0.01223	0.00000	0.00000													0.00334	0.00554
156-168		0.00447	0.00879	0.01050	0.00000	0.00825	0.00421	0.00817	0.01769	0.00428	0.00000	0.00571	0.00000	0.01378														0.00660	0.00458
168-180	0.00428	0.01789	0.00879	0.00700	0.00801	0.00000	0.00843	0.00408	0.00442	0.00856	0.00432	0.00571	0.01223															0.00721	0.00453
180-192	0.01284	0.00447	0.00440	0.00350	0.00400	0.00413	0.00000	0.00408	0.00000	0.00000	0.00432	0.00571																0.00395	0.00441
192-204	0.00428	0.00894	0.00440	0.00700	0.02001	0.00413	0.01264	0.00408	0.00442	0.00856	0.00432																	0.00753	0.00412
204-216	0.00000	0.00000	0.00440	0.00000	0.00000	0.00413	0.00000	0.00408	0.00884	0.01284																		0.00343	0.00395
216-228	0.00000	0.00447	0.00440	0.00350	0.00400	0.01238	0.00421	0.00408	0.00000																			0.00412	0.00343
228-240	0.00428	0.00000	0.00440	0.00700	0.00400	0.01238	0.00000	0.01225																				0.00554	0.00334
																											Total=	0.12204	0.12204

IBNR Claims

Cumulative Factor									0.00334	0.00677	0.01072	0.01484	0.01925	0.02378	0.02836	0.03390	0.04050	0.04728	0.05416	0.06132	0.06848	0.07569	0.08322	0.09082	0.10075	0.11082	0.12204
times Payroll									0.75533	1.58209	2.47931	2.60048	3.14843	3.45217	4.31621	4.70774	5.42523	7.59776	10.65282	12.34675	15.11770	18.88974	19.09887	24.37713	32.55427	35.89723	35.91212

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					
A. IBNR Factor	Coke	Auger	Anthracite Co-Gen	Bituminous Co-Gen	Anthracite Prep Plant	Bituminous Prep Plant
Year	0154	0157	0181	0182	0183	0184
2004	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473
2005	0.0542	0.0542	0.0542	0.0542	0.0542	0.0542
2006	0.0613	0.0613	0.0613	0.0613	0.0613	0.0613
2007	0.0685	0.0685	0.0685	0.0685	0.0685	0.0685
2008	0.0757	0.0757	0.0757	0.0757	0.0757	0.0757
2009	0.0832	0.0832	0.0832	0.0832	0.0832	0.0832
2010	0.0908	0.0908	0.0908	0.0908	0.0908	0.0908
2011	0.1008	0.1008	0.1008	0.1008	0.1008	0.1008
2012	0.1108	0.1108	0.1108	0.1108	0.1108	0.1108
2013	0.1220	0.1220	0.1220	0.1220	0.1220	0.1220
B. Adjustment Factor	0.2000	0.4000	0.5000	0.5000	1.0000	0.5000
C. Payroll Per $1M						
2004	12.0491	1.0588	7.3515	6.3745	4.4067	13.4602
2005	12.8610	1.0265	7.8553	8.5248	5.1701	16.5483
2006	12.7374	1.0668	8.4125	9.4236	4.8859	17.0510
2007	13.6699	1.1212	9.1867	10.8291	5.8173	18.8952
2008	9.7611	2.5068	7.5214	8.4819	5.7335	21.2503
2009	5.1736	0.9470	7.5347	7.8664	6.2646	19.8280
2010	5.4357	0.8275	7.9580	8.7327	4.8769	26.3131
2011	3.5991	1.1763	10.9816	9.1024	6.1233	35.1551
2012	5.7381	0.8082	9.3118	9.0477	7.5690	34.2117
2013	4.7919	1.0938	7.9583	13.1334	7.0537	33.3031
D. IBNR						
2004	0.1139	0.0200	0.1738	0.1507	0.2083	0.3182
2005	0.1393	0.0222	0.2127	0.2309	0.2800	0.4481
2006	0.1562	0.0262	0.2579	0.2889	0.2996	0.5228
2007	0.1872	0.0307	0.3146	0.3708	0.3984	0.6470
2008	0.1478	0.0759	0.2846	0.3210	0.4340	0.8042
2009	0.0861	0.0315	0.3135	0.3273	0.5213	0.8250
2010	0.0987	0.0301	0.3614	0.3966	0.4429	1.1949
2011	0.0725	0.0474	0.5532	0.4585	0.6169	1.7709
2012	0.1272	0.0358	0.5160	0.5013	0.8388	1.8957
2013	0.1170	0.0534	0.4856	0.8014	0.8608	2.0322

Source: IBNR Factor - Exhibit VIII-C-6
Adjustment Factor - Judgement
Payroll = Exhibit X-A
IBNR = A times B times C

COAL MINE COMPENSATION RATING BUREAU
FEDERAL OCCUPATIONAL DISEASE
ALL CLASSIFICATIONS

IBNR By Class

	CLASSIFICATION					
			Anthracite	Bituminous	Anthracite	Bituminous
A. IBNR Factor	Coke	Auger	Co-Gen	Co-Gen	Prep Plant	Prep Plant
	0154	0157	0181	0182	0183	0184
1994	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1995	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033
1996	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068
1997	0.0107	0.0107	0.0107	0.0107	0.0107	0.0107
1998	0.0148	0.0148	0.0148	0.0148	0.0148	0.0148
1999	0.0193	0.0193	0.0193	0.0193	0.0193	0.0193
2000	0.0238	0.0238	0.0238	0.0238	0.0238	0.0238
2001	0.0284	0.0284	0.0284	0.0284	0.0284	0.0284
2002	0.0339	0.0339	0.0339	0.0339	0.0339	0.0339
2003	0.0405	0.0405	0.0405	0.0405	0.0405	0.0405
B. Adjustment Factor	0.2000	0.4000	0.5000	0.5000	1.0000	0.5000
C. Payroll						
1994	54.7213	1.4850	3.7045	0.3776	0.0000	0.0000
1995	55.0002	1.4996	3.4819	0.3602	0.0000	0.0000
1996	54.5712	0.8466	3.7590	0.3702	0.2211	3.0666
1997	53.1191	1.1935	3.5202	0.8561	1.1494	13.7837
1998	13.3539	1.2379	3.4588	1.1612	1.0329	11.1121
1999	12.2935	1.1369	3.6043	1.4943	1.2311	10.6918
2000	12.0926	1.2059	4.4735	1.8707	1.3195	8.5748
2001	10.3758	1.4291	4.6618	2.1213	2.2163	10.1550
2002	10.4850	1.1508	5.6588	2.3861	2.3228	10.0946
2003	11.5341	1.1022	7.0096	3.0525	3.4080	10.1952
D. IBNR						
1994	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1995	0.0367	0.0020	0.0058	0.0006	0.0000	0.0000
1996	0.0739	0.0023	0.0127	0.0013	0.0015	0.0104
1997	0.1139	0.0051	0.0189	0.0046	0.0123	0.0739
1998	0.0396	0.0073	0.0257	0.0086	0.0153	0.0825
1999	0.0473	0.0088	0.0347	0.0144	0.0237	0.1029
2000	0.0575	0.0115	0.0532	0.0222	0.0314	0.1020
2001	0.0589	0.0162	0.0661	0.0301	0.0629	0.1440
2002	0.0711	0.0156	0.0959	0.0404	0.0787	0.1711
2003	0.0934	0.0179	0.1419	0.0618	0.1380	0.2065

Source: IBNR Factor - Exhibit VIII-C-6
Adjustment Factor - Judgement
Payrolls: Exhibit X-A pages 1 & 2
IBNR = A times B times C

Occupational Disease
Federal Benefits

TABLE OF MONTHLY BLACK LUNG BENEFIT RATES

Time Period			Claimant Benefit	Dependent Benefit	Yearly Percentage Increase
10/1/1981	to	9/30/1982	293.20	146.60	
10/1/1982	to	12/31/1983	304.90	152.50	4.0%
1/1/1984	to	12/31/1984	317.10	158.60	4.0%
1/1/1985	to	12/31/1985	328.20	164.10	3.5%
1/1/1986	to	12/31/1986	328.20	164.10	0.0%
1/1/1987	to	12/31/1987	338.00	169.00	3.0%
1/1/1988	to	12/31/1988	344.80	172.40	2.0%
1/1/1989	to	12/31/1989	358.90	179.50	4.1%
1/1/1990	to	12/31/1990	371.80	185.90	3.6%
1/1/1991	to	12/31/1991	387.10	193.60	4.1%
1/1/1992	to	12/31/1992	403.30	201.70	4.2%
1/1/1993	to	12/31/1993	418.20	209.10	3.7%
1/1/1994	to	12/31/1994	427.40	213.70	2.2%
1/1/1995	to	12/31/1995	427.40	213.70	0.0%
1/1/1996	to	12/31/1996	435.10	217.60	1.8%
1/1/1997	to	12/31/1997	445.10	222.60	2.3%
1/1/1998	to	12/31/1998	455.10	227.60	2.2%
1/1/1999	to	12/31/1999	469.50	234.80	3.2%
1/1/2000	to	12/31/2000	487.40	243.60	3.8%
1/1/2001	to	12/31/2001	500.50	250.30	2.7%
1/1/2002	to	12/31/2002	518.50	259.30	3.6%
1/1/2003	to	12/31/2003	534.60	267.30	3.1%
1/1/2004	to	12/31/2004	549.00	274.50	2.7%
1/1/2005	to	12/31/2005	562.80	281.30	2.5%
1/1/2006	to	12/31/2006	574.60	287.20	2.1%
1/1/2007	to	12/31/2007	584.40	292.20	1.7%
1/1/2008	to	12/31/2008	599.00	299.00	2.5%
1/1/2009	to	12/31/2009	616.30	308.20	2.9%
1/1/2010	to	12/31/2010	625.60	312.80	1.5%
1/1/2011	to	12/31/2011	625.60	312.80	0.0%
1/1/2012	to	12/31/2012	625.60	312.80	0.0%
1/1/2013	to	12/31/2013	625.60	312.80	0.0%
1/1/2014	to	12/31/2014	631.80	315.90	1.0%

All Years	Average	2.4%
Last 10 Yrs	Average	1.4%
Last 5 Yrs	Average	0.5%
Last 3 Yrs	Average	0.3%

Selected Benefit Change from	2014	to	2015	0.50%
Selected Benefit Change from	2015	to	2016	1.50%
Selected Benefit Change from	2016	to	2017	2.50%

Selected Average Annual Benefit Change (Last Year's Selection: 2.5%) 2.5%

			Projected Benefit- Claimant	Dependant	Weight
1/1/2015	to	12/31/2015	635.00 a	317.50	28.125%
1/1/2016	to	12/31/2016	644.50 a	322.30	68.750%
1/1/2017	to	12/31/2017	660.60 a	330.30	3.125%

Average Monthly Benefit During the Policy Period Beginning 04/01/2015	642.30 b	321.20
Average Weekly Benefit During the Policy Period Beginning 04/01/2015	148.20 c	74.10
Annual (Weekly X 52)	7,706.40	3,853.20
Annual Miner and Spouse		11,559.60

a Previous year's benefit times selected benefit change
b Weighted average of projected benefit levels from 01-01-15 to 12-31-17
c Monthly Benefit times 12 months divided by 52 weeks

Sources: US Department of Labor
Employment Standards Administration
Office of Workers' Compensation Programs
Division of Coal Mine Workers' Compensation

Anthracite Underground (0160)

Year	Counts (1) Reported	(2) Awarded	(3) Pending	(4) Denied	(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded
2004	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00
2005	-	-	-	-	-	-	-
2006	1	1	-	-	-	-	-
2007	-	-	-	-	-	-	-
2008	1	-	1	-	0.30	-	-
2009	1	-	-	1	-	0.05	0.05
2010	-	-	-	-	-	-	-
2011	1	-	1	-	0.30	-	-
2012	-	-	-	-	-	-	-
2013	1	-	1	-	0.30	-	-
Total	5	1	3	1	0.90	0.05	0.05

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
2004	# 0.00	# 0.00	# 0.0276	# 0.0075	# 0.0075	$ 1,345,321	0.0056
2005	-	-	0.0892	0.0242	0.0242	1,417,568	0.0171
2006	1.00	-	0.1586	0.0430	1.0430	1,442,524	0.7230
2007	-	-	0.2772	0.0751	0.0751	1,662,537	0.0452
2008	0.30	0.70	0.5336	0.1447	0.4447	2,136,713	0.2081
2009	0.05	0.95	0.4591	0.1244	0.1744	1,335,866	0.1306
2010	-	-	0.5888	0.1596	0.1596	1,299,588	0.1228
2011	0.30	0.70	0.7135	0.1934	0.4934	1,257,944	0.3922
2012	-	-	0.7435	0.2016	0.2016	1,029,260	0.1958
2013	0.30	0.70	0.3628	0.0983	0.3983	382,329	1.0419
Total	1.95	3.05	3.9537	1.0719	3.0219	$ 13,309,650	0.2270

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
2004	690	1.0410	36.0	0.0208
2005	716	1.0410	36.6	0.0661
2006	745	1.0410	35.8	2.9134
2007	779	1.0410	39.4	0.1907
2008	807	1.0410	48.9	0.9093
2009	836	1.0410	29.5	0.5914
2010	845	1.0410	28.4	0.5621
2011	858	1.0410	27.1	1.8207
2012	888	1.0410	21.4	0.9418
2013	917	1.0410	7.7	5.1734
Total			310.8	0.9723

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: 0.2711

Bituminous Underground (0158)

Year	Counts (1) Reported	(2) Awarded	(3) Pending	(4) Denied	(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded
2004	# 2	# 1	# 0	# 1	# 0.00	# 0.05	# 0.05
2005	1	-	-	1	-	0.05	0.05
2006	2	1	-	1	-	0.05	0.05
2007	3	-	1	2	0.30	0.10	0.10
2008	-	-	-	-	-	-	-
2009	4	-	-	4	-	0.20	0.20
2010	2	-	1	1	0.30	0.05	0.05
2011	3	-	1	2	0.30	0.10	0.10
2012	4	-	1	3	0.30	0.15	0.15
2013	2	-	2	-	0.60	-	-
Total	23	2	6	15	1.80	0.75	0.75

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
2004	# 1.05	# 0.95	# 2.6875	# 0.7286	# 1.7786	$ 46,073,900	0.0386
2005	0.05	0.95	4.4113	1.1959	1.2459	66,275,755	0.0188
2006	1.05	0.95	5.2920	1.4347	2.4847	70,465,937	0.0353
2007	0.40	2.60	6.7303	1.8246	2.2246	79,904,266	0.0278
2008	-	-	9.5496	2.5889	2.5889	101,353,977	0.0255
2009	0.20	3.80	10.6679	2.8921	3.0921	101,348,140	0.0305
2010	0.35	1.65	14.7149	3.9892	4.3392	125,393,576	0.0346
2011	0.40	2.60	19.4591	5.2753	5.6753	148,485,709	0.0382
2012	0.45	3.55	22.2969	6.0447	6.4947	153,602,187	0.0423
2013	0.60	1.40	23.0421	6.2467	6.8467	141,449,556	0.0484
Total	4.55	18.45	118.8516	32.2207	36.7707	$ 1,034,353,003	0.0355

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
2004	690	1.4260	900.5	0.1975
2005	716	1.4260	1,248.3	0.0998
2006	745	1.4260	1,275.6	0.1948
2007	779	1.4260	1,383.3	0.1608
2008	807	1.4260	1,693.7	0.1529
2009	836	1.4260	1,634.9	0.1891
2010	845	1.4260	2,001.2	0.2168
2011	858	1.4260	2,333.9	0.2432
2012	888	1.4260	2,332.7	0.2784
2013	917	1.4260	2,080.2	0.3291
Total			16,884.3	0.2178

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: 0.2711

Anthracite Surface (0153)

	Counts						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year	Reported	Awarded	Pending	Denied	Pending Awarded (3) * 30%	Denied Reopened	Denied Awarded
2004	# 4	# 2	# 0	# 2	# 0.00	# 0.10	# 0.10
2005	2	1	-	1	-	0.05	0.05
2006	1	-	-	1	-	0.05	0.05
2007	2	2	-	-	-	-	-
2008	1	-	-	1	-	0.05	0.05
2009	1	-	-	1	-	0.05	0.05
2010	-	-	-	-	-	-	-
2011	1	-	-	1	-	0.05	0.05
2012	-	-	-	-	-	-	-
2013	1	-	1	-	0.30	-	-
Total	13	5	1	7	0.30	0.35	0.35

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
2004	# 2.10	# 1.90	# 0.9528	# 0.2583	# 2.3583	$ 12,359,731	0.1908
2005	1.05	0.95	1.1063	0.2999	1.3499	12,140,911	0.1112
2006	0.05	0.95	1.3026	0.3531	0.4031	12,065,323	0.0334
2007	2.00	-	1.8626	0.5050	2.5050	14,866,556	0.1685
2008	0.05	0.95	2.3688	0.6422	0.6922	16,220,231	0.0427
2009	0.05	0.95	2.6531	0.7193	0.7693	15,893,528	0.0484
2010	-	-	2.5357	0.6874	0.6874	13,319,185	0.0516
2011	0.05	0.95	4.1957	1.1374	1.1874	19,507,428	0.0609
2012	-	-	6.1671	1.6719	1.6719	24,734,711	0.0676
2013	0.30	0.70	5.8910	1.5971	1.8971	20,261,498	0.0936
Total	5.65	7.35	29.0357	7.8716	13.5216	$ 161,369,102	0.0838

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
2004	690	1.0410	330.9	0.7127
2005	716	1.0410	313.2	0.4310
2006	745	1.0410	299.2	0.1347
2007	779	1.0410	352.5	0.7106
2008	807	1.0410	371.3	0.1864
2009	836	1.0410	351.2	0.2190
2010	845	1.0410	291.2	0.2361
2011	858	1.0410	420.0	0.2827
2012	888	1.0410	514.6	0.3249
2013	917	1.0410	408.2	0.4647
Total			3,652.3	0.3702

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: 0.2711

Bituminous Surface (0156)

	Counts						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year	Reported	Awarded	Pending	Denied	Pending Awarded (3) * 30%	Denied Reopened	Denied Awarded
2004	# 2	# 0	# 1	# 1	# 0.30	# 0.05	# 0.05
2005	1	-	-	1	-	0.05	0.05
2006	4	-	1	3	0.30	0.15	0.15
2007	4	1	-	3	-	0.15	0.15
2008	3	1	2	-	0.60	-	-
2009	-	-	-	-	-	-	-
2010	1	-	-	1	-	0.05	0.05
2011	1	-	-	1	-	0.05	0.05
2012	8	1	3	4	0.90	0.20	0.20
2013	2	-	1	1	0.30	0.05	0.05
Total	26	3	8	15	2.40	0.75	0.75

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
2004	# 0.35	# 1.65	# 1.5207	# 0.4123	# 0.7623	$ 56,217,298	0.0136
2005	0.05	0.95	2.0856	0.5654	0.6154	64,871,562	0.0095
2006	0.45	3.55	2.3963	0.6496	1.0996	63,798,502	0.0172
2007	1.15	2.85	2.7887	0.7560	1.9060	64,808,093	0.0294
2008	1.60	1.40	3.7316	1.0116	2.6116	74,601,231	0.0350
2009	-	-	3.6344	0.9853	0.9853	63,306,695	0.0156
2010	0.05	0.95	4.8184	1.3063	1.3563	74,255,177	0.0183
2011	0.05	0.95	6.3920	1.7329	1.7829	87,730,506	0.0203
2012	2.10	5.90	6.4578	1.7507	3.8507	77,870,990	0.0494
2013	0.35	1.65	6.0779	1.6477	1.9977	64,837,518	0.0308
Total	6.15	19.85	39.9034	10.8178	16.9678	$ 692,297,572	0.0245

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
2004	690	1.0410	1,505.1	0.0506
2005	716	1.0410	1,673.7	0.0368
2006	745	1.0410	1,582.0	0.0695
2007	779	1.0410	1,536.9	0.1240
2008	807	1.0410	1,707.7	0.1529
2009	836	1.0410	1,398.9	0.0704
2010	845	1.0410	1,623.4	0.0835
2011	858	1.0410	1,888.9	0.0944
2012	888	1.0410	1,620.0	0.2377
2013	917	1.0410	1,306.2	0.1529
Total			15,842.8	0.1071

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: 0.2711

Four Standard Classes

Year	Counts (1) Reported	(2) Awarded	(3) Pending	(4) Denied	(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded
2004	# 8	# 3	# 1	# 4	# 0.30	# 0.20	# 0.20
2005	4	1	-	3	-	0.15	0.15
2006	8	2	1	5	0.30	0.25	0.25
2007	9	3	1	5	0.30	0.25	0.25
2008	5	1	3	1	0.90	0.05	0.05
2009	6	-	-	6	-	0.30	0.30
2010	3	-	1	2	0.30	0.10	0.10
2011	6	-	2	4	0.60	0.20	0.20
2012	12	1	4	7	1.20	0.35	0.35
2013	6	-	5	1	1.50	0.05	0.05
Total	67	11	18	38	5.40	1.90	1.90

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
2004	# 3.50	# 4.50	# 5.1886	# 1.4066	# 4.9066	$ 115,996,250	0.0423
2005	1.15	2.85	7.6924	2.0854	3.2354	144,705,796	0.0224
2006	2.55	5.45	9.1494	2.4804	5.0304	147,772,286	0.0340
2007	3.55	5.45	11.6588	3.1607	6.7107	161,241,452	0.0416
2008	1.95	3.05	16.1835	4.3873	6.3373	194,312,152	0.0326
2009	0.30	5.70	17.4145	4.7211	5.0211	181,884,229	0.0276
2010	0.40	2.60	22.6579	6.1426	6.5426	214,267,526	0.0305
2011	0.80	5.20	30.7602	8.3391	9.1391	256,981,587	0.0356
2012	2.55	9.45	35.6653	9.6689	12.2189	257,237,148	0.0475
2013	1.55	4.45	35.3738	9.5898	11.1398	226,930,901	0.0491
Total	18.30	48.70	191.7445	51.9819	70.2819	$ 1,901,329,327	0.0370

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
2004	690		2,772.5	0.1770
2005	716		3,271.8	0.0989
2006	745		3,192.6	0.1576
2007	779		3,312.1	0.2026
2008	807		3,821.6	0.1658
2009	836		3,414.5	0.1471
2010	845		3,944.2	0.1659
2011	858		4,669.9	0.1957
2012	888		4,488.7	0.2722
2013	917		3,802.3	0.2930
Total			36,690.2	0.1916

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: 0.2711

Coke (0154)

Year	Counts (1) Reported	(2) Awarded	(3) Pending	(4) Denied	(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded
2004	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00
2005	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
2004	# 0.00	# 0.00	# 0.1139	# 0.0309	# 0.0309	$ 12,049,126	0.0026
2005	-	-	0.1393	0.0378	0.0378	12,860,979	0.0029
2006	-	-	0.1562	0.0423	0.0423	12,737,394	0.0033
2007	-	-	0.1872	0.0507	0.0507	13,669,925	0.0037
2008	-	-	0.1478	0.0401	0.0401	9,761,146	0.0041
2009	-	-	0.0861	0.0233	0.0233	5,173,552	0.0045
2010	-	-	0.0987	0.0268	0.0268	5,435,658	0.0049
2011	-	-	0.0725	0.0197	0.0197	3,599,086	0.0055
2012	-	-	0.1272	0.0345	0.0345	5,738,105	0.0060
2013	-	-	0.1170	0.0317	0.0317	4,791,910	0.0066
Total	-	-	1.2459	0.3378	0.3378	$ 85,816,881	0.0039

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
2004	690	1.0410	322.6	0.0096
2005	716	1.0410	331.8	0.0114
2006	745	1.0410	315.8	0.0134
2007	779	1.0410	324.2	0.0157
2008	807	1.0410	223.4	0.0179
2009	836	1.0410	114.3	0.0204
2010	845	1.0410	118.8	0.0225
2011	858	1.0410	77.5	0.0254
2012	888	1.0410	119.4	0.0289
2013	917	1.0410	96.5	0.0329
Total			2,044.3	0.0165

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: 0.2711

Auger (0157)

	Counts						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year	Reported	Awarded	Pending	Denied	Pending Awarded (3) * 30%	Denied Reopened	Denied Awarded
2004	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00
2005	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
2004	# 0.00	# 0.00	# 0.0200	# 0.0054	# 0.0054	$ 1,058,799	0.0051
2005	-	-	0.0222	0.0060	0.0060	1,026,537	0.0059
2006	-	-	0.0262	0.0071	0.0071	1,066,831	0.0067
2007	-	-	0.0307	0.0083	0.0083	1,121,156	0.0074
2008	-	-	0.0759	0.0206	0.0206	2,506,758	0.0082
2009	-	-	0.0315	0.0085	0.0085	946,963	0.0090
2010	-	-	0.0301	0.0082	0.0082	827,496	0.0099
2011	-	-	0.0474	0.0129	0.0129	1,176,255	0.0109
2012	-	-	0.0358	0.0097	0.0097	808,208	0.0120
2013	-	-	0.0534	0.0145	0.0145	1,093,790	0.0132
Total	-	-	0.3732	0.1012	0.1012	$ 11,632,793	0.0087

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
2004	690	1.0410	28.3	0.0192
2005	716	1.0410	26.5	0.0227
2006	745	1.0410	26.5	0.0268
2007	779	1.0410	26.6	0.0313
2008	807	1.0410	57.4	0.0358
2009	836	1.0410	20.9	0.0409
2010	845	1.0410	18.1	0.0451
2011	858	1.0410	25.3	0.0508
2012	888	1.0410	16.8	0.0578
2013	917	1.0410	22.0	0.0658
Total			268.4	0.0377

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: 0.2711

Anthracite Co-Gen (181)

	Counts						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year	Reported	Awarded	Pending	Denied	Pending Awarded (3) * 30%	Denied Reopened	Denied Awarded
2004	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00
2005	1	-	-	1	-	0.05	0.05
2006	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
Total	1	-	-	1	-	0.05	0.05

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
2004	# 0.00	# 0.00	# 0.1738	# 0.0471	# 0.0471	$ 7,351,514	0.0064
2005	0.05	0.95	0.2127	0.0577	0.1077	7,855,289	0.0137
2006	-	-	0.2579	0.0699	0.0699	8,412,527	0.0083
2007	-	-	0.3146	0.0853	0.0853	9,186,706	0.0093
2008	-	-	0.2846	0.0772	0.0772	7,521,400	0.0103
2009	-	-	0.3135	0.0850	0.0850	7,534,735	0.0113
2010	-	-	0.3614	0.0980	0.0980	7,958,048	0.0123
2011	-	-	0.5532	0.1500	0.1500	10,981,642	0.0137
2012	-	-	0.5160	0.1399	0.1399	9,311,812	0.0150
2013	-	-	0.4856	0.1316	0.1316	7,958,314	0.0165
Total	0.05	0.95	3.4733	0.9416	0.9916	$ 84,071,987	0.0118

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
2004	690	1.0410	196.8	0.0239
2005	716	1.0410	202.7	0.0531
2006	745	1.0410	208.6	0.0335
2007	779	1.0410	217.9	0.0391
2008	807	1.0410	172.2	0.0448
2009	836	1.0410	166.5	0.0510
2010	845	1.0410	174.0	0.0563
2011	858	1.0410	236.4	0.0634
2012	888	1.0410	193.7	0.0722
2013	917	1.0410	160.3	0.0821
Total			1,929.1	0.0514

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: 0.2711

Bituminous Co-Gen (182)

	Counts						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year	Reported	Awarded	Pending	Denied	Pending Awarded (3) * 30%	Denied Reopened	Denied Awarded
2004	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00
2005	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
2004	# 0.00	# 0.00	# 0.1507	# 0.0409	# 0.0409	$ 6,374,483	0.0064
2005	-	-	0.2309	0.0626	0.0626	8,524,752	0.0073
2006	-	-	0.2889	0.0783	0.0783	9,423,575	0.0083
2007	-	-	0.3708	0.1005	0.1005	10,829,140	0.0093
2008	-	-	0.3210	0.0870	0.0870	8,481,888	0.0103
2009	-	-	0.3273	0.0887	0.0887	7,866,413	0.0113
2010	-	-	0.3966	0.1075	0.1075	8,732,701	0.0123
2011	-	-	0.4585	0.1243	0.1243	9,102,411	0.0137
2012	-	-	0.5013	0.1359	0.1359	9,047,745	0.0150
2013	-	-	0.8014	0.2173	0.2173	13,133,423	0.0165
Total	-	-	3.8474	1.0430	1.0430	$ 91,516,531	0.0114

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
2004	690	1.4260	124.6	0.0328
2005	716	1.4260	160.6	0.0390
2006	745	1.4260	170.6	0.0459
2007	779	1.4260	187.5	0.0536
2008	807	1.4260	141.7	0.0614
2009	836	1.4260	126.9	0.0699
2010	845	1.4260	139.4	0.0771
2011	858	1.4260	143.1	0.0869
2012	888	1.4260	137.4	0.0989
2013	917	1.4260	193.1	0.1125
Total			1,524.9	0.0684

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: 0.2711

Anthracite Prep-Plant (183)

Year	Counts (1) Reported	(2) Awarded	(3) Pending	(4) Denied	(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded
2004	# 1	# 0	# 1	# 0	# 0.30	# 0.00	# 0.00
2005	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
Total	1	-	1	-	0.30	-	-

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
2004	# 0.30	# 0.70	# 0.2083	# 0.0565	# 0.3565	$ 4,406,653	0.0809
2005	-	-	0.2800	0.0759	0.0759	5,170,069	0.0147
2006	-	-	0.2996	0.0812	0.0812	4,885,882	0.0166
2007	-	-	0.3984	0.1080	0.1080	5,817,291	0.0186
2008	-	-	0.4340	0.1177	0.1177	5,733,543	0.0205
2009	-	-	0.5213	0.1413	0.1413	6,264,606	0.0226
2010	-	-	0.4429	0.1201	0.1201	4,876,927	0.0246
2011	-	-	0.6169	0.1672	0.1672	6,123,259	0.0273
2012	-	-	0.8388	0.2274	0.2274	7,569,023	0.0300
2013	-	-	0.8608	0.2334	0.2334	7,053,691	0.0331
Total	0.30	0.70	4.9010	1.3287	1.6287	$ 57,900,944	0.0281

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
2004	690	1.0410	118.0	0.3021
2005	716	1.0410	133.4	0.0569
2006	745	1.0410	121.2	0.0670
2007	779	1.0410	138.0	0.0783
2008	807	1.0410	131.2	0.0897
2009	836	1.0410	138.4	0.1021
2010	845	1.0410	106.6	0.1126
2011	858	1.0410	131.8	0.1269
2012	888	1.0410	157.5	0.1444
2013	917	1.0410	142.1	0.1642
Total			1,318.2	0.1236

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: 0.2711

Bituminous Prep-Plant (184)

	Counts						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year	Reported	Awarded	Pending	Denied	Pending Awarded (3) * 30%	Denied Reopened	Denied Awarded
2004	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00
2005	1	-	1	-	0.30	-	-
2006	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-
2011	1	-	1	-	0.30	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
Total	2	-	2	-	0.60	-	-

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
2004	# 0.00	# 0.00	# 0.3182	# 0.0863	# 0.0863	$ 13,460,201	0.0064
2005	0.30	0.70	0.4481	0.1215	0.4215	16,548,307	0.0255
2006	-	-	0.5228	0.1417	0.1417	17,050,967	0.0083
2007	-	-	0.6470	0.1754	0.1754	18,895,192	0.0093
2008	-	-	0.8042	0.2180	0.2180	21,250,256	0.0103
2009	-	-	0.8250	0.2237	0.2237	19,828,012	0.0113
2010	-	-	1.1949	0.3239	0.3239	26,313,130	0.0123
2011	0.30	0.70	1.7709	0.4801	0.7801	35,155,068	0.0222
2012	-	-	1.8957	0.5139	0.5139	34,211,729	0.0150
2013	-	-	2.0322	0.5509	0.5509	33,303,121	0.0165
Total	0.60	1.40	10.4590	2.8354	3.4354	$ 236,015,983	0.0146

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
2004	690	1.4260	263.1	0.0328
2005	716	1.4260	311.7	0.1352
2006	745	1.4260	308.7	0.0459
2007	779	1.4260	327.1	0.0536
2008	807	1.4260	355.1	0.0614
2009	836	1.4260	319.9	0.0699
2010	845	1.4260	419.9	0.0771
2011	858	1.4260	552.6	0.1412
2012	888	1.4260	519.6	0.0989
2013	917	1.4260	489.8	0.1125
Total			3,867.5	0.0888

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: 0.2711

Total Other Classes

Year	Counts (1) Reported	(2) Awarded	(3) Pending	(4) Denied	(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded
2004	# 1	# 0	# 1	# 0	# 0.30	# 0.00	# 0.00
2005	2	-	1	1	0.30	0.05	0.05
2006	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-
2011	1	-	1	-	0.30	-	-
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
Total	4	-	3	1	0.90	0.05	0.05

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
2004	# 0.30	# 0.70	# 0.9849	# 0.2670	# 0.5670	$ 44,700,776	0.0127
2005	0.35	1.65	1.3332	0.3614	0.7114	51,985,933	0.0137
2006	-	-	1.5516	0.4206	0.4206	53,577,176	0.0079
2007	-	-	1.9487	0.5283	0.5283	59,519,410	0.0089
2008	-	-	2.0675	0.5605	0.5605	55,254,991	0.0101
2009	-	-	2.1047	0.5706	0.5706	47,614,281	0.0120
2010	-	-	2.5246	0.6844	0.6844	54,143,960	0.0126
2011	0.30	0.70	3.5194	0.9541	1.2541	66,137,721	0.0190
2012	-	-	3.9148	1.0613	1.0613	66,686,622	0.0159
2013	-	-	4.3504	1.1794	1.1794	67,334,249	0.0175
Total	0.95	3.05	24.2998	6.5877	7.5377	$ 566,955,119	0.0133

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
2004	690		1,053.4	0.0538
2005	716		1,166.7	0.0610
2006	745		1,151.4	0.0365
2007	779		1,221.3	0.0433
2008	807		1,081.0	0.0519
2009	836		886.9	0.0643
2010	845		976.8	0.0701
2011	858		1,166.7	0.1075
2012	888		1,144.4	0.0927
2013	917		1,103.8	0.1068
Total			10,952.4	0.0688

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: 0.2711

Grand Total

Year	Counts (1) Reported	(2) Awarded	(3) Pending	(4) Denied	(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded
2004	# 9	# 3	# 2	# 4	# 0.60	# 0.20	# 0.20
2005	6	1	1	4	0.30	0.20	0.20
2006	8	2	1	5	0.30	0.25	0.25
2007	9	3	1	5	0.30	0.25	0.25
2008	5	1	3	1	0.90	0.05	0.05
2009	6	-	-	6	-	0.30	0.30
2010	3	-	1	2	0.30	0.10	0.10
2011	7	-	3	4	0.90	0.20	0.20
2012	12	1	4	7	1.20	0.35	0.35
2013	6	-	5	1	1.50	0.05	0.05
Total	71	11	21	39	6.30	1.95	1.95

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
2004	# 3.80	# 5.20	# 6.1735	# 1.6736	# 5.4736	$ 160,697,026	0.0341
2005	1.50	4.50	9.0256	2.4468	3.9468	196,691,729	0.0201
2006	2.55	5.45	10.7010	2.9010	5.4510	201,349,462	0.0271
2007	3.55	5.45	13.6075	3.6890	7.2390	220,760,862	0.0328
2008	1.95	3.05	18.2510	4.9478	6.8978	249,567,143	0.0276
2009	0.30	5.70	19.5192	5.2917	5.5917	229,498,510	0.0244
2010	0.40	2.60	25.1825	6.8270	7.2270	268,411,486	0.0269
2011	1.10	5.90	34.2796	9.2932	10.3932	323,119,308	0.0322
2012	2.55	9.45	39.5801	10.7302	13.2802	323,923,770	0.0410
2013	1.55	4.45	39.7242	10.7692	12.3192	294,265,150	0.0419
Total	19.25	51.75	216.0443	58.5696	77.8196	$ 2,468,284,446	0.0315

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
2004	690		3,825.9	0.1431
2005	716		4,438.5	0.0889
2006	745		4,344.0	0.1255
2007	779		4,533.4	0.1597
2008	807		4,902.6	0.1407
2009	836		4,301.4	0.1300
2010	845		4,921.0	0.1469
2011	858		5,836.6	0.1781
2012	888		5,633.1	0.2358
2013	917		4,906.1	0.2511
Total			47,642.6	0.1633

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: 0.2711

COAL MINE COMPENSATION RATING BUREAU
INDIVIDUAL CLAIM DETAIL FOR STATE AND FEDERAL EXCESS

														"All Permanent Partial" Scenario (see note)						
											Federal Excess:							Federal Excess:		
		Awd (2)		Exp.	Age of Miner at	State	Medical	Act 44	Act	Offsets for:		After Offsets:			State	State plus	Offsets for:		After Offsets:	
ID No.	Class	Pend (1)	Type*	Yr.	Comp Date	Benefit	Bef. Act 44	Factor	44 Med.	Soc. Sec.	Pension	Base	SS	SS, PP	Benefit	Act 44 Med.	Soc. Sec.	Pension	Base	SS	SS, PP
000-00-0017	1011	2		1992	49.97	1,276,762	34,088	1.00	34,088	255,395	151,510	22	46,341	176,555	464,790	-	-	-	397,243	397,243	397,243
000-00-0018	1011	2		1992	47.39	1,560,180	37,729	1.00	37,729	279,183	176,673	0	27,171	159,050	563,652	-	-	-	395,467	395,467	395,467
000-00-0019	1011	2		2011	49.92	1,628,157	34,088	1.00	34,088	289,718	214,685	-	17,037	156,736	591,805	-	-	-	384,112	384,112	384,112
000-00-0052	1011	2	LS	1999	62.24	131,384	20,722	1.00	20,722	-	65,181	201,556	201,556	260,911	131,384	-	-	65,181	201,556	201,556	260,911
000-00-0078	1011	2		1990	66.83	574,557	16,151	1.00	16,151	-	-	-	-	-	400,698	-	-	-	46,857	46,857	46,857
000-00-0079	1011	2		1993	61.26	556,957	21,719	1.00	21,719	-	136,662	45	45	5,970	291,221	-	-	73,927	166,619	166,619	166,619
000-00-0080	1011	2		1993	61.22	423,426	21,719	1.00	21,719	-	135,497	-	-	334	257,558	-	-	73,296	79,356	79,356	79,356
000-00-0081	1011	2		1993	64.79	525,721	17,899	1.00	17,899	-	147,278	15	15	2,990	293,447	-	-	97,545	139,028	139,028	139,692
Total Underground Anthracite				8		6,677,144	204,113		204,113	824,296	1,027,486	201,638	292,164	762,547	2,994,555	0	0	309,949	1,810,237	1,810,237	1,870,256
Average of 8 claims						834,643	25,514		25,514	103,037	128,436	25,205	36,521	95,318	374,319	0	0	38,744	226,280	226,280	233,782
						6,881,257															
Medical plus Indemnity						860,157				103,037	128,436	25,205	36,521	95,318	399,833		0	38,744	226,280	226,280	233,782
Adjusted															399,833		0	38,744	226,280	226,280	233,782

* Type code is as follows: CC is Commuted or Compromised; WO is Widow Only; LS is Lump Sum.
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, Commuted/Compromised 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 STATE AND FEDERAL EXCESS

															"All Permanent Partial" Scenario (see note)						
					Age of							Federal Excess:							Federal Excess:		
		Awd (2)		Exp.	Miner at	State	Medical	Act 44	Act	Offsets for:		After Offsets:			State	State plus	Offsets for:		After Offsets:		
ID No.	Class	Pend (1)	Type*	Yr.	Comp Date	Benefit	Bef. Act 44	Factor	44 Med.	Soc. Sec.	Pension	Base	SS	SS, PP	Benefit	Act 44 Med.	Soc. Sec.	Pension	Base	SS	SS, PP
000-00-0001	1002	2	CC	1990	67.38	46,397	16,151	1.00	16,151	-	43,242	214,409	214,409	257,651	46,397	-	-	43,242	214,409	214,409	257,651
000-00-0002	1002	2	CC	1992	62.84	136,063	19,753	1.00	19,753	-	42,015	210,298	210,298	228,554	136,063	-	-	42,015	210,298	210,298	228,554
000-00-0003	1002	2	CC	1992	62.49	91,400	20,722	1.00	20,722	-	65,008	95,162	95,162	146,933	91,400	-	-	65,008	95,162	95,162	146,933
000-00-0004	1002	2	CC	1993	63.31	368,027	19,753	1.00	19,753	-	113,636	242,907	242,907	242,907	368,027	-	-	113,636	242,907	242,907	242,907
000-00-0006	1002	2		1992	62.41	1,186,386	20,722	1.00	20,722	-	313,272	-	-	1	581,695	-	-	171,097	183,418	183,418	185,052
000-00-0007	1002	2		1992	60.69	1,072,705	21,719	1.00	21,719	-	262,270	-	-	0	556,317	-	-	155,021	174,004	174,004	175,298
000-00-0008	1002	2		1994	58.76	1,426,151	23,793	1.00	23,793	289,609	289,556	-	3,202	119,692	589,101	-	95,665	116,434	277,471	279,065	298,617
000-00-0009	1002	2	LS	2000	44.43	68,082	41,384	1.00	41,384	-	-	652,538	652,538	652,538	68,082	-	-	-	652,538	652,538	652,538
000-00-0010	1002	1		2004	63.60	781,932	18,812	1.00	18,812	-	334,037	-	-	-	504,621	-	-	211,630	63,026	63,026	64,579
000-00-0011	1002	2	LS	2005	54.58	82,822	28,209	1.00	28,209	2,124	-	340,930	343,054	343,054	82,822	-	2,124	-	340,930	343,054	343,054
000-00-0012	1002	2		2005	60.48	572,214	22,743	1.00	22,743	-	183,110	-	-	2	350,607	-	-	100,007	76,914	76,914	77,869
000-00-0013	1002	2	LS	2008	57.98	104,563	24,867	1.00	24,867	27,621	-	342,459	369,909	369,909	104,563	-	27,621	-	342,459	369,909	369,909
000-00-0014	1002	2		2012	63.34	1,126,871	19,753	1.00	19,753	-	264,049	-	-	0	545,933	-	-	156,073	204,789	204,789	206,092
000-00-0015	1002	2		2012	62.39	1,129,976	20,722	1.00	20,722	-	298,691	-	-	0	577,568	-	-	163,133	167,581	167,581	169,138
000-00-0016	1002	1		2012	67.99	914,009	15,318	1.00	15,318	-	198,345	-	-	0	520,255	-	-	155,603	130,669	130,669	131,503
000-00-0029	1002	2	LS	1992	63.60	158,693	18,812	1.00	18,812	-	127,830	196,938	196,938	293,391	158,693	-	-	127,830	196,938	196,938	293,391
000-00-0030	1002	2	LS	1992	65.08	106,285	17,899	1.00	17,899	-	84,935	198,265	198,265	283,200	106,285	-	-	84,935	198,265	198,265	283,200
000-00-0031	1002	2	LS	1993	64.91	101,764	17,899	1.00	17,899	-	86,382	201,905	201,905	287,552	101,764	-	-	86,382	201,905	201,905	287,552
000-00-0032	1002	2	LS	1994	66.34	16,621	17,012	1.00	17,012	-	12,630	225,360	225,360	237,990	16,621	-	-	12,630	225,360	225,360	237,990
000-00-0033	1002	2	LS	1995	58.06	277,780	24,867	1.00	24,867	53,157	20,221	253,967	270,468	286,958	277,780	-	53,157	20,221	253,967	270,468	286,958
000-00-0034	1002	2	LS	1997	56.50	137,389	25,963	1.00	25,963	24,416	76	264,692	287,874	287,951	137,389	-	24,416	76	264,692	287,874	287,951
000-00-0035	1002	2	LS	1999	54.98	3,090	28,209	1.00	28,209	79	-	442,743	442,822	442,822	3,090	-	79	-	442,743	442,822	442,822
000-00-0036	1002	2	LS	2000	61.77	487,667	20,722	1.00	20,722	-	134,676	211,230	211,230	213,042	487,667	-	-	134,676	211,230	211,230	213,042
000-00-0037	1002	2	LS	2000	66.09	83,498	17,012	1.00	17,012	-	63,996	175,656	175,656	239,652	83,498	-	-	63,996	175,656	175,656	239,652
000-00-0038	1002	2	LS	2000	59.02	83,073	23,793	1.00	23,793	29,168	-	268,817	297,985	297,985	83,073	-	29,168	-	268,817	297,985	297,985
000-00-0039	1002	2	LS	2000	57.74	83,105	24,867	1.00	24,867	21,953	-	292,387	314,340	314,340	83,105	-	21,953	-	292,387	314,340	314,340
000-00-0040	1002	2	LS	2000	61.43	81,307	21,719	1.00	21,719	-	48,904	232,071	232,071	280,953	81,307	-	-	48,904	232,071	232,071	280,953
000-00-0041	1002	2	LS	2001	59.31	118,979	23,793	1.00	23,793	41,652	123	265,376	306,352	306,475	118,979	-	41,652	123	265,376	306,352	306,475
000-00-0042	1002	2	LS	2001	53.43	327,494	30,522	1.00	30,522	-	-	464,418	464,418	464,418	327,494	-	-	-	464,418	464,418	464,418
000-00-0043	1002	2	LS	2001	61.37	122,155	21,719	1.00	21,719	-	71,805	252,652	252,652	322,533	122,155	-	-	71,805	252,652	252,652	322,533
000-00-0044	1002	2	LS	2002	45.33	173,765	40,170	1.00	40,170	-	-	499,081	499,081	499,081	173,765	-	-	-	499,081	499,081	499,081
000-00-0045	1002	2	LS	2002	58.68	144,248	23,793	1.00	23,793	50,516	131	242,678	287,288	287,418	144,248	-	50,516	131	242,678	287,288	287,418
000-00-0046	1002	2	LS	2004	52.31	80,862	31,700	1.00	31,700	-	-	394,439	394,439	394,439	80,862	-	-	-	394,439	394,439	394,439
000-00-0047	1002	2	LS	2005	61.64	204,913	20,722	1.00	20,722	-	122,539	199,063	199,063	261,856	204,913	-	-	122,539	199,063	199,063	261,856
000-00-0048	1002	2	LS	2008	49.57	511,551	34,088	1.00	34,088	-	-	446,682	446,682	446,682	511,551	-	-	-	446,682	446,682	446,682
000-00-0049	1002	2	LS	2011	65.26	492,593	17,899	1.00	17,899	-	145,113	159,946	159,946	159,946	492,593	-	-	145,113	159,946	159,946	159,946
000-00-0050	1002	2	LS	2013	58.48	500,529	24,867	1.00	24,867	45,279	55,132	271,783	271,783	279,101	500,529	-	45,279	55,132	271,783	271,783	279,101
000-00-0051	1002	2	LS	2013	59.65	500,529	22,743	1.00	22,743	71,697	86,902	107,467	107,467	108,502	500,529	-	71,697	86,902	107,467	107,467	108,502
000-00-0073	1002	2		1990	66.69	1,030,481	16,151	1.00	16,151	-	317,343	-	-	24	576,365	-	-	249,061	119,968	119,968	121,306
000-00-0074	1002	2		1992	63.51	1,101,838	18,812	1.00	18,812	-	323,611	-	-	0	575,072	-	-	205,024	156,572	156,572	158,077
000-00-0075	1002	2		1992	55.50	1,331,794	27,077	1.00	27,077	270,398	227,580	-	4,269	94,167	568,329	-	49,500	52,260	276,210	277,764	282,475
000-00-0076	1002	2	WO	1992	N/A	591,273	-	1.00	-	-	-	-	-	-	591,273	-	-	-	-	-	-
000-00-0077	1002	2	LS	1999	52.91	45,543	30,522	1.00	30,522	-	-	418,983	418,983	418,983	45,543	-	-	-	418,983	418,983	418,983
Total Underground Bituminous				43		18,006,418	977,762		977,762	927,668	4,337,159	8,785,303	8,998,815	9,870,703	12,277,924	0	512,825	3,060,637	10,615,924	10,825,113	11,526,822
Average of 43 claims						418,754	22,739		22,739	21,574	100,864	204,309	209,275	229,551	285,533	0	11,926	71,178	246,882	251,747	268,066
						18,984,180															
Medical plus Indemnity						441,493				21,574	100,864	204,309	209,275	229,551	308,272		11,926	71,178	246,882	251,747	268,066
Adjusted															308,272		11,926	71,178	246,882	251,747	268,066

* Type code is as follows: CC is Commuted or Compromised; WO is Widow Only; LS is Lump Sum.
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, Commuted/Compromised 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 STATE AND FEDERAL EXCESS

															"All Permanent Partial" Scenario (see note)						
											Federal Excess:							Federal Excess:		
		Awd (2)		Exp.	Age of Miner at	State	Medical	Act 44	Act	Offsets for:		After Offsets		State	State plus	Offsets for:		After Offsets		
ID No.	Class	Pend (1)	Type*	Yr.	Comp Date	Benefit	Bef. Act 44	Factor	44 Med.	Soc. Sec.	Pension	Base	SS	SS, PP	Benefit	Act 44 Med.	Soc. Sec.	Pension	Base	SS	SS, PP
000-00-0005	1016	2	LS	1998	67.80	468,904	15,318	1.00	15,318	-	117,926	133,272	133,272	133,272	468,904	-	-	117,926	133,272	133,272	133,272
000-00-0021	1016	2		1993	71.83	39,402	12,281	1.00	12,281	-	-	61,705	61,705	61,705	31,079	-	-	-	70,028	70,028	70,028
000-00-0022	1016	2		1994	69.02	714,635	14,513	1.00	14,513	-	155,318	-	-	0	465,511	-	-	131,244	82,020	82,020	82,602
000-00-0023	1016	2		2004	79.61	520,669	7,510	1.00	7,510	-	146,849	-	-	0	450,431	-	-	143,992	14,368	14,368	14,503
000-00-0024	1016	2		2005	60.16	621,747	22,743	1.00	22,743	-	145,851	34	34	4,083	318,287	-	-	79,658	181,752	181,752	182,512
000-00-0025	1016	2	LS	2011	76.68	97,389	9,113	1.00	9,113	-	44,908	95,555	95,555	140,463	97,389	-	-	44,908	95,555	95,555	140,463
000-00-0061	1016	2	LS	1991	43.13	273,662	42,590	1.00	42,590	-	-	251,071	251,071	251,071	273,662	-	-	-	251,071	251,071	251,071
000-00-0062	1016	2	LS	1991	59.49	464,713	23,793	1.00	23,793	47,084	45,635	115,020	115,020	115,020	464,713	-	47,084	45,635	115,020	115,020	115,020
000-00-0063	1016	2	LS	1997	62.59	25,918	19,753	1.00	19,753	-	18,440	285,296	285,296	303,736	25,918	-	-	18,440	285,296	285,296	303,736
000-00-0064	1016	2	LS	2000	74.58	17,422	10,307	1.00	10,307	-	11,878	217,960	217,960	229,838	17,422	-	-	11,878	217,960	217,960	229,838
000-00-0065	1016	2	LS	2003	61.47	88,790	21,719	1.00	21,719	-	53,404	97,677	97,677	147,769	88,790	-	-	53,404	97,677	97,677	147,769
000-00-0066	1016	2	LS	2003	61.41	184,979	21,719	1.00	21,719	-	74,188	257,760	257,760	294,446	184,979	-	-	74,188	257,760	257,760	294,446
000-00-0067	1016	2	LS	2007	68.81	98,940	14,513	1.00	14,513	-	74,198	163,398	163,398	237,596	98,940	-	-	74,198	163,398	163,398	237,596
000-00-0068	1016	2	LS	2007	72.89	41,874	11,598	1.00	11,598	-	27,608	146,746	146,746	174,353	41,874	-	-	27,608	146,746	146,746	174,353
000-00-0069	1016	2	LS	2007	60.60	74,631	21,719	1.00	21,719	-	50,499	98,089	98,089	148,589	74,631	-	-	50,499	98,089	98,089	148,589
000-00-0089	1016	2	WO	1990	N/A	434,758	-	1.00	-	-	-	-	-	-	434,758	-	-	-	-	-	-
000-00-0090	1016	2		1990	65.74	552,373	17,012	1.00	17,012	-	123,116	9	9	1,667	307,188	-	-	93,509	141,294	141,294	141,827
000-00-0091	1016	2	WO	1990	N/A	472,658	-	1.00	-	-	-	-	-	-	472,658	-	-	-	-	-	-
000-00-0092	1016	2		1990	63.64	743,891	18,812	1.00	18,812	-	136,666	23,133	23,133	36,764	274,611	-	-	86,585	400,680	400,680	401,316
000-00-0093	1016	2	WO	1991	N/A	251,927	-	1.00	-	-	-	-	-	-	251,927	-	-	-	-	-	-
000-00-0094	1016	2		1992	69.33	624,167	14,513	1.00	14,513	-	134,955	-	-	0	412,826	-	-	115,182	77,320	77,320	77,813
000-00-0095	1016	2		1992	66.08	661,296	17,012	1.00	17,012	-	146,051	-	-	4	404,508	-	-	117,932	101,619	101,619	102,216
000-00-0096	1016	2		1992	67.23	686,233	16,151	1.00	16,151	-	152,155	-	-	11	400,069	-	-	119,416	121,587	121,587	122,229
000-00-0097	1016	2		1993	59.70	625,170	22,743	1.00	22,743	222,841	175,731	-	5,326	73,225	363,809	-	84,213	79,924	90,446	91,648	100,152
000-00-0098	1016	2	WO	1993	N/A	567,967	-	1.00	-	-	-	-	-	-	567,967	-	-	-	-	-	-
000-00-0099	1016	2		1993	65.92	877,379	17,012	1.00	17,012	-	192,116	-	-	-	544,086	-	-	157,004	95,222	95,222	95,993
000-00-0100	1016	2		1994	62.25	500,235	20,722	1.00	20,722	-	126,173	118	118	10,163	267,192	-	-	68,910	155,690	155,690	156,464
000-00-0101	1016	2	WO	1994	N/A	637,927	-	1.00	-	-	-	-	-	-	637,927	-	-	-	-	-	-
000-00-0102	1016	2		1995	67.59	413,243	15,318	1.00	15,318	-	90,650	7	7	2,948	261,009	-	-	74,943	93,280	93,280	93,636
000-00-0103	1016	2		1995	66.97	1,196,698	16,151	1.00	16,151	-	292,901	-	-	1	579,421	-	-	218,751	175,896	175,896	177,176
000-00-0104	1016	2		1995	69.81	360,931	13,738	1.00	13,738	-	77,967	86	86	6,743	230,511	-	-	65,504	91,076	91,076	93,035
000-00-0105	1016	2		1996	63.07	610,480	19,753	1.00	19,753	-	207,804	-	-	-	383,877	-	-	122,827	70,067	70,067	71,092
000-00-0106	1016	2		1997	62.27	538,103	20,722	1.00	20,722	-	172,194	-	-	8	329,707	-	-	94,045	76,935	76,935	77,833
000-00-0107	1016	2		1997	66.58	462,344	16,151	1.00	16,151	-	-	-	-	-	322,441	-	-	-	47,362	47,362	47,362
000-00-0108	1016	2	LS	1999	73.64	20,037	10,940	1.00	10,940	-	-	75,536	75,536	75,536	20,037	-	-	-	75,536	75,536	75,536
000-00-0109	1016	2		2001	48.10	897,527	36,510	1.00	36,510	198,762	90,160	2,051	109,483	196,559	327,770	-	-	-	389,932	389,932	389,932
Total Surface Anthracite				36		15,869,022	562,444		562,444	468,686	3,085,340	2,024,524	2,137,282	2,645,568	10,896,829	0	131,298	2,288,111	4,413,952	4,415,154	4,749,409
Average of 36 claims						440,806	15,623		15,623	13,019	85,704	56,237	59,369	73,488	302,690	0	3,647	63,559	122,610	122,643	131,928
						16,431,466															
Medical plus Indemnity						456,430				13,019	85,704	56,237	59,369	73,488	318,313		3,647	63,559	122,610	122,643	131,928
Adjusted															318,313		3,647	63,559	122,610	122,643	131,928

* Type code is as follows: CC is Commuted or Compromised; WO is Widow Only; LS is Lump Sum

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, Commuted/Compromised and Lump Sums were the same as in the Base Scenari

Sources: Individual claim data from CMCRB

COAL MINE COMPENSATION RATING BUREAU
INDIVIDUAL CLAIM DETAIL FOR STATE AND FEDERAL EXCESS

												Federal Excess: After Offsets:			"All Permanent Partial" Scenario (see note)				Federal Excess: After Offsets:		
ID No.	Class	Awd (2) Pend (1)	Type*	Exp. Yr.	Age of Miner at Comp Date	State Benefit	Medical Bef. Act 44	Act 44 Factor	Act 44 Med.	Offsets for: Soc. Sec.	Offsets for: Pension	Base	SS	SS, PP	State Benefit	State plus Act 44 Med.	Offsets for: Soc. Sec.	Offsets for: Pension	Base	SS	SS, PP
000-00-0020	1013	1		2011	58.77	805,857	23,793	1.00	23,793	255,524	215,586	-	1,898	51,515	457,134	-	84,406	86,171	96,991	98,397	99,704
000-00-0053	1013	2	LS	1990	45.48	525,861	40,170	1.00	40,170	-	-	484,076	484,076	484,076	525,861	-	-	-	484,076	484,076	484,076
000-00-0054	1013	2	LS	1991	69.22	174,796	14,513	1.00	14,513	-	116,868	88,795	88,795	170,895	174,796	-	-	116,868	88,795	88,795	170,895
000-00-0055	1013	2	LS	1994	59.11	59,217	23,793	1.00	23,793	20,792	-	325,088	345,880	345,880	59,217	-	20,792	-	325,088	345,880	345,880
000-00-0056	1013	2	LS	1996	64.21	70,253	18,812	1.00	18,812	-	56,590	92,290	92,290	148,880	70,253	-	-	56,590	92,290	92,290	148,880
000-00-0057	1013	2	LS	1996	61.04	163,412	21,719	1.00	21,719	-	98,288	213,853	213,853	286,673	163,412	-	-	98,288	213,853	213,853	286,673
000-00-0058	1013	2	LS	1997	61.04	9,680	21,719	1.00	21,719	-	5,822	285,624	285,624	291,446	9,680	-	-	5,822	285,624	285,624	291,446
000-00-0059	1013	2	LS	1998	62.52	103,464	19,753	1.00	19,753	-	73,612	88,331	88,331	147,001	103,464	-	-	73,612	88,331	88,331	147,001
000-00-0060	1013	2	LS	2005	46.21	32,016	38,950	1.00	38,950	-	-	273,727	273,727	273,727	32,016	-	-	-	273,727	273,727	273,727
000-00-0082	1013	2	CC	1991	43.69	393,765	41,384	1.00	41,384	-	-	242,471	242,471	242,471	393,765	-	-	-	242,471	242,471	242,471
000-00-0083	1013	2		1993	64.41	1,204,508	18,812	1.00	18,812	-	354,242	-	-	2	583,629	-	-	224,431	181,066	181,066	182,713
000-00-0084	1013	2		1993	57.79	909,180	24,867	1.00	24,867	226,560	169,491	1	19,329	138,291	409,092	-	63,869	59,296	244,863	246,131	271,246
000-00-0085	1013	2		1994	45.76	1,476,455	38,950	1.00	38,950	268,249	146,361	12	54,412	183,948	504,823	-	-	-	451,282	451,282	451,282
000-00-0086	1013	2		1995	56.89	775,024	25,963	1.00	25,963	193,981	130,347	387	49,055	166,932	329,854	-	45,158	38,978	281,860	282,962	311,276
000-00-0087	1013	2		1999	53.50	955,012	29,358	1.00	29,358	221,665	143,501	28	40,972	164,568	392,494	-	18,246	15,910	301,788	303,082	310,418
000-00-0088	1013	2	LS	1999	59.19	39,598	23,793	1.00	23,793	13,903	-	299,333	313,236	313,236	39,598	-	13,903	-	299,333	313,236	313,236
Total Surface Bituminous				16		7,698,099	426,345		426,345	1,200,674	1,510,708	2,394,016	2,593,948	3,409,541	4,249,088	0	246,374	775,966	3,951,437	3,991,203	4,330,922
Average of 16 claims						481,131	26,647		26,647	75,042	94,419	149,626	162,122	213,096	265,568	0	15,398	48,498	246,965	249,450	270,683
						8,124,444															
Medical plus Indemnity						507,778				75,042	94,419	149,626	162,122	213,096	292,215		15,398	48,498	246,965	249,450	270,683
Adjusted															292,215		15,398	48,498	246,965	249,450	270,683

* Type code is as follows: CC is Commuted or Compromised; WO is Widow Only; LS is Lump Sum.
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, Commuted/Compromised 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 STATE AND FEDERAL EXCESS

												Federal Excess:			"All Permanent Partial" Scenario (see note				Federal Excess:		
		Awd (2)		Exp.	Age of Miner at	State	Medical	Act 44	Act	Offsets for:			After Offsets:		State	State plus	Offsets for:			After Offsets:	
ID No.	Class	Pend (1)	Type*	Yr.	Comp Date	Benefit	Bef. Act 44	Factor	44 Med.	Soc. Sec.	Pension	Base	SS	SS, PP	Benefit	Act 44 Med.	Soc. Sec.	Pension	Base	SS	SS, PP
000-00-0110	1017	2	LS	1992	56.91	198,692	25,963	1.00	25,963	32,115	3,306	298,597	319,077	322,330	198,692	-	32,115	3,306	298,597	319,077	322,330
000-00-0111	1017	2		1993	60.76	1,328,529	21,719	1.00	21,719	-	358,109	-	-	114	583,429	-	-	211,669	230,279	230,279	232,046
000-00-0070	1022	2	LS	2003	53.06	78,256	30,522	1.00	30,522	-	-	350,505	350,505	350,505	78,256	-	-	-	350,505	350,505	350,505
000-00-0071	1024	2	LS	2006	59.96	108,721	22,743	1.00	22,743	47,750	-	109,491	147,248	147,248	108,721	-	47,750	-	109,491	147,248	147,248
000-00-0026	1026	2		2007	43.15	1,066,732	42,590	1.00	42,590	203,274	67,416	14,519	158,269	224,779	333,142	-	-	-	554,922	554,922	554,922
000-00-0027	1026	2		2010	74.49	420,809	10,940	1.00	10,940	-	87,052	-	-	2	318,110	-	-	80,534	43,337	43,337	43,554
000-00-0072	1026	2	LS	1997	54.71	34,558	28,209	1.00	28,209	886	-	192,993	193,879	193,879	34,558	-	886	-	192,993	193,879	193,879
000-00-0112	1026	2		1997	55.39	433,740	28,209	1.00	28,209	158,018	83,141	89	56,932	136,012	222,810	-	21,020	15,932	129,947	130,864	142,736
000-00-0113	1026	2	LS	2004	78.06	68,628	8,554	1.00	8,554	-	40,718	117,821	117,821	158,539	68,628	-	-	40,718	117,821	117,821	158,539
000-00-0028	1028	1		2005	56.54	1,392,285	25,963	1.00	25,963	293,203	278,228	-	4,376	134,503	591,468	-	68,251	81,564	259,327	260,991	278,046
000-00-0114	1028	2	LS	2000	78.26	61,510	8,554	1.00	8,554	-	35,913	163,037	163,037	198,950	61,510	-	-	35,913	163,037	163,037	198,950
Total Other Classes				11		5,192,459	253,965		253,965	735,246	953,884	1,247,052	1,511,144	1,866,862	2,599,323	0	170,022	469,637	2,450,256	2,511,961	2,622,756
Average of 11 claims						472,042	23,088		23,088	66,841	86,717	113,368	137,377	169,715	236,302	0	15,457	42,694	222,751	228,360	238,432
						5,446,424															
Medical plus Indemnity						495,129				66,841	86,717	113,368	137,377	169,715	259,390		15,457	42,694	222,751	228,360	238,432
Adjusted															259,390		15,457	42,694	222,751	228,360	238,432

* Type code is as follows: CC is Commuted or Compromised; WO is Widow Only; LS is Lump Su

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, Commuted/Compromised and Lump Sums were the same as in the Base Scer

Sources: Individual claim data from CMCRB

Coal Mine Compensation Rating Bureau
Individual Claim Detail for Federal Basic

ID No.	Class	Awd (2) Pend (1)	Exp. Yr.	Type*	Age of Miner at Comp. Date	Federal Benefit	Medical
88	160	2	1990	0	60.50	385,089	35,378
89	160	2	1990	0	67.11	404,785	25,124
90	160	2	1990	0	52.39	557,981	49,311
91	160	2	1990	0	64.94	281,460	27,842
92	160	2	1990	0	56.42	348,841	42,120
93	160	1	1999	0	59.16	190,779	37,011
94	160	2	2001	0	51.00	420,004	51,161
95	160	2	2003	0	65.28	266,001	27,842
96	160	2	2006	0	53.47	537,741	47,478
97	160	1	2008	0	44.16	320,094	64,375
98	160	1	2011	0	53.44	241,358	47,478
99	160	1	2013	0	44.31	320,094	64,375
164	160	2	1990	0	67.34	278,885	25,124
165	160	2	1990	0	54.50	511,303	43,881
166	160	2	1990	WO	N/A	227,574	-
167	160	2	1992	WO	N/A	259,921	-
168	160	2	1993	0	59.78	406,817	35,378
169	160	2	1994	0	61.23	174,919	33,784
170	160	2	2001	0	64.89	273,575	27,842

Total Underground Anthracite		6,407,218	685,503
Average of 19 claims	57.64	337,222	36,079
Medical plus Indemnity		373,301	

*Type is "WO" for Widow Only claims; 0 for all other claims.

Source: Individual claim detail from CMCRB.

Coal Mine Compensation Rating Bureau
Individual Claim Detail for Federal Basic

ID No.	Class	Awd (2) Pend (1)	Exp. Yr.	Type*	Age of Miner at Comp. Date	Federal Benefit	Medical
49	158	1	1990	0	36.42	841,183	78,704
50	158	2	1990	0	57.91	377,876	38,682
51	158	1	1991	0	41.77	697,755	68,110
52	158	2	1991	0	81.18	121,572	10,930
53	158	2	1991	0	54.11	457,248	45,667
54	158	1	1991	0	71.12	213,007	20,213
55	158	1	1991	0	39.62	711,185	71,769
56	158	2	1991	0	68.11	242,065	23,828
57	158	2	1992	0	65.60	275,898	26,462
58	158	2	1992	0	79.44	149,438	12,476
59	158	2	1992	0	62.76	327,538	30,726
60	158	1	1992	0	45.26	648,225	62,486
61	158	2	1993	0	66.43	267,944	26,462
62	158	1	1994	0	57.93	479,294	38,682
63	158	1	1994	0	72.51	190,739	18,041
64	158	2	1994	0	60.97	348,936	33,784
65	158	2	1995	0	70.65	243,042	20,213
66	158	1	1996	0	70.22	211,095	21,370
67	158	1	1997	0	79.15	143,721	12,476
68	158	1	1998	0	44.74	662,655	62,486
69	158	2	1999	0	56.03	391,662	42,120
70	158	2	1999	0	63.36	412,890	30,726
71	158	2	2001	0	54.95	398,804	43,881
72	158	2	2001	0	61.75	324,439	32,234
73	158	2	2001	0	59.28	412,969	37,011
74	158	2	2001	0	60.19	364,832	35,378
75	158	1	2002	0	54.41	457,248	45,667
76	158	2	2002	0	58.29	198,942	38,682
77	158	2	2002	0	55.34	224,125	43,881
78	158	1	2002	0	63.03	346,807	30,726
79	158	2	2003	0	67.68	291,589	23,828
80	158	2	2004	0	58.85	371,255	37,011
81	158	2	2006	0	60.41	374,793	35,378
82	158	1	2007	0	55.23	450,355	43,881
83	158	1	2010	0	61.34	330,662	33,784
84	158	1	2011	0	65.82	138,457	26,462
85	158	1	2012	0	65.16	298,204	27,842
86	158	1	2013	0	56.03	215,634	42,120
87	158	1	2013	0	65.37	281,460	27,842
150	158	2	1990	WO	N/A	305,911	-
151	158	2	1990	0	73.06	190,739	18,041
152	158	2	1992	0	71.39	259,853	20,213
153	158	2	1992	WO	N/A	100,657	-
154	158	1	1992	WO	N/A	341,812	-
155	158	1	1992	0	62.54	159,771	30,726
156	158	2	1993	0	62.00	352,604	32,234
157	158	1	1993	WO	N/A	121,231	-
158	158	2	1993	0	64.46	419,775	29,263
159	158	2	1994	WO	N/A	227,574	-
160	158	1	1994	WO	N/A	389,745	-
161	158	2	1997	WO	N/A	207,282	-
162	158	2	1999	0	70.49	217,777	21,370
163	158	2	1999	WO	N/A	188,009	-
Total Underground Bituminous						17,378,283	1,553,870
Average of 53 claims					61.61	327,892	29,318
Medical plus Indemnity						357,210	

*Type is "WO" for Widow Only claims; 0 for all other claims.

Source: Individual claim detail from CMCRB.

Coal Mine Compensation Rating Bureau
Individual Claim Detail for Federal Basic

ID No.	Class	Awd (2) Pend (1)	Exp. Yr.	Type*	Age of Miner at Comp. Date	Federal Benefit	Medical
1	153	1	1990	0	54.96	538,267	43,881
2	153	1	1992	0	65.99	138,457	26,462
3	153	2	1993	0	62.41	342,858	32,234
4	153	1	1995	0	55.87	215,634	42,120
5	153	2	1995	0	53.19	511,723	47,478
6	153	1	1996	0	65.26	316,319	27,842
7	153	1	1996	0	65.58	292,776	26,462
8	153	1	1998	0	66.38	311,012	26,462
9	153	2	2000	0	76.19	172,224	15,085
10	153	2	2002	0	75.14	196,125	16,032
11	153	2	2003	0	68.92	277,715	22,576
12	153	2	2004	0	56.26	401,314	42,120
13	153	2	2004	0	56.70	394,416	40,386
14	153	2	2005	0	60.49	374,793	35,378
15	153	2	2007	0	76.31	80,380	15,085
16	153	1	2013	0	53.83	468,612	45,667
105	153	2	1990	0	60.12	182,766	35,378
106	153	2	1990	0	71.50	195,168	19,104
107	153	2	1990	WO	N/A	178,741	-
108	153	2	1990	0	73.92	90,380	17,018
109	153	2	1990	0	72.80	178,517	18,041
110	153	2	1991	0	73.48	184,480	18,041
111	153	2	1992	0	65.72	226,695	26,462
112	153	2	1992	0	73.09	234,625	18,041
113	153	2	1993	0	63.45	367,466	30,726
114	153	1	1994	0	63.92	303,840	29,263
115	153	2	1995	0	77.64	152,846	13,307
116	153	2	1995	0	65.56	239,207	26,462
117	153	2	1995	0	66.54	131,717	25,124
118	153	2	1996	0	58.31	368,425	38,682
119	153	2	1997	0	60.04	374,793	35,378
120	153	2	1997	WO	N/A	188,009	-
121	153	2	1998	0	73.04	172,841	18,041
122	153	2	2000	0	66.03	301,722	26,462
123	153	2	2003	0	65.03	273,575	27,842
124	153	2	2003	0	65.00	145,379	27,842
125	153	2	2007	0	59.55	395,786	35,378

Total Surface Anthracite		9,919,603	991,862
Average of 37 claims	65.38	268,097	26,807
Medical plus Indemnity		294,904	

*Type is "WO" for Widow Only claims; 0 for all other claims.
Source: Individual claim detail from CMCRB.

Coal Mine Compensation Rating Bureau
Individual Claim Detail for Federal Basic

ID No.	Class	Awd (2) Pend (1)	Exp. Yr.	Type*	Age of Miner at Comp. Date	Federal Benefit	Medical
17	156	2	1990	0	70.45	217,777	21,370
18	156	1	1990	0	47.13	554,478	58,690
19	156	1	1991	0	56.39	411,332	42,120
20	156	1	1991	0	44.70	634,142	62,486
21	156	1	1991	0	30.10	420,579	87,638
22	156	2	1992	0	52.41	518,588	49,311
23	156	1	1992	0	59.87	182,766	35,378
24	156	2	1992	0	62.67	309,691	30,726
25	156	1	1992	0	43.15	662,148	66,250
26	156	2	1993	0	82.26	105,269	10,227
27	156	1	1993	0	80.02	140,453	11,683
28	156	2	1994	0	57.24	472,847	40,386
29	156	2	1994	0	80.24	124,779	11,683
30	156	2	1994	0	81.59	54,977	10,227
32	156	2	1995	0	61.87	342,858	32,234
33	156	2	1995	0	65.13	325,901	27,842
34	156	1	1995	0	57.95	419,303	38,682
35	156	1	1995	0	42.14	336,963	68,110
36	156	2	1996	0	67.08	287,551	25,124
37	156	1	1996	0	46.06	716,903	60,589
38	156	2	1997	0	61.97	352,604	32,234
40	156	1	2004	0	50.61	525,566	51,161
41	156	1	2006	0	57.74	419,303	38,682
42	156	2	2007	0	63.94	218,017	29,263
43	156	1	2008	0	70.55	259,853	20,213
44	156	1	2008	0	58.40	387,688	38,682
45	156	1	2012	0	63.74	295,370	29,263
46	156	1	2012	0	65.59	292,776	26,462
47	156	1	2012	0	59.31	371,255	37,011
48	156	1	2013	0	74.32	193,132	17,018
126	156	2	1990	0	70.79	213,007	20,213
127	156	2	1990	0	71.51	101,107	19,104
128	156	2	1990	0	61.43	412,294	33,784
129	156	2	1991	0	84.18	99,769	8,963
130	156	1	1991	0	62.11	362,700	32,234
131	156	2	1991	0	79.99	124,779	11,683
132	156	2	1991	0	77.89	136,645	13,307
133	156	2	1991	WO	N/A	468,028	-
134	156	2	1991	WO	N/A	160,948	-
135	156	2	1992	0	71.10	199,824	20,213
136	156	2	1992	0	66.18	284,172	26,462
137	156	2	1992	0	69.69	232,071	21,370
138	156	2	1994	0	74.94	176,116	16,032
139	156	2	1994	0	54.92	511,303	43,881
140	156	1	1995	0	54.49	544,732	45,667
141	156	2	1995	0	70.51	206,262	20,213
142	156	2	1995	0	76.03	166,093	15,085
143	156	2	1995	0	65.86	267,944	26,462
144	156	2	1995	0	61.86	324,439	32,234
145	156	2	1996	0	77.58	141,777	13,307
146	156	2	2000	0	55.51	467,005	42,120
147	156	2	2000	0	62.11	333,468	32,234
148	156	2	2008	WO	N/A	160,948	-
149	156	2	2012	WO	N/A	227,574	-

Total Surface Bituminous		16,877,876	1,605,313
Average of 54 claims	63.67	312,553	29,728
Medical plus Indemnity		342,281	

*Type is "WO" for Widow Only claims; 0 for all other claims.

Source: Individual claim detail from CMCRB.

Coal Mine Compensation Rating Bureau
Individual Claim Detail for Federal Basic

ID No.	Class	Awd (2) Pend (1)	Exp. Yr.	Type*	Age of Miner at Comp. Date	Federal Benefit	Medical
171	181	2	1997	0	62.00	342,858	32,234
100	183	1	1997	0	53.33	241,358	47,478
101	183	1	2000	0	51.88	250,074	49,311
102	183	1	2004	0	62.34	333,468	32,234
172	183	2	1997	0	80.31	129,730	11,683
103	184	1	2005	0	62.06	167,250	32,234
104	184	1	2011	0	70.83	235,084	20,213
173	184	2	2002	0	79.05	189,688	12,476

Total Other Classes		1,889,510	237,862
Average of 8 claims	65.23	236,189	29,733
Medical plus Indemnity		265,921	

*Type is "WO" for Widow Only claims; 0 for all other claims.

Source: Individual claim detail from CMCRB.

COAL MINE COMPENSATION RATING BUREAU
Summary of Developed & Adjusted Payrolls

	Anthracite Underground	Bituminous Underground	Anthracite Surface	Bituminous Surface	Coke	Auger	Anthracite Co-gen	Bituminous Co-gen	Anthracite Prep Plant	Bituminous Prep Plant	Total
Traumatic											
	(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	197,351	50,439,544	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	75,855	55,493,906	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	-	66,842,986	12,359,731	56,217,298	12,049,126	1,058,799	7,351,514	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	1,026,537	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	154,412,040	26,295,907	76,433,301	5,738,105	808,208	10,273,004	9,047,745	8,671,140	34,211,729	326,110,586
2013	175,900	146,145,680	22,127,846	63,507,517	4,791,910	1,093,790	8,678,376	13,133,423	8,266,396	33,935,906	301,856,744
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	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	65,497,665	12,359,731	56,217,298	12,049,126	1,058,799	7,351,514	6,374,483	4,406,653	18,067,286	184,727,876
2005	1,417,568	70,872,620	12,140,911	64,871,562	12,860,979	1,026,537	7,855,289	8,524,752	5,170,069	17,690,358	202,430,645
2006	1,442,524	70,465,937	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	153,602,187	26,295,907	76,433,301	5,738,105	808,208	10,273,004	9,047,745	8,671,140	34,211,729	326,110,586
2013	382,329	145,939,251	22,127,846	63,507,517	4,791,910	1,093,790	8,678,376	13,133,423	8,266,396	33,935,906	301,856,744
Federal OD											
	(0160)	(0158)	(0153)	(0156)	(0154)	(0157)	(0181)	(0182)	(0183)	(0184)	
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	12,923,748	58,151,332	10,375,826	1,429,131	4,661,813	2,121,331	2,216,299	10,155,025	152,193,657
2002	1,386,545	40,837,995	11,046,570	53,502,085	10,485,005	1,150,843	5,658,774	2,386,124	2,322,815	10,094,549	138,871,305
2003	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	10,195,206	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	153,602,187	24,734,711	77,870,990	5,738,105	808,208	9,311,812	9,047,745	7,569,023	34,211,729	323,923,770
2013	382,329	141,449,556	20,261,498	64,837,518	4,791,910	1,093,790	7,958,314	13,133,423	7,053,691	33,303,121	294,265,150

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 - 2002

COAL MINE COMPENSATION RATING BUREAU
History of Reported OD Payrolls 1979-1996

State OD

	Anthracite Underground	Bituminous Underground	Anthracite Surface	Bituminous Surface	Coke	Auger	Anthracite Co-gen	Bituminous Co-gen	Anthracite Prep Plant	Bituminous Prep Plant	
	(1011)	(1002)	(1016)	(1013)	(1017)	(1019)	(1022)	(1024)	(1026)	(1028)	Total
1979	3,398,172	155,459,760	33,547,630	189,274,623	8,602,156	1,250,040	0	0	0	0	391,532,381
1980	3,933,740	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	141,497,489	45,905,609	193,710,747	3,521,616	1,581,422	0	0	0	0	391,206,842
1982	5,295,887	170,306,624	42,724,737	194,074,092	1,831,640	1,682,037	0	0	0	0	415,915,017
1983	4,169,015	82,776,145	34,841,224	146,423,067	124,805	1,260,780	0	0	0	0	269,595,036
1984	4,137,720	77,024,693	34,531,000	174,212,221	2,078,069	1,778,957	0	0	0	0	293,762,660
1985	4,507,670	46,693,499	31,216,341	143,422,695	2,528,033	1,561,675	0	0	0	0	229,929,913
1986	4,896,054	43,203,448	32,077,958	136,641,573	19,044,481	1,669,241	0	0	0	0	237,532,755
1987	4,061,875	55,036,577	25,008,155	134,305,891	26,573,681	1,695,582	0	0	0	0	246,681,761
1988	2,745,685	64,843,301	23,099,360	126,493,210	18,498,632	1,626,194	0	0	0	0	237,306,382
1989	2,066,292	74,335,286	27,044,506	125,361,713	12,583,451	1,888,442	0	0	0	0	243,279,690
1990	1,547,051	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	932,801	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	1,181,997	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	1,310,675	60,590,938	30,210,452	92,464,635	54,721,324	1,485,044	3,704,499	377,617	0	0	244,865,184
1995	1,493,523	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

Federal OD

	Anthracite Underground	Bituminous Underground	Anthracite Surface	Bituminous Surface	Coke	Auger	Anthracite Co-gen	Bituminous Co-gen	Anthracite Prep Plant	Bituminous Prep Plant	
	(0160)	(0158)	(0153)	(0156)	(0154)	(0157)	(0181)	(0182)	(0183)	(0184)	Total
1979	3,398,172	155,459,760	33,547,630	189,274,623	8,602,156	1,250,040	0	0	0	0	391,532,381
1980	3,933,740	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	141,497,489	45,905,609	193,710,747	3,521,616	1,581,422	0	0	0	0	391,206,842
1982	5,295,887	170,306,624	42,724,737	194,074,092	1,831,640	1,682,037	0	0	0	0	415,915,017
1983	4,169,015	82,776,145	34,841,224	146,423,067	124,805	1,260,780	0	0	0	0	269,595,036
1984	4,137,720	77,024,693	34,531,000	174,212,221	2,078,069	1,778,957	0	0	0	0	293,762,660
1985	4,507,670	46,693,499	31,216,341	143,422,695	2,528,033	1,561,675	0	0	0	0	229,929,913
1986	4,896,054	43,203,448	32,077,958	136,641,573	19,044,481	1,669,241	0	0	0	0	237,532,755
1987	4,061,875	42,076,700	25,008,155	134,305,891	26,573,681	1,695,582	0	0	0	0	233,721,884
1988	2,745,685	51,133,431	23,099,360	126,493,210	18,498,632	1,626,194	0	0	0	0	223,596,512
1989	2,066,292	58,507,532	27,044,506	125,361,713	12,583,451	1,888,442	0	0	0	0	227,451,936
1990	1,547,051	63,271,520	32,392,891	124,189,071	61,308,712	2,295,585	676,180	0	0	0	285,681,010
1991	718,147	58,318,242	30,956,584	104,583,500	52,451,102	1,718,758	1,093,089	0	0	0	249,839,422
1992	932,801	63,401,297	29,476,120	100,999,381	42,761,324	1,181,625	3,505,476	47,640	0	0	242,305,664
1993	1,181,997	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	1,310,675	60,590,938	30,210,452	92,464,635	54,721,324	1,485,044	3,704,499	377,617	0	0	244,865,184
1995	1,493,523	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

Source: Prior Filings

COAL MINE COMPENSATION RATING BUREAU
TRAUMATIC LOSS COST PREMIUM

	ANTHRACITE UNDERGROUND (1010)			BITUMINOUS UNDERGROUND (1001)			ANTHRACITE SURFACE (1012)			BITUMINOUS SURFACE (1014)		
YEAR	LOSS COST	DEVELOPED PAYROLL	LOSS COST PREMIUM	LOSS COST	DEVELOPED PAYROLL	LOSS COST PREMIUM	LOSS COST	DEVELOPED PAYROLL	LOSS COST PREMIUM	LOSS COST	DEVELOPED PAYROLL	LOSS COST PREMIUM
2003	20.04	75,855	15,201	5.68	55,493,906	3,152,054	7.38	12,166,211	897,866	1.85	47,873,740	885,664
2004	20.04	0	0	5.68	66,842,986	3,796,682	7.38	12,359,731	912,148	1.85	56,217,298	1,040,020
2005	20.04	0	0	5.68	72,290,188	4,106,083	7.38	12,140,911	895,999	1.85	64,871,562	1,200,124
2006	20.04	530	106	5.68	71,907,931	4,084,370	7.38	11,946,382	881,643	1.85	63,008,975	1,165,666
2007	20.04	0	0	5.68	81,566,803	4,632,994	7.38	14,555,579	1,074,202	1.85	63,295,774	1,170,972
2008	20.04	0	0	5.68	103,490,690	5,878,271	7.38	16,954,313	1,251,228	1.85	73,054,482	1,351,508
2009	20.04	0	0	5.68	102,684,006	5,832,452	7.38	16,445,462	1,213,675	1.85	61,784,394	1,143,011
2010	20.04	5,700	1,142	5.68	126,687,464	7,195,848	7.38	14,295,288	1,054,992	1.85	72,711,558	1,345,164
2011	20.04	110,125	22,069	5.68	149,633,528	8,499,184	7.38	21,034,600	1,552,353	1.85	86,074,064	1,592,370
2012	20.04	219,407	43,969	5.68	154,412,040	8,770,604	7.38	26,295,907	1,940,638	1.85	76,433,301	1,414,016
2013	20.04	175,900	35,250	5.68	146,145,680	8,301,075	7.38	22,127,846	1,633,035	1.85	63,507,517	1,174,889

	COKE (1469)			AUGER (1015)			ANTHRACITE CO-GEN (1021)			BITUMINOUS CO-GEN (1023)		
YEAR	LOSS COST	DEVELOPED PAYROLL	LOSS COST PREMIUM	LOSS COST	DEVELOPED PAYROLL	LOSS COST PREMIUM	LOSS COST	DEVELOPED PAYROLL	LOSS COST PREMIUM	LOSS COST	DEVELOPED PAYROLL	LOSS COST PREMIUM
2003	6.40	11,534,080	738,181	14.75	1,102,223	162,578	1.98	7,137,655	141,326	1.07	3,052,523	32,662
2004	6.40	12,049,126	771,144	14.75	1,058,799	156,173	1.98	7,351,514	145,560	1.07	6,374,483	68,207
2005	6.40	12,860,979	823,103	14.75	1,026,537	151,414	1.98	7,855,289	155,535	1.07	8,524,752	91,215
2006	6.40	12,737,394	815,193	14.75	1,066,831	157,358	1.98	8,405,393	166,427	1.07	9,397,580	100,554
2007	6.40	13,669,925	874,875	14.75	1,121,156	165,371	1.98	9,160,450	181,377	1.07	10,789,214	115,445
2008	6.40	9,761,146	624,713	14.75	2,488,558	367,062	1.98	7,958,335	157,575	1.07	8,468,561	90,614
2009	6.40	5,173,552	331,107	14.75	926,163	136,609	1.98	8,004,644	158,492	1.07	7,866,413	84,171
2010	6.40	5,435,658	347,882	14.75	806,696	118,988	1.98	8,481,228	167,928	1.07	8,732,701	93,440
2011	6.40	3,599,086	230,342	14.75	1,176,255	173,498	1.98	11,720,035	232,057	1.07	9,102,411	97,396
2012	6.40	5,738,105	367,239	14.75	808,208	119,211	1.98	10,273,004	203,405	1.07	9,047,745	96,811
2013	6.40	4,791,910	306,682	14.75	1,093,790	161,334	1.98	8,678,376	171,832	1.07	13,133,423	140,528

	ANTHRACITE PREP PLANT (1025)			BITUMINOUS PREP PLANT (1027)			TOTAL	
YEAR	LOSS COST	DEVELOPED PAYROLL	LOSS COST PREMIUM	LOSS COST	DEVELOPED PAYROLL	LOSS COST PREMIUM	DEVELOPED PAYROLL	LOSS COST PREMIUM
2003	5.49	3,721,296	204,299	1.00	14,752,318	147,523	156,909,807	6,377,354
2004	5.49	4,406,653	241,925	1.00	18,067,286	180,673	184,727,876	7,312,532
2005	5.49	5,170,069	283,837	1.00	17,690,358	176,904	202,430,645	7,884,214
2006	5.49	4,885,882	268,235	1.00	17,050,967	170,510	200,407,865	7,810,062
2007	5.49	5,756,439	316,029	1.00	18,895,192	188,952	218,810,532	8,720,217
2008	5.49	6,390,767	350,853	1.00	21,250,256	212,503	249,817,108	10,284,327
2009	5.49	6,749,748	370,561	1.00	19,828,012	198,280	229,462,394	9,468,358
2010	5.49	5,762,086	316,339	1.00	26,313,130	263,131	269,231,509	10,904,854
2011	5.49	7,236,583	397,288	1.00	35,155,068	351,551	324,841,755	13,148,108
2012	5.49	8,671,140	476,046	1.00	34,211,729	342,117	326,110,586	13,774,056
2013	5.49	8,266,396	453,825	1.00	33,935,906	339,359	301,856,744	12,717,809

Payroll - Exhibit X-D, pages 1, 2, 3, 4 and 5; Loss Costs - Exhibit X-B Page 2

PAB
Effective Date - April 01, 2015

Coal Mine Compensation Rating Bureau
Traumatic & OD Loss costs
Approved Effective April 1, 2014

CLASS DESCRIPTION	CLASS CODE	CURRENT MANUAL LOSS COST	CLASS CODE	CURRENT MANUAL LOSS COST	CLASS CODE	CURRENT MANUAL LOSS COST
	TRAUMATIC		STATE O D		FEDERAL O D	
UNDERGROUND						
Anthracite	1010	$20.04	1011	$4.58	0160	$12.15
Bituminous	1001	$5.68	1002	$0.54	0158	$0.66
SURFACE						
Anthracite	1012	$7.38	1016	$2.57	0153	$3.70
Bituminous	1014	$1.85	1013	$0.16	0156	$0.40
COKE	1469	$6.40	1017	$0.12	0154	$0.11
AUGER	1015	$14.75	1019	$0.25	0157	$0.39
CO-GEN						
Anthracite	1021	$1.98	1022	$0.40	0181	$0.54
Bituminous	1023	$1.07	1024	$0.38	0182	$0.33
PREP PLANT						
Anthracite	1025	$5.49	1026	$2.67	0183	$1.30
Bituminous	1027	$1.00	1028	$0.29	0184	$0.44

CLASS DESCRIPTION	CLASS CODE	UNLOADED APPROVED LOSS COST	CLASS CODE	UNLOADED APPROVED LOSS COST	CLASS CODE	UNLOADED APPROVED LOSS COST
	TRAUMATIC		STATE O D		FEDERAL O D	
UNDERGROUND						
Anthracite	1010	$19.43	1011	$4.58	0160	$12.15
Bituminous	1001	$5.33	1002	$0.54	0158	$0.66
SURFACE						
Anthracite	1012	$7.21	1016	$2.57	0153	$3.70
Bituminous	1014	$1.78	1013	$0.16	0156	$0.40
COKE	1469	$6.25	1017	$0.12	0154	$0.11
AUGER	1015	$14.38	1019	$0.25	0157	$0.39
CO-GEN						
Anthracite	1021	$1.90	1022	$0.40	0181	$0.54
Bituminous	1023	$1.01	1024	$0.38	0182	$0.33
PREP PLANT						
Anthracite	1025	$5.35	1026	$2.67	0183	$1.30
Bituminous	1027	$0.94	1028	$0.29	0184	$0.44

Source: Manual Loss Costs approved effective April 1, 2012; Section 2, pages 2 and 3 of Approved Manual
Unloaded Approved Loss Costs from Exhibit V-A, column (9) of current approved filing.

Coal Mine Compensation Rating Bureau
Adjustments from 2014 Filing

Section 1 Catastrophic Loss Cost (2014)

Underground		
Anthracite	0.25	
Bituminous	0.25	
Auger	0.11	(1/3 Underground, 2/3 Surface)
Other Classes	0.04	

Section 2 Load Factors (2014)

Experience Rating	1.0000
Merit Rating (Exh XIV-A, page 1)	1.0004
Safety Committee (Exh. XIV-B)	1.0177
	1.0181
Small Business Advocate (XI-A)	1.0001

ANTHRACITE UNDERGROUND (1010)

Year	State OD Developed Payroll (1)	Federal Exempt Reported Payroll (2)	Partnership Reported Payroll (3)	Development Factor (4)	Federal OD Payroll (1) + [(3)-(2)]*(4) (5)	Payroll Per Million (5)/1000000 (6)
2003	1,354,265	0	0	1.0000	1,354,265	1.354265
2004	1,345,321	0	0	1.0000	1,345,321	1.345321
2005	1,417,568	0	0	1.0000	1,417,568	1.417568
2006	1,442,524	0	0	1.0000	1,442,524	1.442524
2007	1,662,537	0	0	1.0000	1,662,537	1.662537
2008	2,136,713	0	0	1.0000	2,136,713	2.136713
2009	1,335,866	0	0	1.0000	1,335,866	1.335866
2010	1,299,588	0	0	1.0000	1,299,588	1.299588
2011	1,257,944	0	0	1.0000	1,257,944	1.257944
2012	1,029,260	0	0	1.0000	1,029,260	1.029260
2013	382,329	0	0	1.0000	382,329	0.382329

BITUMINOUS UNDERGROUND (1001)

Year	State OD Developed Payroll (1)	Federal Exempt Reported Payroll (2)	Partnership Reported Payroll (3)	Development Factor (4)	Federal OD Payroll (1) + [(3)-(2)]*(4) (5)	Payroll Per Million (5)/1000000 (6)
2003	54,215,496	17,717,090	0	1.0000	36,498,406	36.498406
2004	65,497,665	19,423,765	0	1.0000	46,073,900	46.073900
2005	70,872,620	4,596,865	0	1.0000	66,275,755	66.275755
2006	70,465,937	0	0	1.0000	70,465,937	70.465937
2007	79,904,266	0	0	1.0000	79,904,266	79.904266
2008	101,353,977	0	0	1.0000	101,353,977	101.353977
2009	101,348,140	0	0	1.0000	101,348,140	101.348140
2010	125,393,576	0	0	1.0000	125,393,576	125.393576
2011	148,485,709	0	0	1.0000	148,485,709	148.485709
2012	153,602,187	0	0	1.0000	153,602,187	153.602187
2013	145,939,251	4,483,540	13,513	1.0044	141,449,556	141.449556

ANTHRACITE SURFACE (1012)

Year	State OD Developed Payroll (1)	Federal Exempt Reported Payroll (2)	Partnership Reported Payroll (3)	Development Factor (4)	Federal OD Payroll (1) + [(3)-(2)]*(4) (5)	Payroll Per Million (5)/1000000 (6)
2003	12,166,211	238,002	0	1.0000	11,928,209	11.928209
2004	12,359,731	0	0	1.0000	12,359,731	12.359731
2005	12,140,911	0	0	1.0000	12,140,911	12.140911
2006	11,946,382	0	118,941	1.0000	12,065,323	12.065323
2007	14,555,579	0	310,977	1.0000	14,866,556	14.866556
2008	16,954,313	1,047,741	313,659	1.0000	16,220,231	16.220231
2009	16,445,462	903,752	351,818	1.0000	15,893,528	15.893528
2010	14,295,288	1,205,978	229,875	1.0000	13,319,185	13.319185
2011	21,034,600	1,929,891	402,719	1.0000	19,507,428	19.507428
2012	26,295,907	1,973,449	412,253	1.0000	24,734,711	24.734711
2013	22,127,846	2,307,223	440,875	1.0000	20,261,498	20.261498

BITUMINOUS SURFACE (1014)

Year	State OD Developed Payroll (1)	Federal Exempt Reported Payroll (2)	Partnership Reported Payroll (3)	Development Factor (4)	Federal OD Payroll (1) + [(3)-(2)]*(4) (5)	Payroll Per Million (5)/1000000 (6)
2003	47,873,740	0	0	1.0000	47,873,740	47.873740
2004	56,217,298	0	0	1.0000	56,217,298	56.217298
2005	64,871,562	0	0	1.0000	64,871,562	64.871562
2006	63,008,975	0	789,527	1.0000	63,798,502	63.798502
2007	63,295,774	0	1,512,319	1.0000	64,808,093	64.808093
2008	73,054,482	0	1,546,749	1.0000	74,601,231	74.601231
2009	61,784,394	0	1,522,301	1.0000	63,306,695	63.306695
2010	72,711,558	0	1,543,619	1.0000	74,255,177	74.255177
2011	86,074,064	0	1,656,442	1.0000	87,730,506	87.730506
2012	76,433,301	0	1,437,689	1.0000	77,870,990	77.870990
2013	63,507,517	0	1,325,494	1.0034	64,837,518	64.837518

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

AUGER (1015)

Year	State OD Developed Payroll (1)	Federal Exempt Reported Payroll (2)	Partnership Reported Payroll (3)	Development Factor (4)	Federal OD Payroll (1) + [(3)-(2)]*(4) (5)	Payroll Per Million (5)/1000000 (6)
2003	1,102,223	0	0	1.0000	1,102,223	1.102223
2004	1,058,799	0	0	1.0000	1,058,799	1.058799
2005	1,026,537	0	0	1.0000	1,026,537	1.026537
2006	1,066,831	0	0	1.0000	1,066,831	1.066831
2007	1,121,156	0	0	1.0000	1,121,156	1.121156
2008	2,488,558	0	18,200	1.0000	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	1,093,790	0	0	1.0103	1,093,790	1.093790

COKE (1469)

Year	State OD Developed Payroll (1)	Federal Exempt Reported Payroll (2)	Partnership Reported Payroll (3)	Development Factor (4)	Federal OD Payroll (1) + [(3)-(2)]*(4) (5)	Payroll Per Million (5)/1000000 (6)
2003	11,534,080	0	0	1.0000	11,534,080	11.534080
2004	12,049,126	0	0	1.0000	12,049,126	12.049126
2005	12,860,979	0	0	1.0000	12,860,979	12.860979
2006	12,737,394	0	0	1.0000	12,737,394	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

ANTHRACITE CO-GEN (1021)

Year	State OD Developed Payroll (1)	Federal Exempt Reported Payroll (2)	Partnership Reported Payroll (3)	Development Factor (4)	Federal OD Payroll (1) + [(3)-(2)]*(4) (5)	Payroll Per Million (5)/1000000 (6)
2003	7,137,655	128,036	0	1.0000	7,009,619	7.009619
2004	7,351,514	0	0	1.0000	7,351,514	7.351514
2005	7,855,289	0	0	1.0000	7,855,289	7.855289
2006	8,405,393	0	7,134	1.0000	8,412,527	8.412527
2007	9,160,450	0	26,256	1.0000	9,186,706	9.186706
2008	7,958,335	477,298	40,363	1.0000	7,521,400	7.521400
2009	8,004,644	505,653	35,744	1.0000	7,534,735	7.534735
2010	8,481,228	594,188	71,008	1.0000	7,958,048	7.958048
2011	11,720,035	827,364	88,971	1.0000	10,981,642	10.981642
2012	10,273,004	1,025,112	63,920	1.0000	9,311,812	9.311812
2013	8,678,376	792,519	72,457	1.0000	7,958,314	7.958314

BITUMINOUS CO-GEN (1023)

Year	State OD Payroll (1)	Federal Exempt Reported Payroll (2)	Partnership Reported Payroll (3)	Development Factor (4)	Federal OD Payroll (1) + [(3)-(2)]*(4) (5)	Payroll Per Million (5)/1000000 (6)
2003	3,052,523	0	0	1.0000	3,052,523	3.052523
2004	6,374,483	0	0	1.0000	6,374,483	6.374483
2005	8,524,752	0	0	1.0000	8,524,752	8.524752
2006	9,397,580	0	25,995	1.0000	9,423,575	9.423575
2007	10,789,214	0	39,926	1.0000	10,829,140	10.829140
2008	8,468,561	0	13,327	1.0000	8,481,888	8.481888
2009	7,866,413	0	0	1.0000	7,866,413	7.866413
2010	8,732,701	0	0	1.0000	8,732,701	8.732701
2011	9,102,411	0	0	1.0000	9,102,411	9.102411
2012	9,047,745	0	0	1.0000	9,047,745	9.047745
2013	13,133,423	0	0	1.0041	13,133,423	13.133423

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

ANTHRACITE PREP PLANT (1025)

Year	State OD Developed Payroll (1)	Federal Exempt Reported Payroll (2)	Partnership Reported Payroll (3)	Development Factor (4)	Federal OD Payroll (1) + [(3)-(2)]*(4) (5)	Payroll Per Million (5)/1000000 (6)
2003	3,721,296	313,298	0	1.0000	3,407,998	3.407998
2004	4,406,653	0	0	1.0000	4,406,653	4.406653
2005	5,170,069	0	0	1.0000	5,170,069	5.170069
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	8,266,396	1,400,236	189,952	1.0020	7,053,691	7.053691

BITUMINOUS PREP PLANT (1027)

Year	State OD Developed Payroll (1)	Federal Exempt Reported Payroll (2)	Partnership Reported Payroll (3)	Development Factor (4)	Federal OD Payroll (1) + [(3)-(2)]*(4) (5)	Payroll Per Million (5)/1000000 (6)
2003	14,752,318	4,557,112	0	1.0000	10,195,206	10.195206
2004	18,067,286	4,607,085	0	1.0000	13,460,201	13.460201
2005	17,690,358	1,142,051	0	1.0000	16,548,307	16.548307
2006	17,050,967	0	0	1.0000	17,050,967	17.050967
2007	18,895,192	0	0	1.0000	18,895,192	18.895192
2008	21,250,256	0	0	1.0000	21,250,256	21.250256
2009	19,828,012	0	0	1.0000	19,828,012	19.828012
2010	26,313,130	0	0	1.0000	26,313,130	26.313130
2011	35,155,068	0	0	1.0000	35,155,068	35.155068
2012	34,211,729	0	0	1.0000	34,211,729	34.211729
2013	33,935,906	628,948	0	1.0061	33,303,121	33.303121

Source: Anthracite Prep Plant (1025) - Exhibit X-D, page 5
Bituminous Prep Plant (1027) - Exhibit X-D, page 5

ANTHRACITE UNDERGROUND (1010)

Year	Developed Payroll (1)	Files 258,330,4027 & 4049 Developed Payroll* (2)	OD Payroll (3) = (1) + (2)	Payroll Per Million (4) = (3)/1000000
2003	75,855	1,278,410	1,354,265	1.354265
2004	0	1,345,321	1,345,321	1.345321
2005	0	1,417,568	1,417,568	1.417568
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	206,429	382,329	0.382329

BITUMINOUS UNDERGROUND (1001)

Year	Developed Payroll (1)	Files 258,330,4027 & 4049 Developed Payroll* (2)	(2)	OD Payroll (3) = (1) - (2)	Payroll Per Million (4) = (3)/1000000
2003	55,493,906	1,278,410		54,215,496	54.215496
2004	66,842,986	1,345,321		65,497,665	65.497665
2005	72,290,188	1,417,568		70,872,620	70.872620
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	154,412,040	809,853		153,602,187	153.602187
2013	146,145,680	206,429		145,939,251	145.939251

* The reclassification from Anthracite U/G to Bituminous U/G applies to Traumatic, but not to OD. For Traumatic Files 258, 330, 4027 & 4049 payroll and losses are coded 1001. The above reclassification is made to move State and Federal O.D. exposures from Class 1001 (Bituminous U/G) 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 4-30-2014

ANTHRACITE UNDERGROUND (1010)

Year	REPORTED PAYROLL*	DEVELOPMENT FACTORS**	DEVELOPED PAYROLL
2003	1,278,410	1.0000	1,278,410
2004	1,345,321	1.0000	1,345,321
2005	1,417,568	1.0000	1,417,568
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	1.0022	206,429

Source: CMCRB database for file 258, 330, 4027 and 4049 Payrolls as of 4-30-2014
* For Traumatic Files 258, 330, 4027 and 4049 only.
** Development Factors are averages of U/G Ant. and U/G Bit. Development Factors from Exhibit X-E-1

ANTHRACITE UNDERGROUND (1010)

YEAR	REPORTED PAYROLL (1)	DEVELOPMENT FACTORS (2)	DEVELOPED PAYROLL (3) =(1) x (2)	PAYROLL PER MILLION (4) =(1)X(2)/1000000
2003	75,855	1.0000	75,855	0.075855
2004	-	1.0000	-	0.000000
2005	-	1.0000	-	0.000000
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

BITUMINOUS UNDERGROUND (1001)

YEAR	REPORTED PAYROLL (1)	DEVELOPMENT FACTORS (2)	DEVELOPED PAYROLL (3) =(1) x (2)	PAYROLL PER MILLION (4) =(1)X(2)/1000000
2003	55,493,906	1.0000	55,493,906	55.493906
2004	66,842,986 *	1.0000	66,842,986	66.842986
2005	72,290,188	1.0000	72,290,188	72.290188
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	154,412,040	1.0000	154,412,040	154.412040
2013	145,505,456	1.0044	146,145,680	146.145680

(1) Payroll and (2) Development - Exhibit X-E, page 1
The Reported Payroll for 2004 was drawn from the CMCRB Data Base
for classes 1001,1014 and 1027 because there was development beyond 5th report.

ANTHRACITE SURFACE (1012)

YEAR	REPORTED PAYROLL (1)	DEVELOP FACTORS (2)	DEVELOPMENT PAYROLL (3) =(1) x (2)	PAYROLL PER MILLION (4) =(1)X(2)/1000000
2003	12,166,211	1.0000	12,166,211	12.166211
2004	12,359,731	1.0000	12,359,731	12.359731
2005	12,140,911	1.0000	12,140,911	12.140911
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	22,127,846	1.0000	22,127,846	22.127846

BITUMINOUS SURFACE (1014)

YEAR	REPORTED PAYROLL (1)	DEVELOP FACTORS (2)	PAYROLL (3) =(1) x (2)	PAYROLL PER MILLION (4) =(1)X(2)/1000000
2003	47,873,740	1.0000	47,873,740	47.873740
2004	56,217,298 *	1.0000	56,217,298	56.217298
2005	64,871,562	1.0000	64,871,562	64.871562
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	76,433,301	1.0000	76,433,301	76.433301
2013	63,292,323	1.0034	63,507,517	63.507517

(1) Payroll and (2) Development - Exhibit X-E, page 2
The Reported Payroll for 2004 was drawn from the CMCRB Data Base
for classes 1001,1014 and 1027 because there was development beyond 5th report.

COKE (1469)

YEAR	REPORTED PAYROLL (1)	DEVELOPMENT FACTORS (2)	DEVELOPED PAYROLL (3) =(1) x (2)	PAYROLL PER MILLION (4) =(1)X(2)/1000000
2003	11,534,080	1.0000	11,534,080	11.534080
2004	12,049,126	1.0000	12,049,126	12.049126
2005	12,860,979	1.0000	12,860,979	12.860979
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

AUGER (1015)

YEAR	REPORTED PAYROLL (1)	DEVELOPMENT FACTORS (2)	DEVELOPED PAYROLL (3) =(1) x (2)	PAYROLL PER MILLION (4) =(1)X(2)/1000000
2003	1,102,223	1.0000	1,102,223	1.102223
2004	1,058,799	1.0000	1,058,799	1.058799
2005	1,026,537	1.0000	1,026,537	1.026537
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	1,082,639	1.0103	1,093,790	1.093790

Source: (1) Payroll and (2) Development - Exhibit X-E, page 3

ANTHRACITE CO-GEN (1021)

YEAR	REPORTED PAYROLL (1)	DEVELOPMENT FACTORS (2)	DEVELOPED PAYROLL (3) =(1) x (2)	PAYROLL PER MILLION (4) =(1)X(2)/1000000
2003	7,137,655	1.0000	7,137,655	7.137655
2004	7,351,514	1.0000	7,351,514	7.351514
2005	7,855,289	1.0000	7,855,289	7.855289
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	8,678,376	1.0000	8,678,376	8.678376

BITUMINOUS CO-GEN (1023)

YEAR	REPORTED PAYROLL (1)	DEVELOPMENT FACTORS (2)	PAYROLL (3) =(1) x (2)	PAYROLL PER MILLION (4) =(1)X(2)/1000000
2003	3,052,523	1.0000	3,052,523	3.052523
2004	6,374,483	1.0000	6,374,483	6.374483
2005	8,524,752	1.0000	8,524,752	8.524752
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	13,079,796	1.0041	13,133,423	13.133423

Source: (1) Payroll and (2) Development - Exhibit X-E, page 4

ANTHRACITE PREP PLANT (1025)

YEAR	REPORTED PAYROLL (1)	DEVELOPMENT FACTORS (2)	DEVELOPED PAYROLL (3) =(1) x (2)	PAYROLL PER MILLION (4) =(1)X(2)/1000000
2003	3,721,296	1.0000	3,721,296	3.721296
2004	4,406,653	1.0000	4,406,653	4.406653
2005	5,170,069	1.0000	5,170,069	5.170069
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	8,249,896	1.0020	8,266,396	8.266396

BITUMINOUS PREP PLANT (1027)

YEAR	REPORTED PAYROLL (1)	DEVELOPMENT FACTORS (2)	PAYROLL (3) =(1) x (2)	PAYROLL PER MILLION (4) =(1)X(2)/1000000
2003	14,752,318	1.0000	14,752,318	14.752318
2004	18,067,286 *	1.0000	18,067,286	18.067286
2005	17,690,358	1.0000	17,690,358	17.690358
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	33,730,152	1.0061	33,935,906	33.935906

(1) Payroll and (2) Development - Exhibit X-E, page 5
The Reported Payroll for 2004 was drawn from the CMCRB Data Base
for classes 1001,1014 and 1027 because there was development beyond 5th report.

COAL MINE COMPENSATION RATING BUREAU
Payroll Development

PAYROLLS
ANTHRACITE UNDERGROUND (1010)

RPT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1ST	75,855	0	0	530	0	0	0	5,700	110,125	219,407	175,900
2ND	75,855	0	0	530	0	0	0	5,700	110,125	219,407	
3RD	75,855	0	0	530	0	0	0	5,700	110,125		
4TH	75,855	0	0	530	0	0	0	5,700			
5TH	75,855	0	0	530	0	0	0				

DEV.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	5 YEAR AVERAGE	ACCUM.	SELECTED
1-2	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
3-4	1.0000			1.0000				1.0000			1.0000	1.0000	1.0000
4-5	1.0000			1.0000							1.0000	1.0000	1.0000

PAYROLLS
BITUMINOUS UNDERGROUND (1001)

RPT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1ST	53,966,206	65,374,101	70,247,185	71,756,779	81,366,980	102,595,885	100,337,635	126,269,667	150,087,771	156,005,503	145,505,456
2ND	55,493,906	66,554,476	70,464,920	71,907,931	81,566,803	103,490,690	102,684,006	126,687,464	149,633,528	154,412,040	
3RD	55,493,906	66,554,476	70,464,920	71,907,931	81,566,803	103,490,690	102,684,006	126,687,464	149,633,528		
4TH	55,493,906	66,554,476	70,464,920	71,907,931	81,566,803	103,490,690	102,684,006	126,687,464			
5TH	55,493,906	66,554,476	72,290,188	71,907,931	81,566,803	103,490,690	102,684,006				

DEV.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	5 YEAR AVERAGE	ACCUM.	SELECTED
1-2	1.0283	1.0181	1.0031	1.0021	1.0025	1.0087	1.0234	1.0033	0.9970	0.9898	1.0044	1.0096	1.0044
2-3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		1.0000	1.0052	1.0000
3-4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			1.0000	1.0052	1.0000
4-5	1.0000	1.0000	1.0259	1.0000	1.0000	1.0000	1.0000				1.0052	1.0052	1.0000

Source: CMCRB Database as of 4-30-2014 - Traumatic Payroll Reports

COAL MINE COMPENSATION RATING BUREAU
Payroll Development

PAYROLLS
ANTHRACITE SURFACE (1012)

RPT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1ST	12,174,090	12,362,643	12,146,875	11,844,081	14,568,659	17,094,165	16,464,925	14,316,712	21,041,889	26,061,126	22,127,846
2ND	12,129,412	12,361,324	12,140,911	11,946,382	14,555,579	16,999,485	16,445,462	14,302,955	21,034,600	26,295,907	
3RD	12,190,569	12,359,731	12,140,911	11,946,382	14,555,579	16,954,313	16,445,462	14,295,288	21,034,600		
4TH	12,166,211	12,359,731	12,140,911	11,946,382	14,555,579	16,954,313	16,445,462	14,295,288			
5TH	12,166,211	12,359,731	12,140,911	11,946,382	14,555,579	16,954,313	16,445,462				

DEV.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	5 YEAR AVERAGE	ACCUM.	SELECTED
1ST	0.9963	0.9999	0.9995	1.0086	0.9991	0.9945	0.9988	0.9990	0.9997	1.0090	1.0002	0.9996	1.0000
2-3	1.0050	0.9999	1.0000	1.0000	1.0000	0.9973	1.0000	0.9995	1.0000		0.9994	0.9994	1.0000
3-4	0.9980	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
BITUMINOUS SURFACE (1014)

RPT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1ST	47,762,298	55,856,915	64,005,855	63,013,132	62,335,653	72,508,648	62,272,331	72,008,001	84,685,809	77,131,715	63,292,323
2ND	47,873,740	56,031,862	64,429,416	63,084,439	63,295,774	73,054,482	61,784,394	72,711,558	86,074,064	76,433,301	
3RD	47,873,740	56,128,132	64,342,262	63,008,975	63,295,774	73,054,482	61,784,394	72,711,558	86,074,064		
4TH	47,873,740	56,128,132	64,342,262	63,008,975	63,295,774	73,054,482	61,784,394	72,711,558			
5TH	47,873,740	56,128,132	64,871,562	63,008,975	63,295,774	73,054,482	61,784,394				

DEV.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	5 YEAR AVERAGE	ACCUM.	SELECTED
1-2	1.0023	1.0031	1.0066	1.0011	1.0154	1.0075	0.9922	1.0098	1.0164	0.9909	1.0034	1.0050	1.0034
2-3	1.0000	1.0017	0.9986	0.9988	1.0000	1.0000	1.0000	1.0000	1.0000		1.0000	1.0016	1.0000
3-4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			1.0000	1.0016	1.0000
4-5	1.0000	1.0000	1.0082	1.0000	1.0000	1.0000	1.0000				1.0016	1.0016	1.0000

Source: CMCRB Database as of 4-30-2014 - Traumatic Payroll Reports

COAL MINE COMPENSATION RATING BUREAU
Payroll Development

PAYROLLS
COKE (1469)

RPT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1ST	11,507,709	12,049,126	12,860,979	12,737,394	13,669,925	9,761,146	5,173,552	5,435,658	3,599,086	5,738,105	4,791,910
2ND	11,534,080	12,049,126	12,860,979	12,737,394	13,669,925	9,761,146	5,173,552	5,435,658	3,599,086	5,738,105	
3RD	11,534,080	12,049,126	12,860,979	12,737,394	13,669,925	9,761,146	5,173,552	5,435,658	3,599,086		
4TH	11,534,080	12,049,126	12,860,979	12,737,394	13,669,925	9,761,146	5,173,552	5,435,658			
5TH	11,534,080	12,049,126	12,860,979	12,737,394	13,669,925	9,761,146	5,173,552				

DEV.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	5 YEAR AVERAGE	ACCUM.	SELECTED
1-2	1.0023	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2-3	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
AUGER (1015)

RPT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1ST	1,109,631	1,048,056	1,026,537	1,066,831	1,121,967	2,489,280	935,743	793,313	1,151,902	789,136	1,082,639
2ND	1,109,631	1,058,799	1,026,537	1,066,831	1,121,156	2,488,558	926,163	806,696	1,176,255	808,208	
3RD	1,102,223	1,058,799	1,026,537	1,066,831	1,121,156	2,488,558	926,163	806,696	1,176,255		
4TH	1,102,223	1,058,799	1,026,537	1,066,831	1,121,156	2,488,558	926,163	806,696			
5TH	1,102,223	1,058,799	1,026,537	1,066,831	1,121,156	2,488,558	926,163				

DEV.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	5 YEAR AVERAGE	ACCUM.	SELECTED
1-2	1.0000	1.0103	1.0000	1.0000	0.9993	0.9997	0.9898	1.0169	1.0211	1.0242	1.0103	1.0103	1.0103
2-3	0.9933	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

Source: CMCRB Database as of 4-30-2014 - Traumatic Payroll Reports

COAL MINE COMPENSATION RATING BUREAU
Payroll Development

PAYROLLS
ANTHRACITE CO-GEN (1021)

RPT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1ST	7,652,104	7,389,096	7,836,042	8,378,307	9,157,398	7,974,156	8,083,804	8,455,858	11,710,908	10,377,312	8,678,376
2ND	7,137,655	7,351,514	7,855,289	8,405,393	9,160,450	7,958,335	8,004,644	8,481,228	11,720,035	10,273,004	
3RD	7,137,655	7,351,514	7,855,289	8,405,393	9,160,450	7,958,335	8,004,644	8,481,228	11,720,035		
4TH	7,137,655	7,351,514	7,855,289	8,405,393	9,160,450	7,958,335	8,004,644	8,481,228			
5TH	7,137,655	7,351,514	7,855,289	8,405,393	9,160,450	7,958,335	8,004,644				

DEV.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	5 YEAR AVERAGE	ACCUM.	SELECTED
1-2	0.9328	0.9949	1.0025	1.0032	1.0003	0.9980	0.9902	1.0030	1.0008	0.9899	0.9964	0.9964	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
BITUMINOUS CO-GEN (1023)

RPT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1ST	3,302,377	6,313,976	8,450,693	9,292,226	9,873,810	8,469,399	7,861,068	9,236,721	9,015,644	9,057,266	13,079,796
2ND	3,067,630	6,374,483	8,553,082	9,397,580	10,789,214	8,468,561	7,866,413	8,732,701	9,102,411	9,047,745	
3RD	3,067,630	6,374,483	8,524,752	9,397,580	10,789,214	8,468,561	7,866,413	8,732,701	9,102,411		
4TH	3,052,523	6,374,483	8,524,752	9,397,580	10,789,214	8,468,561	7,866,413	8,732,701			
5TH	3,052,523	6,374,483	8,524,752	9,397,580	10,789,214	8,468,561	7,866,413				

DEV.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	5 YEAR AVERAGE	ACCUM.	SELECTED
1-2	0.9289	1.0096	1.0121	1.0113	1.0927	0.9999	1.0007	0.9454	1.0096	0.9989	0.9909	0.9909	1.0041
2-3	1.0000	1.0000	0.9967	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		1.0000	1.0000	1.0000
3-4	0.9951	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

Source: CMCRB Database as of 4-30-2014 - Traumatic Payroll Reports

COAL MINE COMPENSATION RATING BUREAU
Payroll Development

PAYROLLS
ANTHRACITE PREP PLANT (1025)

RPT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1ST	3,692,526	4,391,048	5,176,012	4,885,882	5,756,521	6,320,163	6,785,937	5,723,658	7,300,075	8,617,327	8,249,896
2ND	3,721,296	4,406,653	5,170,069	4,885,882	5,756,439	6,390,767	6,749,748	5,762,086	7,236,583	8,671,140	
3RD	3,721,296	4,406,653	5,170,069	4,885,882	5,756,439	6,390,767	6,749,748	5,762,086	7,236,583		
4TH	3,721,296	4,406,653	5,170,069	4,885,882	5,756,439	6,390,767	6,749,748	5,762,086			
5TH	3,721,296	4,406,653	5,170,069	4,885,882	5,756,439	6,390,767	6,749,748				

DEV.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	5 YEAR AVERAGE	ACCUM.	SELECTED
1-2	1.0078	1.0036	0.9989	1.0000	1.0000	1.0112	0.9947	1.0067	0.9913	1.0062	1.0020	1.0020	1.0020
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
BITUMINOUS PREP PLANT (1027)

RPT	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1ST	14,498,951	18,012,677	17,490,567	17,116,808	18,852,719	20,315,099	19,852,091	25,843,606	34,632,323	34,353,700	33,730,152
2ND	14,752,318	18,029,182	17,489,118	17,050,967	18,895,192	21,250,256	19,828,012	26,313,130	35,155,068	34,211,729	
3RD	14,752,318	18,029,182	17,489,118	17,050,967	18,895,192	21,250,256	19,828,012	26,313,130	35,155,068		
4TH	14,752,318	18,029,182	17,489,118	17,050,967	18,895,192	21,250,256	19,828,012	26,313,130			
5TH	14,752,318	18,029,182	17,690,358	17,050,967	18,895,192	21,250,256	19,828,012				

DEV.	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	5 YEAR AVERAGE	ACCUM.	SELECTED
1-2	1.0175	1.0009	0.9999	0.9962	1.0023	1.0460	0.9988	1.0182	1.0151	0.9959	1.0148	1.0171	1.0061
2-3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		1.0000	1.0023	1.0000
3-4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			1.0000	1.0023	1.0000
4-5	1.0000	1.0000	1.0115	1.0000	1.0000	1.0000	1.0000				1.0023	1.0023	1.0000

Source: CMCRB Database as of 4-30-2014 - Traumatic Payroll Reports

COAL MINE COMPENSATION RATING BUREAU
OD Frequencies From Approved Filing

		State OD Class Code	State OD Indicated Frequency (Eff. 4/1/2014) (1)	Federal OD Class Code	Fedeal OD Basic Indicated Frequency (Eff. 4/1/2014) (2)	Fedeal OD Excess Indicated Frequency (Eff. 4/1/2014) (3)
Underground:	Anthracite	1011	0.064428	160	0.308746	0.049457
	Bituminous	1002	0.016357	158	0.014894	0.006377
Surface:	Anthracite	1016	0.062667	153	0.121693	0.024454
	Bituminous	1013	0.004100	156	0.012045	0.001793
	Coke	1017	0.003192	154	0.002467	0.001393
	Auger	1019	0.006631	157	0.010660	0.002839
Co-Gen:	Anthracite	1022	0.009843	181	0.017720	0.003612
	Bituminous	1024	0.010003	182	0.008419	0.003551
Prep Plants:	Anthracite	1026	0.065048	183	0.037291	0.030281
	Bituminous	1028	0.007756	184	0.012131	0.003179

Source: (1): Exhibit III Column (3) of prior filing.
(2) & (3): Exhibit IV-A Column (3) of prior filing.

COAL MINE COMPENSATION RATING BUREAU

Exhibit X-G

Calculation of Coal Class Adjustment Factor to SAWW

	Average Coal Class Weekly Wages									
	Anthracite Underground	Bituminous Underground	Anthracite Surface	Bituminous Surface	Coke	Auger	Anthracite Co-gen	Bituminous Co-gen	Anthracite Prep Plant	Bituminous Prep Plant
Year	1010	1001	1012	1014	1469	1015	1021	1023	1025	1027
2004	#	1020.94	783.10	610.72	713.53	596.68	593.49	723.87	748.38	948.90
2005	#	1000.99	871.67	714.52	718.89	436.91	632.08	924.67	745.57	1203.30
2006	#	997.03	780.70	821.68	855.68	384.15	640.00	1092.50	795.63	978.40
2007	#	999.30	888.96	792.88	865.75	506.05	961.14	1004.50	709.24	1059.33
2008	#	1122.46	933.69	897.20	808.50	362.00	455.00	1117.25	786.87	980.01
2009	#	1186.72	889.44	882.89	699.10	450.40	994.20		1054.05	1006.54
2010	#	1196.34	875.36	869.71	428.37	559.30	650.50	868.00	670.27	1056.50
2011	#	1269.30	956.16	965.20	509.19	583.00	638.00	902.00	709.93	1168.50
2012	#	1400.66	1026.52	1019.54		405.00	1049.67	1370.33	1225.08	1074.90
2013	#	1455.16	961.94	1068.54	630.72	571.00	951.84	1188.00	821.92	1230.43

	Number of Wage Records Used to Calculate Average Coal Class Weekly Wages								
Year	1010	1001	1012	1014	1469	1015	1021	1023	1025	1027
2004		133	16	43	10	2	6	4	7	10
2005		119	13	44	20	4	2	6	10	10
2006		84	23	31	11	3	1	2	5	5
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		104	21	31	3	4	2	2	8	12
2012		120	20	28		1	6	3	7	10
2013		67	25	24	1	4	8	1	8	7
Total		1057	204	312	82	26	39	26	70	74

		Average Coal Class Weekly Wage Indexed to Statewide Average Weekly Wage									
Year	SAWW	1010	1001	1012	1014	1469	1015	1021	1023	1025	1027
2004	690	#	1.480	1.135	0.885	1.034	0.865	0.860	1.049	1.085	1.375
2005	716	#	1.398	1.217	0.998	1.004	0.610	0.883	1.291	1.041	1.681
2006	745	#	1.338	1.048	1.103	1.149	0.516	0.859	1.466	1.068	1.313
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	858	#	1.479	1.114	1.125	0.593	0.679	0.744	1.051	0.827	1.362
2012	888	#	1.577	1.156	1.148		0.456	1.182	1.543	1.380	1.210
2013	917	#	1.587	1.049	1.165	0.688	0.623	1.038	1.296	0.896	1.342
Average			1.437	1.112	1.064	0.880	0.605	0.932	1.266	1.024	1.331

		Average Coal Class Weekly Wage Indexed to Statewide Average Weekly Wage - Classes Combined	
	SAWW	Bit. Und., Co-gen & Prep	All Other Classes
2004	690	1.461	0.965
2005	716	1.414	1.015
2006	745	1.339	1.063
2007	779	1.286	1.055
2008	807	1.383	1.069
2009	836	1.410	1.032
2010	845	1.401	0.971
2011	858	1.460	1.027
2012	888	1.549	1.169
2013	917	1.560	1.041
Average		1.426	1.041
Selected Coal Class Adjt. Factor to SAWW		1.426	1.041

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.

PAB

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Effective Date - April 01, 2015

Run Date: 08/18/14 15:39:42

Checksum:208,340.943528

SMALL BUSINESS ADVOCATE ASSESSMENT

1. 2014-2015 Small Business Advocate Assessment	$	194,000
2. 2013 Insurance Carrier Paid Losses		
CMCRB		19,993,599
PCRB		2,272,376,857
Total		**2,292,370,456**
3. Insurer Assessment Ratio (item 1 divided by item 2)		0.0001

Source: 1. Pa. Dept. of Labor & Industry
2. PCRB
3. CMCRB

COAL MINE COMPENSATION RATING BUREAU

EMPLOYER ASSESSMENT FACTOR

PROPOSED EFFECTIVE April 1, 2015

1) 2014/2015 INSURANCE CARRIER ASSESSMENT AMOUNTS		
A)	Administrative Fund	40,096,155
B)	Subsequent Injury Fund	148,198
C)	Supersedeas Fund	16,064,792
D)	Uninsured Employers Guaranty Fund	2,289,259
TOTAL		58,598,404
2) 2013 Employer Assessment Premium Base		3,548,566,915
3) 2013 Coal Mine Premium Base		17,881,034
4) Coal Premium percent of Total	(3)/(2)	0.504%
5) Assessments to be paid by coal employers		295,274
6) Coal Employer Assessment Factor		0.0165

Sources:
1) Pa. Dept. of Labor & Industry
2) PCRB
3) CMCRB

CATASTROPHE - Spread of Loss Cost to Classes

Classification		(1) 2013 Developed Payrolls	(2) Hazard Weights	(3) Payroll Weight (1)x(2)/1000	(4) Percentage of Exposure	(5) Catastrophe Losses (4)xAverage	(6) Actual Loss Cost Spread [(5)/(1)]x100	(7) Approved Loss Cost Eff 4/1/2014	(8) Selected	(9) Rate Change (8)/(7) - 1
Underground										
Anthracite	1010	$175,900								
Bituminous	1001	146,145,680								
Total		146,321,580	7	1,024,251	86.8%	330,451	0.23	0.25	0.23	-8.0%
Surface										
Anthracite	1012	22,127,846								
Bituminous	1014	63,507,517								
Coke	1469	4,791,910								
Auger	1015	1,093,790								
Co-Gen Anth.	1021	8,678,376								
Co-Gen Bit.	1023	13,133,423								
Prep Anth.	1025	8,266,396								
Prep Bit.	1027	33,935,906								
Total		155,535,164	1	155,535	13.2%	50,180	0.03	0.04	0.03	-25.0%
Grand Total		301,856,744	8	1,179,786	100.0%	380,631	0.13	a-0.14	0.13	-7.1%

a - Current Total Loss Cost is based on 2013 Payroll weights
b- Auger = one-third underground & two-thirds surface or $0.10

Source: Payroll - Exhibit X-A (Developed 2013 Payroll)
Hazard Weights - Judgement
Catastrophe Losses, Grand Total - Exhibit XII-B

COAL MINE COMPENSATION RATING BUREAU
CATASTROPHE CALCULATION
TRAUMATIC ON-LEVEL LOSSES IN EXCESS OF $1,250,000

Accident Year	Number of Excess Claims	Excess Loss Dollars
1994	7	2,973,355
1995	-	-
1996	2	586,238
1997	3	122,507
1998	-	-
1999	1	204,211
2000	-	-
2001	-	-
2002	2	405,365
2003	2	188,216
2004	2	656,793
2005	3	539,026
2006	-	-
2007	1	1,936,905
2008	-	-
2009	-	-
2010	-	-
2011	-	-
2012	-	-
2013	-	-
	23	7,612,616

Average over 20 years	380,631
2013 Payroll from Exhibit XII-A	301,856,744
Loss Cost	0.13

Source: Claims detail from Exhibit XII-C
2013 Payroll from Exhibit XII-A

COAL MINE COMPENSATION RATING BUREAU
CATASTROPHE CALCULATION
TRAUMATIC LOSSES OVER $1,250,000

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Key Number	Class	Accident Year	Injury Type	Incurred Indemnity & Funeral	Incurred Medical	Paid Medical	O/S Medical	Act 44 Factor	Trend	Medical w/Trend & Act 44 Factor	Loss at Current Level	Excess Over $1,250,000
29874	101400	1994	1	747,129	613	613	-	1.0000	1.9919	1,221	1,489,427	239,427
30020	101400	1994	2	698,279	20,274	11,620	8,654	1.0000	1.9919	40,384	1,431,286	181,286
30178	101400	1994	2	516,472	158,750	158,750	-	1.0000	1.9919	316,214	1,344,975	94,975
30184	101400	1994	2	932,812	242,528	180,074	62,454	1.0000	1.9919	483,092	2,341,160	1,091,160
30193	101400	1994	2	859,696	110,000	92,184	17,816	1.0000	1.9919	219,109	1,931,537	681,537
30304	100100	1994	2	722,930	40,028	37,647	2,381	1.0000	1.9919	79,732	1,519,736	269,736
30483	100100	1994	1	678,468	157,535	157,535	-	1.0000	1.9919	313,794	1,665,234	415,234
32287	100100	1996	1	803,604	4,261	4,261	-	1.0000	1.8634	7,940	1,505,376	255,376
32473	101200	1996	2	764,246	84,129	38,967	45,162	1.0000	1.8634	156,766	1,580,862	330,862
33129	100100	1997	9	117,115	586,621	251,820	334,801	1.0000	1.8118	1,062,840	1,275,029	25,029
33176	100100	1997	9	173,195	524,887	434,489	90,398	1.0000	1.8118	950,990	1,264,785	14,785
33295	100100	1997	1	723,968	11,595	11,595	-	1.0000	1.8118	21,008	1,332,693	82,693
34602	100100	1999	9	358,233	512,500	512,500	-	1.0000	1.6701	855,926	1,454,211	204,211
Que Creek	100100	2002	9	892,793	116,396	116,396	-	1.0000	1.4834	172,662	1,497,031	247,031
39274	101500	2002	1	947,187	2,209	2,209	-	1.0000	1.4834	3,277	1,408,334	158,334
39840	100100	2003	2	419,207	487,253	264,481	222,772	1.0000	1.4548	708,856	1,318,718	68,718
39990	100100	2003	1	941,365	-	-	-	1.0000	1.4548	-	1,369,498	119,498
40926	100100	2004	9	625,192	443,182	416,518	26,664	1.0000	1.4232	630,737	1,520,510	270,510
41102	102700	2004	2	505,991	643,730	643,730	-	1.0000	1.4232	916,157	1,636,283	386,283
41618	101400	2005	2	566,940	580,000	478,235	101,765	1.0000	1.3715	795,470	1,573,028	323,028
41672	100100	2005	2	791,163	175,000	110,667	64,333	1.0000	1.3715	240,013	1,325,093	75,093
41676	100100	2005	2	889,149	125,000	67,918	57,082	1.0000	1.3715	171,438	1,390,905	140,905
43059	101200	2007	2	528,086	2,000,000	1,476,902	523,098	1.0000	1.2606	2,521,200	3,186,905	1,936,905
Totals	23										36,362,616	7,612,616

20 Year Average	380,631
2013 Developed Payroll	301,856,744
Loss Cost	0.13

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

Coal Mine Compensation Rating Bureau
Catastrophe Calculation
Trend Factors for Medical and Indemnity

Year	Statewide Average Weekly Wage	Yearly Percentage Change	Trend Factor	Year	Statewide Average Weekly Wage	Yearly Percentage Change	Trend Factor
1994	493		1.9919				
1995	509	3.2%	1.9293	2005	716	3.8%	1.3715
1996	527	3.5%	1.8634	2006	745	4.1%	1.3181
1997	542	2.8%	1.8118	2007	779	4.6%	1.2606
1998	561	3.5%	1.7504	2008	807	3.6%	1.2169
1999	588	4.8%	1.6701	2009	836	3.6%	1.1746
2000	611	3.9%	1.6072	2010	845	1.1%	1.1621
2001	644	5.4%	1.5248	2011	858	1.5%	1.1445
2002	662	2.8%	1.4834	2012	888	3.5%	1.1059
2003	675	2.0%	1.4548	2013	917	3.3%	1.0709
2004	690	2.2%	1.4232	2014	932	1.6%	1.0536

Average of All Years=	3.24%	
Average of last 10 years=	3.06%	
Average of last 5 years=	2.20%	
Average of last 3 years=	2.80%	
Selected=	3.00%	(Last Year's Selection was 3.00%)

	Projected Wage		Weight
01-01-2015	960.00	a	28.125%
01-01-2016	989.00	a	68.750%
01-01-2017	1,018.00	a	3.125%

Average Weekly Wage For Policies effective between 04-01-2015 and 04-01-2017

$982 b

a. Previous year's wage times annual increase of 3.00%
b. Weighted average of projected wage levels from 01-01-2015 to 01-01-2017

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 Code	Description	Number of Claims	Excess Over $1,250,000
1010	Underground Anthracite	-	-
1001	Underground Bituminous	13	2,188,819
1012	Surface Anthracite	2	2,267,767
1014	Surface Bituminous	6	2,611,413
1469	Coke	-	-
1015	Auger	1	158,334
1021	Anthracite Co-Gen	-	-
1023	Bituminous Co-Gen	-	-
1025	Anthracite Prep Plant	-	-
1027	Bituminous Prep Plant	1	386,283
	Total	23	$7,612,616

Sources: Adjusted to On-Level and Post-Act 44 basis in Exhibit XII-C

Coal Mine Compensation Rating Bureau of Pennsylvania

Experience Rating Plan

Basic Data Lookup Tables

2015 plan factors at 50k and 150 k splits:

Table A: Ratemaking Factors

Year:	2013	2012	2011	Average
Loss Develop.	1.8082	1.2766	1.1420	split by
Layers:	Split of total losses by Layer			Layer
0- 50	0.66776	0.51578	0.49140	0.55831
50-150	0.04673	0.14781	0.13997	0.11150
Over 150	0.28551	0.33641	0.36863	0.33018
Trend	1.0223	1.0322	1.0415	1.0000

Table B: Payroll Development

Classification		Payroll De-velopment
1001	Bit deep	1.0044
1010	Anth deep	1.0000
1012	Anth surf	1.0000
1014	Bit surf	1.0034
1015	Auger	1.0103
1021	Anth Co-gen	1.0000
1023	Bit Co-gen	1.0041
1025	Anth Prep	1.0020
1027	Bit Prep	1.0061
1469	Coke	1.0000

Table C: Unloaded Loss Costs - Traumatic

Classification		Unloaded Loss Cost (1)
1001	Bit deep	5.47
1010	Anth deep	19.76
1012	Anth surf	9.01
1014	Bit surf	2.15
1015	Auger	15.58
1021	Anth Co-gen	2.38
1023	Bit Co-gen	1.05
1025	Anth Prep	4.79
1027	Bit Prep	1.13
1469	Coke	5.70

Table D: Manual Loss Costs - Traumatic

Classification		Unloaded Loss Cost (1)	Loadings: Catastrophe Exh. XII-A (2)	Loadings: Small Business Assessment (3)	Loadings: Off-Balances# (4)	Manual Loss Cost (5)
1001	Bit deep	5.47	0.23	1.0001	1.0189	5.81
1010	Anth deep	19.76	0.23	1.0001	1.0189	20.37
1012	Anth surf	9.01	0.03	1.0001	1.0189	9.21
1014	Bit surf	2.15	0.03	1.0001	1.0189	2.22
1015	Auger	15.58	0.10	1.0001	1.0189	15.98
1021	Anth Co-gen	2.38	0.03	1.0001	1.0189	2.46
1023	Bit Co-gen	1.05	0.03	1.0001	1.0189	1.10
1025	Anth Prep	4.79	0.03	1.0001	1.0189	4.91
1027	Bit Prep	1.13	0.03	1.0001	1.0189	1.18
1469	Coke	5.70	0.03	1.0001	1.0189	5.84

	Off-* Balances
Merit Rating Exh. XIV-A	1.0005
Safety Rating Exh XIV-B	1.0184
Combined	1.0189

Table E: Expected Traumatic Loss Costs

			2013					2012					2011				
			All Layers		Layer 0-50	Layer 50-150	XS over 150	All Layers		Layer 0-50	Layer 50-150	XS over 150	All Layers		Layer 0-50	Layer 50-150	XS over 150
Classification		Unloaded Manual Loss Cost	De-trended Loss Cost*	Undevel-oped Losses**	Split of total losses by Layer: 0.66776	0.04673	0.28551	De-trended Loss Cost*	Undevel-oped Losses**	Split of total losses by Layer: 0.51578	0.14781	0.33641	De-trended Loss Cost*	Undevel-oped Losses**	Split of total losses by Layer: 0.49140	0.13997	0.36863
					Undeveloped Expected Loss Cost***					Undeveloped Expected Loss Cost***					Undeveloped Expected Loss Cost***		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1001	Bit deep	5.47	5.35	2.96	1.98	0.14	0.85	5.30	4.15	2.14	0.61	1.40	5.25	4.60	2.26	0.64	1.70
1010	Anth deep	19.76	19.33	10.69	7.14	0.50	3.05	19.14	14.99	7.73	2.22	5.04	18.97	16.61	8.16	2.32	6.12
1012	Anth surf	9.01	8.81	4.87	3.25	0.23	1.39	8.73	6.84	3.53	1.01	2.30	8.65	7.57	3.72	1.06	2.79
1014	Bit surf	2.15	2.10	1.16	0.77	0.05	0.33	2.08	1.63	0.84	0.24	0.55	2.06	1.80	0.88	0.25	0.66
1015	Auger	15.58	15.24	8.43	5.63	0.39	2.41	15.09	11.82	6.10	1.75	3.98	14.96	13.10	6.44	1.83	4.83
1021	Anth Co-gen	2.38	2.33	1.29	0.86	0.06	0.37	2.31	1.81	0.93	0.27	0.61	2.29	2.01	0.99	0.28	0.74
1023	Bit Co-gen	1.05	1.03	0.57	0.38	0.03	0.16	1.02	0.80	0.41	0.12	0.27	1.01	0.88	0.43	0.12	0.32
1025	Anth Prep	4.79	4.69	2.59	1.73	0.12	0.74	4.64	3.63	1.87	0.54	1.22	4.60	4.03	1.98	0.56	1.49
1027	Bit Prep	1.13	1.11	0.61	0.41	0.03	0.17	1.09	0.85	0.44	0.13	0.29	1.08	0.95	0.47	0.13	0.35
1469	Coke	5.70	5.58	3.09	2.06	0.14	0.88	5.52	4.32	2.23	0.64	1.45	5.47	4.79	2.35	0.67	1.77
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

* Detrended loss costs are calculated by dividing the unloaded manual lost costs (Table C) by the trend factors (table A row 7), and rounding.

** 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.

*** 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

		Reported Losses	LDF	Untrended Developed Losses	Weight: Percent Indemnity vs Medical	Medical Loss Development	Indemnity Loss Development	Combined Loss Development Weighted by % indemnity vs medical by year
Indemnity	2011	$8,225,491	1.1058	$9,095,748	57.55%	1.1910	1.1058	1.1420
	2012	$6,826,563	1.3155	$8,980,344	58.29%	1.2222	1.3155	1.2766
	2013	$3,407,539	2.1006	$7,157,876	61.37%	1.3437	2.1006	1.8082
				$25,233,968	58.86%			
Medical	2011	$5,633,374	1.1910	$6,709,348	42.45%			
	2012	$5,258,148	1.2222	$6,426,508	41.71%			
	2013	$3,352,536	1.3437	$4,504,803	38.63%			
				$17,640,659	41.14%			
	Total			$42,874,627	1.0000			

		Years of Trend	Medical Trend at 1.6%	Indemnity Trend at 0.3%	Combined Trend Weighted by % indemnity vs medical by year
Average Exp date AY 2011	7/1/2011	4.75	1.0783	1.0143	1.0415
Average Exp date AY 2012	7/1/2012	3.75	1.0613	1.0113	1.0322
Average Exp date AY 2013	7/1/2013	2.75	1.0446	1.0083	1.0223
Average Date of Accident	4/1/2016				

Source: Loss Development - Exhibit V-C
Trend - Exhibit V-F
Reported Losses - Exhibit V-B page 1

2015 Credibility Tables
PCRB shape

Expected Losses Greater than	Equivalent Modified Payroll at $4.29 *	Primary Credibility	Excess Credibility
11,516	300,000	0.29	0.06
14,394	335,530	0.30	0.06
17,632	411,008	0.31	0.06
21,218	494,592	0.32	0.06
23,729	553,129	0.33	0.07
25,895	603,613	0.34	0.07
28,223	657,885	0.35	0.07
31,724	739,487	0.36	0.07
33,340	777,145	0.37	0.07
36,148	842,611	0.38	0.07
39,261	915,165	0.39	0.07
42,723	995,880	0.40	0.07
46,173	1,076,285	0.41	0.07
50,260	1,171,556	0.42	0.07
54,480	1,269,920	0.43	0.07
58,930	1,373,654	0.44	0.07
64,137	1,495,042	0.45	0.07
69,460	1,619,111	0.46	0.07
72,885	1,698,948	0.47	0.07
75,602	1,762,274	0.48	0.07
78,457	1,828,839	0.49	0.07
81,395	1,897,312	0.50	0.07
84,414	1,967,694	0.51	0.07
87,590	2,041,734	0.52	0.07
90,840	2,117,478	0.53	0.07
94,219	2,196,251	0.54	0.07
97,737	2,278,258	0.55	0.07
101,336	2,362,142	0.56	0.08
105,125	2,450,457	0.57	0.08
109,027	2,541,410	0.58	0.08
113,042	2,635,000	0.59	0.08
117,273	2,733,625	0.60	0.08
121,605	2,834,618	0.61	0.08
126,119	2,939,834	0.62	0.08
130,628	3,044,950	0.63	0.08
135,136	3,150,023	0.64	0.08
146,976	3,426,017	0.65	0.08
159,790	3,724,719	0.66	0.08
174,343	4,063,947	0.67	0.08
190,774	4,446,953	0.68	0.09
208,366	4,857,024	0.69	0.09
228,292	5,321,489	0.70	0.09
249,705	5,820,629	0.71	0.09
274,047	6,388,049	0.72	0.10
302,119	7,042,401	0.73	0.10
333,210	7,767,133	0.74	0.10
366,752	8,548,986	0.75	0.10
407,662	9,502,611	0.76	0.11
450,677	10,505,284	0.77	0.11
498,112	11,611,002	0.78	0.12
558,410	13,016,558	0.79	0.12
624,012	14,545,731	0.80	0.13
697,648	16,262,191	0.81	0.14
788,985	18,391,259	0.82	0.14
894,945	20,861,189	0.83	0.15
1,018,370	23,738,228	0.84	0.16
1,157,231	26,975,085	0.85	0.17
1,321,831	30,811,908	0.86	0.18
1,528,079	35,619,561	0.87	0.19
1,795,880	41,861,995	0.88	0.20
1,795,880	44,485,215	0.88	0.21
2,120,319	49,424,685	0.89	0.22
2,505,663	58,407,063	0.90	0.23
2,505,663	62,598,008	0.90	0.24
3,000,680	69,945,913	0.91	0.25
3,000,680	78,526,990	0.91	0.26
3,851,016	89,767,265	0.92	0.27
3,851,016	99,118,112	0.92	0.28
4,547,151	105,994,196	0.93	0.29
4,547,151	126,769,048	0.93	0.30
6,019,437	140,313,220	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

Credibility Zp or Ze
= (S*Payroll+I*G)/(J*S*Payroll+K*G)
[where S adjusts Payroll to Expected Losses]

Variable	Layer 1	Layer 2
Av Claim G	N/A	11,512
S	N/A	0.054
I	N/A	43.50
J	N/A	2.4000
K	N/A	700.00

* The average unloaded loss cost underlying the proposed filing is $4.29.
the table was updated to reflect this change.

Coal Mine Compensation Rating Bureau of Pennsylvania
Experience Rating 2015
Mod Comparisons

File	Proposed Manual Premium	Proposed 2015 Mod	Proposed Experience Rated Premium	2014 Mod	Change in Mod Factor
2	2,228	1.200	2,674	1.200	0.000
37	39,424	1.165	45,929	0.840	0.325
52	8,286	0.763	6,322	0.767	-0.004
55	90,691	0.804	72,916	n/a	n/a
66	4,679	0.812	3,799	0.811	0.001
99	10,977	0.827	9,078	0.811	0.016
101	26,316	1.309	34,448	1.139	0.170
119	110,370	1.062	117,213	0.877	0.185
121	226,448	0.638	144,474	0.624	0.014
124	14,767	0.719	10,617	0.741	-0.022
179	3,573	0.838	2,994	0.824	0.014
214	16,479	0.691	11,387	0.866	-0.175
237	10,632	1.251	13,301	1.423	-0.172
283	28,846	0.597	17,221	0.593	0.004
288	2,337	0.857	2,003	0.856	0.001
306	254,489	0.757	192,648	0.722	0.035
322	65,877	1.124	74,046	1.234	-0.110
325	28,243	0.757	21,380	0.755	0.002
330	12,020	1.771	21,287	2.149	-0.378
342	8,691	0.974	8,465	0.905	0.069
352	8,358	0.782	6,536	0.786	-0.004
354	15,913	1.823	29,009	2.662	-0.839
360	2,918	0.830	2,422	0.826	0.004
370	2,587	0.874	2,261	n/a	n/a
386	4,189	0.832	3,485	0.823	0.009
403	8,923	1.760	15,704	2.047	-0.287
418	13,476	0.736	9,918	0.744	-0.008
421	12,043	0.745	8,972	1.502	-0.757
426	34,134	2.877	98,204	2.946	-0.069
437	42,537	0.790	33,604	0.899	-0.109
444	0	0.792	0	0.776	0.016
451	3,143	0.805	2,530	0.777	0.028
491	11,936	0.810	9,668	0.821	-0.011
652	260,084	0.988	256,963	1.207	-0.219
690	6,216	0.831	5,165	0.832	-0.001
722	8,085	0.661	5,344	0.638	0.023
910	6,610	0.879	5,810	1.400	-0.521
954	17,531	0.700	12,272	0.706	-0.006
1016	9,591	0.772	7,404	0.776	-0.004
1037	31,574	1.179	37,226	n/a	n/a
1361	3,085	1.300	4,011	0.768	0.532
1382	10,879	1.024	11,140	1.091	-0.067
1444	300,880	1.067	321,039	1.193	-0.126
1550	0	0.842	0	0.801	0.041
1700	50,046	1.152	57,653	0.721	0.431

Coal Mine Compensation Rating Bureau of Pennsylvania
Experience Rating 2015
Mod Comparisons

File	Proposed Manual Premium	Proposed 2015 Mod	Proposed Experience Rated Premium	2014 Mod	Change in Mod Factor
1843	3,223	0.829	2,672	0.823	0.006
2065	16,379	0.958	15,691	0.909	0.049
2265	8,386	0.768	6,440	0.767	0.001
2353	19,249	1.114	21,443	0.931	0.183
2458	10,352	0.803	8,313	0.790	0.013
2687	53,433	0.712	38,044	0.944	-0.232
2839	36,905	1.619	59,749	1.399	0.220
3157	25,485	0.773	19,700	0.764	0.009
3190	20,785	0.735	15,277	1.011	-0.276
3194	13,562	1.390	18,851	0.807	0.583
3270	3,007	0.825	2,481	0.817	0.008
3506	2,298	0.829	1,905	0.811	0.018
3527	3,704	0.823	3,048	0.824	-0.001
3552	10,806	0.766	8,277	0.755	0.011
3614	33,711	0.854	28,789	0.691	0.163
3619	37,713	1.142	43,068	1.173	-0.031
3629	29,529	0.779	23,003	0.783	-0.004
3691	102,234	0.916	93,646	0.894	0.022
3798	4,479	0.819	3,668	0.850	-0.031
3804	36,389	0.677	24,635	0.988	-0.311
3905	12,364	1.200	14,837	0.818	0.382
3932	12,241	0.754	9,230	0.766	-0.012
3941	49,367	0.720	35,544	0.720	0.000
3944	3,571	2.044	7,299	2.014	0.030
3951	2,219	1.200	2,663	0.827	0.373
3952	5,363	1.300	6,972	1.300	0.000
3967	2,418	0.835	2,019	0.803	0.032
3969	3,595	0.821	2,951	0.795	0.026
3970	12,525	0.814	10,195	0.752	0.062
3972	26,712	1.220	32,589	1.076	0.144
3973	44,072	0.790	34,817	0.793	-0.003
3977	35,133	1.270	44,619	0.843	0.427
3978	33,384	0.626	20,898	0.634	-0.008
3981	5,926	0.795	4,711	0.839	-0.044
3982	108,594	1.366	148,339	1.911	-0.545
3985	18,496	0.840	15,537	0.838	0.002
3987	1,444,289	0.881	1,272,419	0.882	-0.001
3988	10,594	0.840	8,899	0.841	-0.001
3995	3,358	0.832	2,794	n/a	n/a
3997	6,512	0.961	6,258	0.934	0.027
4001	62,439	0.760	47,454	0.689	0.071
4004	0	0.809	0	0.762	0.047
4011	3,928	0.819	3,217	0.802	0.017
4012	0	2.050	0	2.394	-0.344
4016	27,620	1.478	40,822	1.399	0.079

Coal Mine Compensation Rating Bureau of Pennsylvania
Experience Rating 2015
Mod Comparisons

File	Proposed Manual Premium	Proposed 2015 Mod	Proposed Experience Rated Premium	2014 Mod	Change in Mod Factor
4021	10,541	0.701	7,389	0.734	-0.033
4024	51,926	1.076	55,872	0.728	0.348
4025	777	0.835	649	0.812	0.023
4030	17,761	0.804	14,280	1.470	-0.666
4031	28,512	0.781	22,268	0.787	-0.006
4035	3,486	0.828	2,886	n/a	n/a
4041	11,531	0.836	9,640	n/a	n/a
4042	158,906	0.647	102,812	0.677	-0.030
4044	91,114	1.033	94,121	1.120	-0.087
4056	15,586	0.789	12,297	0.807	-0.018
4058	10,766	0.752	8,096	0.755	-0.003
4060	21,838	0.805	17,580	0.763	0.042
4061	4,753	0.808	3,840	0.811	-0.003
4062	23,060	1.121	25,850	1.456	-0.335
4063	7,986	0.833	6,652	0.922	-0.089
4065	17,795	0.749	13,328	0.805	-0.056
4067	0	0.841	0	0.821	0.020
4069	36,916	0.872	32,191	0.618	0.254
4070	3,432	0.733	2,516	0.723	0.010
4072	369,894	0.776	287,038	0.718	0.058
4074	23,873	0.815	19,456	0.826	-0.011
4077	325,370	0.850	276,565	0.771	0.079
4078	139,355	0.660	91,974	0.749	-0.089
4080	0	0.809	0	0.797	0.012
4088	15,566	0.827	12,873	n/a	n/a
4094	20,744	1.200	24,893	n/a	n/a
4100	128,179	1.163	149,072	n/a	n/a
4101	141,002	0.638	89,959	n/a	n/a
999008	1,527	0.987	1,507	0.910	0.077
999011	39,027	0.721	28,138	0.793	-0.072
999013	29,158	2.945	85,870	2.572	0.373
999019	410,136	1.141	467,965	1.074	0.067
999020	45,695	1.079	49,305	0.650	0.429
999024	4,881	0.808	3,944	0.796	0.012
999038	34,707	1.596	55,392	1.050	0.546
999039	171,025	1.848	316,054	1.760	0.088
999051	2,012,604	0.889	1,789,205	0.869	0.020
999052	5,280	1.300	6,864	1.300	0.000
999053	30,835	3.211	99,011	2.737	0.474
999056	9,185	0.836	7,679	n/a	n/a
999061	1,061,391	0.873	926,594	1.000	-0.127
999063	3,647,878	1.159	4,227,891	1.132	0.027
999065	5,353	1.400	7,494	1.300	0.100
999075	29,501	0.886	26,138	0.781	0.105

Coal Mine Compensation Rating Bureau of Pennsylvania
Experience Rating 2015
Mod Comparisons

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)

File	2014 Mod	Proposed 2015 Mod	Limited Mod
330	2.149	1.771	1.799
354	2.662	1.823	2.312
421	1.502	0.745	1.152
910	1.400	0.879	1.050
1361	0.768	1.300	1.118
1700	0.721	1.152	1.071
3194	0.807	1.390	1.157
3905	0.818	1.200	1.168
3951	0.827	1.200	1.177
3977	0.843	1.270	1.193
3982	1.911	1.366	1.561
4030	1.470	0.804	1.120
999013	2.572	2.945	2.922
999020	0.650	1.079	1.000
999038	1.050	1.596	1.400
999053	2.737	3.211	3.087

MERIT RATING PLAN OFF-BALANCE CALCULATION

Class	(1) 2013 Payroll	(2) Traumatic Proposed Unloaded Loss Cost	(3) Credits/ Surcharge	(4) Loss Cost Premium	Off-Balance
Underground Anthracite (1010)					
Total	$175,900	19.76		$34,758	
Credit	5,700	19.76	-5.00%	(56)	
Surcharge	0	19.76	5.00%	0	
Underground Bituminous (1001)					
Total	$146,145,680	5.47		$7,994,169	
Credit	3,216	5.47	-5.00%	(9)	
Surcharge	0	5.47	5.00%	0	
Surface Anthracite (1012)					
Total	$22,127,846	9.01		$1,993,719	
Credit	582,022	9.01	-5.00%	(2,622)	
Surcharge	0	9.01	5.00%	0	
Surface Bituminous (1014)					
Total	$63,507,517	2.15		$1,365,412	
Credit	1,609,501	2.15	-5.00%	(1,730)	
Surcharge	0	2.15	5.00%	0	
Coke (1469)					
Total	$4,791,910	5.70		$273,139	
Credit	0	5.70	-5.00%	0	
Surcharge	0	5.70	5.00%	0	
Auger (1015)					
Total	$1,093,790	15.58		$170,412	
Credit	58,548	15.58	-5.00%	(456)	
Surcharge	0	15.58	5.00%	0	
Anthracite Co-Gen (1021)					
Total	$8,678,376	2.38		$206,545	
Credit	206,042	2.38	-5.00%	(245)	
Surcharge	0	2.38	5.00%	0	
Bituminous Co-Gen (1023)					
Total	$13,133,423	1.05		$137,901	
Credit	0	1.05	-5.00%	0	
Surcharge	0	1.05	5.00%	0	
Anthracite Prep Plant (1025)					
Total	$8,266,396	4.79		$395,960	
Credit	421,572	4.79	-5.00%	(1,010)	
Surcharge	0	4.79	5.00%	0	
Bituminous Prep Plant (1027)					
Total	$33,935,906	1.13		$383,476	
Credit	0	1.13	-5.00%	0	
Surcharge	0	1.13	5.00%	0	
All Classes Combined					
Total	$301,856,744			$12,955,491	
Credit	2,886,601		-5.00%	($6,128)	
Surcharge	0		5.00%	$0	
				$12,949,363	1.0005

Source: (1) Exhibit XIV-A Page2
(2) Exhibit II
(4)=(1)*(2)*(3)

2013 PAYROLL BY CLASS

Class	2013 Total Payroll	2013 Experience Rated Payroll	2013 Merit Rated Payroll	2013 Manual Payroll
Underground Anthracite (1010)	$175,900	$0	$5,700	$170,200
Underground Bituminous(1001)	146,145,680	133,980,989	3,216	12,161,475
Surface Anthracite (1012)	22,127,846	18,352,123	582,022	3,193,701
Surface Bituminous (1014)	63,507,517	58,920,043	1,609,501	2,977,973
Coke (1469)	4,791,910	4,742,923	0	48,987
Auger (1015)	1,093,790	830,585	58,548	204,657
Anthracite Co-Gen (1021)	8,678,376	8,334,642	206,042	137,692
Bituminous Co-Gen (1023)	13,133,423	13,133,423	0	0
Anthracite Prep Plant(1025)	8,266,396	7,070,046	421,572	774,778
Bituminous Prep Plant(1027)	33,935,906	29,874,235	0	4,061,671
TOTAL	$301,856,744	$275,239,009	$2,886,601	$23,731,134

MERIT PAYROLL - CREDIT/SURCHARGE

Class	2013 Merit Rated Payroll	2013 Merit Credit Payroll	2013 Merit No Adjustment Payroll	2013 Merit Surcharge Payroll
Underground Anthracite (1010)	$5,700	$5,700	$0	$0
Underground Bituminous(1001)	3,216	3,216	0	0
Surface Anthracite (1012)	582,022	582,022	0	0
Surface Bituminous (1014)	1,609,501	1,609,501	0	0
Coke (1469)	0	0	0	0
Auger (1015)	58,548	58,548	0	0
Anthracite Co-Gen (1021)	206,042	206,042	0	0
Bituminous Co-Gen (1023)	0	0	0	0
Anthracite Prep Plant(1025)	421,572	421,572	0	0
Bituminous Prep Plant(1027)	0	0	0	0
TOTAL	$2,886,601	$2,886,601	$0	$0

Source: Exhibit X-A and CMCRB database as of 4/30/2014

COAL MINE COMPENSATION RATING BUREAU
SAFETY COMMITTEE CREDIT OFFSET

CLASS	(1) 2013 Developed Payroll	(2) Traumatic Proposed Unloaded Loss Cost	(3) Credit	(4) Loss Cost Premium	Off-Balance
Underground Anthracite(1010)					
Total	$175,900	$19.76		$34,758	
Safety Committee	0	19.76	-5.00%	0	
Underground Bituminous(1001)					
Total	146,145,680	5.47		$7,994,169	
Safety Committee	58,283,410	5.47	-5.00%	(159,405)	
Surface Anthracite(1012)					
Total	22,127,846	9.01		$1,993,719	
Safety Committee	10,723,043	9.01	-5.00%	(48,307)	
Surface Bituminous(1014)					
Total	63,507,517	2.15		$1,365,412	
Safety Committee	4,703,393	2.15	-5.00%	(5,056)	
Coke(1469)					
Total	4,791,910	5.70		$273,139	
Safety Committee	0	5.70	-5.00%	0	
Auger(1015)					
Total	1,093,790	15.58		$170,412	
Safety Committee	41,463	15.58	-5.00%	(323)	
Anthracite Co-gen(1021)					
Total	8,678,376	2.38		$206,545	
Safety Committee	2,293,268	2.38	-5.00%	(2,729)	
Bituminous Co-gen(1023)					
Total	13,133,423	1.05		$137,901	
Safety Committee	0	1.05	-5.00%	0	
Anthracite Prep Plant(1025)					
Total	8,266,396	4.79		$395,960	
Safety Committee	3,260,079	4.79	-5.00%	(7,808)	
Bituminous Prep Plant(1027)					
Total	33,935,906	1.13		$383,476	
Safety Committee	17,571,458	1.13	-5.00%	(9,928)	
All Classes Combined					
Total	301,856,744			12,955,491	
Safety Committee	96,876,114			(233,556)	
				12,721,935	1.0184

Source: (1) Exhibit X-A and CMCRB Database as of 4-30-2014
(2) Exhibit II
(4)=(1)*(2)*(3)