

**COAL MINE COMPENSATION RATING BUREAU
OF PENNSYLVANIA**

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November 15, 2024

The Honorable Michael Humphreys
Insurance Commissioner
Pennsylvania Insurance Department
1311 Strawberry Square
Harrisburg, PA 17120

Attention: Michael McKenney, Director, Property & Casualty Bureau

RE: Proposal CM-1-2024
Revised Loss Costs for Traumatic, State Occupational Disease
And Federal Occupational Disease
To Be Effective: April 1, 2025

Dear Commissioner Humphreys:

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 -13.2%. By coverage, the proposal requests a change of -18.2% for Traumatic, a change of -7.7% for State Occupational Disease (“SOD”) and a change of 5.3% for Federal Occupational Disease (“FOD”).

The Proposed Traumatic Loss Costs are decreasing overall by \$0.79 from \$4.34 to \$3.55. The overall experience is being driven by the following considerations:

- Indemnity Loss Development Factors generally decreased.
 - The changes range from 0.0% to -6.5% from older to newer Accident Years.
- Indemnity Loss Trend Annual Factor decreased from -0.3% to -4.2%. This results in trend factor changes that range from -23.6% to -10.4% from older to newer Accident Years.
- Medical Loss Development Factors changed modestly.
 - The changes range from -1.2% to -4.1% for Accident Years 2021 through 2023.
 - The changes are 0.3% and 1.1% for Accident Years 2019 and 2020.
- Medical Loss Trend Annual Factor decreased from 1.5% to -1.3%. This results in trend factor changes that range from -17.2% to -7.4% from older to newer Accident Years.

- The replacement of Accident Year 2018 experience with Accident Year 2023 experience in the five (5) year Traumatic Loss Cost analysis.
 - For the April 1, 2024 filing, the Accident Year 2018 Loss Cost was estimated to be \$4.86.
 - For the April 1, 2025 filing, the Accident Year 2023 Loss Cost is estimated to be \$3.35 with Indemnity and Medical decreasing by 30% and 33% respectively.

The Proposed SOD Loss Costs are decreasing overall by \$0.06 from \$0.78 to \$0.72. The overall experience is being driven by the following considerations:

- For all classes combined, claim frequency changed by -11.1%.
- For all classes combined, claim severity changed by 1.4%.

The Proposed FOD Loss Costs are increasing overall by \$0.05 from \$0.94 to \$0.99. The overall experience is being driven by the following considerations:

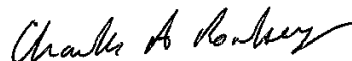
- For all classes combined, Basic claim frequency changed by -3.8%.
- For all classes combined, Excess claim frequency changed by -8.9%.
- For all classes combined, Basic claim severity changed by 11.2%.
- For all classes combined, Excess claim severity changed by 8.9%.

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

We ask for your approval of this filing on or before February 1, 2025. 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 consultant 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, ACAS, MAAA, CPCU, ARM
Executive Director

**Actuarial Report
Regarding the CMCRB's April 1, 2025 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, 2025 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, 2025.

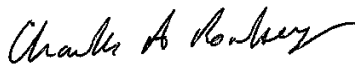
This report and the associated filing exhibits present information that demonstrate the fairness and reasonability of the proposed loss costs and show the CMCRB’s continued use of accepted actuarial procedures and application of sound actuarial judgment.

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

The remainder of this report consists of the following sections:

- The Executive Summary provides a discussion about the overall changes in Loss Costs and the sources of those changes contained in this filing by coverage (i.e., Traumatic, SOD and FOD). It also identifies “Other Items” that are typically of interest (e.g., the Employer Assessment Factor).
- The Summary of Significant Changes identifies and briefly discusses the significant changes in methods and assumptions from the CMCRB’s prior loss cost filing.
- The Discussion of Filing Exhibits addresses the content of all the Filing Exhibits and is arranged in Filing Exhibit order.
- The Disclosures section identifies and briefly discusses topics that broadly apply to all areas of this report and presents considerations or limitations related to the use of these findings.
- Appendices A, B and C are each now essentially reserved for future use:
 - Appendix A concerning House Bill 1846 of 2014 (HB 1846),
 - Appendix B concerning House Bill 1840 (HB 1840 or Act 111 of 2018) and the legislative response to the PA Supreme Court’s decision in Protz v. WCAB, and
 - Appendix C concerning filing exhibit changes from 4/1/2023 to 4/1/2024.

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, 2025, 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).

	<u>Current Loss Cost</u>	<u>Proposed Loss Cost</u>	<u>Change in Loss Costs</u>
Traumatic	\$ 4.34	\$ 3.55	-18.2%
SOD	0.78	0.72	-7.7%
<u>FOD (Basic & Excess)</u>	<u>0.94</u>	<u>0.99</u>	<u>5.3%</u>
Total	\$6.06	\$5.26	-13.2%

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 \$4.34 based on 2023 payroll distribution. The Proposed level is \$3.55 or a change of -18.2%.

The key drivers of the change to Traumatic Loss Costs can be identified by comparing Exhibit V-B Page 1 for the April 1, 2025 filing to the April 1, 2024 filing. These drivers include:

- Indemnity Loss Development Factors generally decreased.
 - The changes range from 0.0% to -6.5% from older to newer Accident Years.
- Indemnity Loss Trend Annual Factor decreased from -0.3% to -4.2%. This results in trend factor changes that range from -23.6% to -10.4% from older to newer Accident Years.
- Medical Loss Development Factors changed modestly.
 - The changes range from -1.2% to -4.1% for Accident Years 2021 through 2023.
 - The changes are 0.3% and 1.1% for Accident Years 2019 and 2020.
- Medical Loss Trend Annual Factor decreased from 1.5% to -1.3%. This results in trend factor changes that range from -17.2% to -7.4% from older to newer Accident Years.
- The replacement of Accident Year 2018 experience with Accident Year 2023 experience in the five (5) year Traumatic Loss Cost analysis.
 - For the April 1, 2024 filing, the Accident Year 2018 Loss Cost was estimated to be \$4.86.
 - For the April 1, 2025 filing, the Accident Year 2023 Loss Cost is estimated to be \$3.35 with Indemnity and Medical decreasing by 30% and 33% respectively.

These drivers generally decrease the Indemnity indication and the Medical indication. The Indemnity indication changed by -26.1%, from \$2.68 to \$1.98; while the Medical indication changed by -20.3%, from \$1.53 to \$1.22. Prior to the application of credibility and capping changes at +/- 25% by class, the Total Traumatic indication changed by -24.0%, from \$4.21 to \$3.20. The Total indication may not equal the sum of the parts due to rounding.

Credibility and capping procedures are applied on Exhibit V-A Page 1 to the Indicated Unloaded Loss Costs to produce the Proposed Unloaded Loss Costs which are also displayed on Exhibit II. Exhibit II shows the Proposed Unloaded Loss Costs Percent Change (after Credibility and Capping) for all classes combined is -19.3%. Also, the totals on Exhibit II are the result of using payroll for the most recent accident year as weights while the totals on Exhibit V-B Page 1 are the result of using payroll for the most recent five (5) accident years as weights. Capping at -25% was utilized for the Anthracite Surface and Anthracite Co-Gen classes.

State Occupational Disease (SOD) Loss Costs

The Current State Occupational Disease Loss Cost for all classes combined is \$0.78 based on 2023 payroll distribution. The Proposed level is \$0.72 or a change of -7.7%.

The key drivers of this change can be identified by comparing Exhibit III for the April 1, 2025 filing to the April 1, 2024 filing. These drivers include:

- For all classes combined, claim frequency changed by -11.1%. By class, frequency changes varied from -17.6% to 6.1%.
- For all classes combined, claim severity changed by 1.4%. By class, severity changes varied from -1.3% to 4.6%.
- All Class changes were within +/- 25%, so capping was not used. Also, the net change in Proposed Loss Costs does not equal the product of the claim frequency change and claim severity change because of capping at +/- 25% in prior filings.

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

The Current Federal Occupational Disease Basic/Excess Loss Cost for all classes combined is \$0.94 based on 2023 payroll distribution. The Proposed level is \$0.99 or a change of 5.3%.

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

	<u>Current Loss Cost</u>	<u>Proposed Loss Cost</u>	<u>Change in Loss Costs</u>
Basic	\$ 0.79	\$ 0.85	7.6%
<u>Excess</u>	<u>0.15</u>	<u>0.14</u>	<u>-6.7%</u>
Total	\$0.94	\$0.99	5.3%

The Proposed Loss Costs are shown in Column (5) of Exhibit IV separately for Basic and Excess and in Total. The Currently Approved Unloaded Loss Costs are shown in Total (i.e., Basic and Excess combined) in Column (2) of Exhibit IV. 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 from the prior filing as weights.

The key drivers of this change can be identified by comparing Exhibit IV for the April 1, 2025 filing to the April 1, 2024 filing. These drivers include:

- For all classes combined, Basic claim frequency changed by -3.8%.
- For all classes combined, Excess claim frequency changed by -8.9%.
- For all classes combined, Basic claim severity changed by 11.2%.
- For all classes combined, Excess claim severity changed by 8.9%.
- The change for Anthracite Underground is capped at +25%.
- The net change in Proposed Loss Costs does not equal the product of the claim frequency change and claim severity change because these three values do not all carry the same number of significant digits and because of the capping at +/- 25% in current or prior filings.

Other Items

- The Small Business Advocate Assessment Ratio remained the same at 0.0003. (See Exhibit XI.) Although Exhibit I-B shows calculations that make provision for this load to our Manual Loss Costs, we note that given the magnitude of this value and the number of significant digits that are carried in our Loss Costs, this calculation does not change our Loss Cost values for this filing.
- The Employer Assessment Factor changed from 2.42% (or 0.0242) to 2.22% (or 0.0222). (See Exhibit XI.) 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 changed from \$0.19 based on 2023 Payroll weights to \$0.20. (See Exhibit XII-A.) By class, the following amounts are loaded into the CMCRB's Manual Loss Costs:
 - The provision for Surface Classes changed from \$0.06 to \$0.05,
 - The provision for Auger changed from \$0.15 to \$0.16 and
 - The provision for Underground Classes changed from \$0.33 to \$0.37.
- The Experience Rating Plan parameters require a change to the Off-Balance Factor from 1.0455 to 1.0393. 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 changed remained at 1.0000. (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 1.0245 to 1.0238. (See Exhibit XIV-B.) This amount is loaded into the CMCRB's Manual Loss Costs.

Summary of Significant Changes from Last Year's Filing

Many Exhibits show that the payroll for the Coke Class for Accident Years 2021 through 2023 is \$0. The Exhibit X series documents that the payroll for the Coke Class decreased significantly from 2019 to 2020 from \$4,466,971 to \$313,587, then subsequently decreased to \$0 for 2021 and remained at \$0 for 2022 and 2023. The CMCRB understands that this is related to the closing of the last commercially insured Coke operation in Pennsylvania during early 2020.

Concerning Exhibit V-A Page 1 and Exhibit V-D Pages 1 and 2, the CMCRB proposes a change to the full credibility standard and traumatic trend capping amount and offers the following discussion in support of this decision.

For at least the last 15 filings for the Traumatic Classes, the CMCRB has made the following interrelated and interactive decisions (or traditional assumptions) concerning certain credibility related criteria:

1. Capped individual Class changes at +/- 25%.
2. Used the Expected Losses for the smallest of the 3 Major Classes as the full credibility standard for all Class changes.
3. Capped, when applicable, Selected Loss Ratio Trend changes to +/- 3 percentage points from the prior Selected Loss Ratio Trend, separately for Indemnity and Medical.
4. Also, decided not to employ an Off-Balance provision to offset for items #1 - #3 above since changes are calculated directly on an individual Class basis and not on an Overall basis with distribution to the Class level.

For the current filing, items #1 and #2 above are found on Exhibit V-A Page 1. Item #3 relates to the Selected Loss Ratio trends on Exhibit V-D Pages 1 and 2.

If the CMCRB used the traditional assumptions for this filing, the overall Traumatic indication would have been -18.5% with 6 Classes receiving full credibility and 3 Classes capped at -25%. Alternatively, the CMCRB proposes 2 changes:

1. Under #2 above, to set the Anthracite Surface Expected Losses to be the full credibility standard for all Class changes on Exhibit V-A Page 1 for this filing.
2. Under #3 above, to suspend capping of the Loss Ratio Trend changes at +/- 3 percentage points for this filing. Note that the Indemnity Loss Ratio Trend on Exhibit V-D Page 1 is -4.2% and that it would have been -3.3% with a +/-3 percentage point cap.

Making these changes, the overall Traumatic indication is -19.3% which is slightly lower than the -18.5% derived under the traditional assumptions. Also, with these changes, 2 Classes receive full credibility and 2 Classes are capped at -25%.

For the pages in the Exhibit V-E series, the CMCRB continues to believe that it is appropriate to limit large losses at \$1,250,000 in the preparation of data for trend analyses. For this filing, there is a claim that exceeds this threshold which was not the situation for the prior three filings. The treatment of this claim is documented on Exhibit V-E Page 3.

Relating to various pages in the Exhibit V-F, V-G and V-H series, the CMCRB proposes the following changes:

- Exhibit V-F Page 1 – The CMCRB selected the Average of Middle Four (or Actual) factors to be the Selected (LDF) Factors in lieu of the Derived Development Factors (or Modeled Factors) as in prior filings. The CMCRB selected the 20:Ult (or the Selected tail factor) consistent with the discussion offered below for Exhibit V-G Page 1.
 - Before including the tail, selecting the Actual factors in lieu of the Modeled factors result in changes in the Cumulative LDFs that vary from -1.3% to 1.0%. However, these changes are 0.0% for each of the five most recent years under consideration.
 - Including the tail, the Selected factors result in changes that vary from -1.1% to 1.1%. These changes are 0.2% for the five most recent years under consideration.
 - The two bullet points above only summarize the effects of the Selection or Methodology change. See the Discussion of Filing Exhibits for Exhibit V-F section of this Report for a discussion of the changes in Loss Development Factors from last year’s filing to this year’s filing that includes both the changes in Selection or Methodology and as well as changes from using current data.
- Exhibit V-F Page 2 – The CMCRB selected the Average of Middle Four (or Actual) factors to be the Selected (LDF) Factors in lieu of the Derived Development Factors (or Modeled Factors) as in prior filings. The CMCRB selected the 20:Ult (or the Selected tail factor) consistent with the discussion offered below for Exhibit V-H Page 1.
 - Before including the tail, selecting the Actual factors in lieu of the Modeled factors result in changes in the Cumulative LDFs that vary from -1.0% to 2.2%. However, these changes are -0.1% for the three most recent years under consideration with modest increases for the fourth (2.2%) and fifth (1.3%) most recent years under consideration.
 - The Selected factors, including the tail, result in changes that vary from -0.4% to 2.9%. These changes are between 0.5% and 0.6% for the three most recent years under consideration with modest increases for the fourth (2.9%) and fifth (1.9%) most recent years under consideration.
 - The two bullet points above only summarize the effects of the Selection or Methodology change. See the Discussion of Filing Exhibits for Exhibit V-F section of this Report for a discussion of the changes in Loss Development Factors from last year’s filing to this year’s filing that includes both the changes in Selection or Methodology and as well as changes from using current data.
- Exhibit V-G Page 1 – The CMCRB selected the “CMCRB tail factor” on this page from Exhibit VI-E Page 1 in lieu of the tail derived from the modeled loss development factors as in prior filings. This changes the CMCRB tail factor from 1.0054 to 1.0090 and the Selected tail factor from 1.0073 to 1.0091. The CMCRB intends to phase-out the loss development factor modeling process going forward, but retained the modeling process for comparison purposes for this filing. The Selected tail factor results in a change of 0.2% that increases all of the Cumulative LDFs mentioned above by the same amount.
- Exhibit V-H Page 1 – The CMCRB selected the “CMCRB tail factor” on this page from Exhibit VI-E Page 2 in lieu of the tail derived from the modeled loss development factors as in prior filings. This changes the CMCRB tail factor from 1.0101 to 1.0226 and the Selected tail factor from 1.0218 to 1.0281. The CMCRB intends to phase-out the loss development factor modeling process going forward, but retained the modeling process

for comparison purposes for this filing. The Selected tail factor results in a change of 0.6% that increases all of the Cumulative LDFs mentioned above by the same amount.

Concerning the Exhibit VI series, the CMCRB added Exhibit VI-E, Pages 1 and 2. These pages provide Traumatic Incurred Loss data from 20th Report Level to the most recent Report Level that is available (i.e., the most recent diagonal is valued as of 4-30-2024.) These pages are prepared separately for Incurred Indemnity and Funeral Losses and for Incurred Medical Losses. The CMCRB believes that the data for these years capture all of the reports for all of the claims that were incurred for these years. The CMCRB believes that the data for years prior to 1991 does not reflect all of the reports for all of the claims that were incurred for these years due to a few member companies being placed into liquidation that resulted in the cessation of continued reporting for these companies.

On Exhibit VIII-C Pages 7 and 8, the Classification Adjustment Factors (line B) were revised based on a review of claim counts by classification as follows:

	<u>Coke</u>	<u>Auger</u>	<u>Anthracite</u> <u>Co-Gen</u>	<u>Bituminous</u> <u>Co-Gen</u>	<u>Anthracite</u> <u>Prep Plant</u>	<u>Bituminous</u> <u>Prep Plant</u>
	<u>0154</u>	<u>0157</u>	<u>0181</u>	<u>0182</u>	<u>0183</u>	<u>0184</u>
Proposed Factor	0.2000	0.5000	0.5000	0.4000	0.8000	0.4000
Prior Factor	0.2000	0.5000	0.5000	0.4000	0.9000	0.4000

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.

Discussion of Filing Exhibits

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

Exhibit I – Current and Proposed Loss Costs

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

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

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

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

Exhibit II – Traumatic Loss Cost Indications

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

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

Exhibit III – State Occupational Disease Loss Cost Indications

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

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

Exhibit IV – Federal Occupational Disease Loss Cost Indications

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

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

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.

For the April 1, 2025 Filing, the Five Year Expected Losses for the Surface Anthracite Class was selected to be the full credibility standard (i.e., 100% credibility or 1.00). For the other classes, 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 Anthracite raised to the $\frac{1}{2}$ power. Previously, the full credibility standard was assigned to the smallest Five Year Expected Losses of the three Major Classifications.

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

Page 2 shows the derivation of the Indicated Traumatic Unloaded Loss Cost for the Underground Anthracite classification. This value is derived by a different process since this classification has minimal experience for the five (5) most recent Accident Years. This is the same procedure that was used in last year's filing.

B. These pages show the derivation of the Indicated Traumatic Unloaded Loss Costs by Classification. This process begins with the Reported Losses separately shown for

Indemnity and Medical for the five (5) most recent Accident Years. It applies Loss Development and Trend Factors to adjust Reported Losses to Ultimate Losses. Finally, it compares Ultimate Losses to Developed Payroll to produce indicated Loss Costs by Accident Year and in Total. Page 1 shows the Total for All Classifications Combined. Pages 2, 6, and 14 show subtotals for the noted classification groupings.

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

- C. This page shows the selected Traumatic Annual Trend Factors separately for Indemnity and Medical losses that are derived from Exhibit V-D, Pages 1 and 2. Since the Annual Trend Factors are applied separately to the five (5) most recent Accident Years, the page also shows the Trend Period for each of those five (5) years and the Trend Factor for each Accident Year.

In addition to traditional trend factors and calculations, this page also allows for adjustments related to other changes. Concerning the factors related to HB 1846, refer to Appendix A to this report. Concerning the factors related to HB 1840 (or Act 111 of 2018), refer to Appendix B to this report. Note that the factors for HB 1846 and HB 1840 are all unity for the five years under consideration in this filing.

- D. These pages show the derivation of the Traumatic Loss Trend factors. Each page provides the data and analysis under consideration for each type of trend.
- Page 1 displays Indemnity and Funeral Loss Ratio Trend.
 - Page 2 displays Medical (all claims) Loss Ratio Trend.
 - Page 3 displays Indemnity and Funeral Claim Frequency Trend. Indemnity claim counts are used as the measure for frequency and represent claims with indemnity and medical reported losses. Medical only claims are not used here to reduce the volatility that is typically associated with these types of claims. However, Medical only claim counts and amounts are included in the Medical (all claims) Loss Ratio Trend and Medical (all claims) Loss Severity Trend (or Pages 2 and 5 of this series.)
 - Page 4 displays Indemnity and Funeral Loss Severity Trend.
 - Page 5 displays Medical (all claims) Loss Severity Trend.

Each of the pages in this series displays the following information:

- The data that serves as the basis for the various trend estimations
- Eight geometric mean estimates each beginning and ending with the years as indicated
- Eight regression estimates each beginning and ending with the years as indicated
- Actual results over three different time spans (i.e., 3-year, 5-year, and 9-year) on both straight and weighted average bases.
- Trended (and adjusted) results over three different time spans (i.e., 3-year, 5-year, and 9-year) on both straight and weighted average bases.

The CMCRB notes that our database is very small and inherently volatile especially with respect to Traumatic loss trend estimation techniques. Oftentimes, the selection of the years that are used to begin or end a loss trend estimation technique significantly changes the trend estimate that is produced. This is not a new observation, but one that deserves consideration.

In calculating and selecting trend assumptions, the CMCRB considers several basic assumptions or observations that include, but are not limited to, the following:

- Claim Frequency Trend – The CMCRB notes that a modest negative claim frequency trend has existed in Pennsylvania for over 20 years and that this is evident in the CMCRB’s data and in the PCR’s data. The CMCRB also understands that this phenomenon exists in W.C. data outside of Pennsylvania, but that this phenomenon might not be as consistent outside of Pennsylvania.
- Indemnity Severity Trend – The CMCRB believes that Indemnity Severity Trend is most influenced by wage inflation. However, other conditions or circumstances also influence Indemnity Claim Severity that are more difficult to quantify (e.g., mix of injury severities under consideration).
- Medical Severity Trend – The CMCRB believes that Medical Severity Trend is most influenced by medical cost and utilization inflation. However, like Indemnity Claim Severity, Medical Claim Severity is also influenced by other conditions or circumstances that are more difficult to quantify (e.g., mix of injury severities under consideration).
- Indemnity and Medical Severity Trend relationship – The CMCRB generally expects medical cost and utilization inflation to exceed wage inflation and that Indemnity Severity Trends will usually be slightly lower than Medical Severity Trends.
- Although the CMCRB believes that the reasoning of the assumptions listed above is sound and generally well accepted, the CMCRB also believes that actual data should be utilized to the extent that it is reliable and reasonable.

The CMCRB prepares a variety of trend estimates based on a review of metrics from actual data for the ten most recent Accident Years. The selected trend assumptions are then applied to the most recent five Accident Years. The new Accident Year is least affected by the selected trend assumptions, while the oldest Accident Year is most affected. See Exhibit V-C for the calculations that support this statement.

Essentially, each of the five most recent Accident Years produces an estimate of the Loss Costs (or the Claim Frequencies or Claim Severities) that are under consideration. Consequently, the CMCRB expects the trended results for the five most recent Accident Years to be randomly scattered around a horizontal straight line. Of course, with a limited database, actual results can and do vary from this expectation.

Traumatic Trend Factor Selections

- The CMCRB selected a Claim Frequency Trend of -1.25%. This selection results in 3-year, 5-year and 9-year average and weighted average trended Claim Frequencies that are very consistent with values between 10.7 and 10.9.

- The CMCRB selected an Indemnity Claim Severity Trend of -3.00%. Although this selection is higher than many of the estimates displayed, this selection produces a reasonably good fit of the Indemnity Claim Severity data over the last ten years especially when noting the variability in the estimates based on the starting and stopping years.
- The CMCRB selected a Medical Claim Severity Trend of 0.00%. This selection results in 3-year and 5-year trended averages that are about \$9,300. Although this selection is higher than all of the estimates through 2022, it fairly well splits the estimates through 2023.

Observations about Loss Ratio Trends

- Although the CMCRB prefers to separately review Claim Frequency and Claim Severity Trend estimates, the CMCRB notes that the Claim Frequency Trend times the Claim Severity Trend is equivalent to the Loss Ratio Trend.
- Therefore, the CMCRB's implied Indemnity Loss Ratio Trend is the product of 0.9875 (i.e., the selected -1.25% Claim Frequency Trend) and 0.97 (i.e., the selected -3.00% Indemnity Severity Trend) which equals 0.958 (or -4.2%).
- Similarly, the CMCRB's implied Medical Loss Ratio Trend is the product of 0.9875 (i.e., the selected -1.25% Claim Frequency Trend) and 1.000 (i.e., the selected 0.0% Medical Severity Trend) which equals 0.987 (or -1.3%).
- The CMCRB usually opines in favor of capping Loss Ratio Trend changes at +/- 3 percentage points from filing to filing to address stability concerns. Since the CMCRB proposes an increase to the full credibility standard for Traumatic ratemaking purposes, the CMCRB also proposes not to impose this limitation to Loss Ratio Trend changes for this filing.

- E. Page 1 provides a summary of the Traumatic Indemnity and Funeral Losses. Page 2 provides a summary of the Traumatic Medical (all claims) Losses. The data on these pages support calculations on the Exhibit V-D pages.

On page 3, an individual Traumatic claim reported for Accident Year 2023 that exceeds \$1,250,000 after loss development is proportioned based on reported indemnity and medical losses. The CMCRB believes that limiting claims in this manner helps to stabilize the trend indications. Note that for the April 1, 2024 Filing, there were not any claims that exceeded the noted threshold.

- F. 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 Average of Middle Four (Development) Factors which are developed on Pages VI-A and VI-B 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) -6.5%,

- 2:3 (2nd report to ultimate) -3.6%,
- 3:4 (3rd report to ultimate) -1.3%,
- 4:5 (4th report to ultimate) -0.4%,
- 5:6 (5th report to ultimate) 0.0% and
- 6th report to ultimate and beyond in the range of -1.1% to 1.0%.

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

- 1:2 (1st report to ultimate) -4.1%,
- 2:3 (2nd report to ultimate) -1.4%,
- 3:4 (3rd report to ultimate) -1.2%,
- 4:5 (4th report to ultimate) 1.1%,
- 5:6 (5th report to ultimate) 0.3% and
- 6th report to ultimate and beyond in the range of -1.1% to 0.6%.

G. These pages show the development of the Derived Traumatic Indemnity Loss Development Age-to-Age factors and include the development of the Tail Factor based on the methodology and assumptions used in last year's filing. The CMCRB notes that Loss Development Factors and Tail Factors are being selected based upon Actual data and not Modeled results and that the modeling approach used on page 1 is being provided for comparison purposes only. See the Summary of Significant Changes from Last Year's Filing section of this Report that begins on Page 5 for additional discussion about these changes.

The following text is repeated from the prior filing, except that the parameters have been updated based on this year's data. The CMCRB expects to discontinue Modeling of Loss Development Factors and this discussion going forward.

Page 1 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. Like 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 15.02730, producing an average of 1.00182.
- 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 1.00182, so $y(12) = 1.00182$.
- 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:
$$y(12) = 1.00182 = x - (a)(12) \text{ and}$$
$$y(29) = 1.0001 = x - (a)(29).$$
- The solution for this system of equations was found to be:
$$a = 0.0001012 \text{ and}$$
$$x = 1.002515.$$
- Given these values, $y(5)$ is determined to be $1.0025 = 1.00303 - (0.0001012)(5)$. (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 0.0001012.
- 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 2 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-G Page 1. The PCRB Age-to-Age Factors are also compared to the CMCRB Age-to-Age Factors on V-F Page 1.

- H. These pages show the development of the Derived Traumatic Medical Loss Development Age-to-Age factors and include the development of the Tail Factor based on the methodology and assumptions used in last year’s filing. The CMCRB notes that Loss Development Factors and Tail Factors are being selected based upon Actual data and not Modeled results and that the modeling approach used on page 1 is being provided for comparison purposes only. See the Summary of Significant Changes from Last Year’s Filing section of this Report that begins on Page 5 for additional discussion about these changes.

The following text is repeated from the prior filing, except that the parameters have been updated based on this year’s data. The CMCRB expects to discontinue Modeling of Loss Development Factors and this discussion going forward.

Page 1 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. Like 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 1.0014148. (There are 17 factors from $t=3$ to $t=19$ so the geometric mean is $(0.9792 \times 1.0116 \times \dots \times 1.0013)^{(1/17)}$).
- 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.
- 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 1.0243.
- 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, $y(11) = 1.0014148$.
- These conditions result in the following system of equations:

$$y(11) = 1.0014148 = (x)(a^8) \text{ and}$$

$$y(38) = 1.0001 = (x)(a^{35}).$$

- The solution for this system of equations was found to be:
 $a = 0.999951$ and
 $x = 1.0018047$.
- At this point, the value 1.0018047 (displayed as 1.0018) is entered on Line 3 (for Period 3) of Column 6. The Factor for Period 4 is obtained as (1.0018047) times (0.999951). 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 1.0243 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 2 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-H Page 1. The PCRB Age-to-Age Factors are compared to the CMCRB Age-to-Age Factors on V-F Page 2.

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's prior filings included calculations and adjustments to address these effects to its reported loss development data in the various pages of Exhibit VI. For the pages in Sections A – D, the CMCRB notes that all the years under consideration in these exhibits (i.e., 1999 through 2023) are expected to be fully incurred and reported on post-Act 44 and post-Act 57 levels and that the related calculations and adjustments are no longer shown on these pages. For the pages in Section E, the CMCRB notes that the changes in this experience (e.g., 1991 at 20th Report Level is as of 4-30-2011) on these pages is also expected to be reported on post-Act 44 and post-Act 57 levels.

- A. This page displays Reported Traumatic Indemnity Incurred Losses 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).
- B. This page displays Reported Traumatic Medical Incurred Losses 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).
- 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 (i.e., the Average of Middle Four), 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. This page presents the Traumatic Indemnity and Medical Paid Loss information by Accident Year and Report Level arranged in traditional loss development format.
- E. Page 1 supplements the data on Exhibit VI-A Page 1 and displays Reported Traumatic Indemnity Incurred Losses by Accident Year and by Report Level for Accident Years 1991 through 2004 from 20th Report Level to the most recent Report Level that is available. It also shows the report-to-report Development factors, as well as a Straight Average Result and two Weighted Average Results. The second Weighted Average was selected as the 20th:Ultimate Factor. Note that this development period is actually 20th to 33rd, not 20th to Ultimate and that development beyond this period is possible (e.g., positive, negative or de minimis), but not included at this time.

Page 2 is like Page 1 except that it displays Reported Traumatic Medical Incurred Losses by Accident Year and by Report Level. Otherwise, the Page 2 format, calculations and selection follow the format of Page 1.

Exhibit VII – SOD and FOD Excess Severity and Frequency

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

These pages display severity values (i.e., Average Amounts or Totals) that are summaries of the details 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 Page 1 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 Page 2. 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 $\frac{1}{2}$ power.

Exhibit VII-B-1 Page 2 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 as Awarded, Denied or Pending by Classification and with Subtotals and a Grand Total. Additionally, the IBNR Claim estimates from Exhibit VII-C are also displayed. IBNR and Pending claims are multiplied by an Award Ratio, since all reported claims do not result in payment awards.

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

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

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

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

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

- C. Pages 1 through 4 display SOD Reported Claims for the Four (4) Major Classifications. Page 5 displays SOD Reported Claims for the six (6) Other Classifications combined. Page 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 show the IBNR calculations for the Other Classifications. Adjustment Factors were used for each of the Other Classifications to lower the expected probability of having a SOD claim since the Other Classifications have produced fewer SOD claims and lower SOD claim frequencies than the All Classifications experience with one exception. The Adjustment Factor for Anthracite Prep Plant was maintained at unity (i.e., no adjustment) because this Class has produced more claims and higher claim frequencies than the rest of the Other Classifications.

D. Omitted – Reserved for Future Use

E. This exhibit consists of six (6) subsections (i.e., a, b, c, d, e, and f). Each subsection consists of five (5) pages (one page for each of the Four Major Classes and one page for the Other Classes combined). The subsections show the following severities or severity adjustments:

a – SOD – Before Act 57

b – SOD – Social Security Offset

c – SOD – Private Pension Offset

d – Federal Excess OD – Before Offsets

e – Federal Excess OD – After Social Security Offset

f – Federal Excess OD – After Social Security and Private Pension Offsets

These pages begin by displaying the Sub-total of individual claim detail from Exhibit IX-A by claim status (i.e., Awarded-Permanent, Awarded-Commuted/Compromised, and Pending). Since Pending claims could be resolved by Commutation or Compromise, the probability of Commutation/Compromise is assigned to the Pending claims based on the mix of Commuted/Compromised claims in the Awarded claims. The severity for the expected Commuted/Compromised claims within the Pending claims is then adjusted by the difference between the Average Awarded Commuted/Compromised Severity and the Average Awarded Permanent Severity. This adjustment results in a lower SOD cost and a higher FOD Excess cost.

F. Omitted – Reserved for Future Use

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

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

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

- H. These pages show the development of the Projected Average SOD Wage Level for each of the Four Major Classes. For each class, an average ratio of the Reported (or Actual) SOD Average Wage to the Statewide Average Weekly Wage is calculated. The product of the ratio for each class and the projected Statewide Average Weekly Wage results in a Projected Average SOD Wage Level for each class. The Wage History for 1990 through 2023 (the most recent year that data is available) is then smoothed for use in the indexation process in Exhibit VII-G.
- I. Omitted – Reserved for Future Use
- J. Page 1 shows the historical Social Security Cost of Living Adjustments (COLA), the 3-year, 5-year, 10-year and All-year averages of these amounts and the Selected Annual Change. Page 2 shows the projection of the Monthly Wage Amounts Bend Points and the Annual Social Security Wage Base used to calculate the Primary Insurance Amount (PIA) or Social Security benefit. These amounts are projected to one (1) year past the proposed effective date, which is the average accident date of the proposed loss costs. Page 3 provides examples as to how the bend points and maximum are used.
- K. Omitted – Reserved for Future Use.
- L. These pages model changes to Claiming activity (i.e., Claim Awarding and Reopening) for FOD Excess Claims that are related to Federal Black Lung Regulation revisions that were issued on January 19, 2001. Generally, the reasoning for these calculations and assumptions follows the reasoning for Exhibit VIII-F, which is presented later in the commentary for Exhibit VIII-F. The differences in the calculations and assumptions between Exhibit VII-L and Exhibit VIII-F are discussed as follows.

Exhibit VII-L uses data for the most recent twenty (20) years whereas Exhibit VIII-F only uses data for the most recent ten (10) years. Previously, the CMCRB asserted that different assumptions should be applied to the pre-2001 years and the post-2000 years. For the April 1, 2025 Filing, all of the years in this exhibit are post-2000, so the following assumptions apply to all of the years on this exhibit:

- Pending Awarded Ratios – an Award Ratio of 30% applies.
- Denied Reopened Ratios – a Reopened Ratio of 5% applies.
- Denied Awarded – an Award Ratio of 100% applies.
- 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.
- All of these assumptions have been maintained since the April 1, 2009 filing.

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

Exhibit VIII – FOD Basic Severity and Frequency

- A. This page provides a summary of the individual claim details that are shown in Exhibit IX-B for the Federal Basic Severities separately for each of the Four Major Classes, the Four Major Classes Combined, the Other Classes Combined and All Classes Combined.
- B-1. 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 VIII-B-1 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 VIII-B-1 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 $\frac{1}{2}$ power.

Page 2 displays the derivation of the FOD Excess Claim Frequencies. The Indicated Claim Frequencies are developed in Exhibit VIII-B-1 Page 5. The currently Approved FOD Excess Claim Frequencies are developed in Exhibit VIII-B-1 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 or Estimated Miner Years as weights as indicated.

- 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 as Awarded, Denied or Pending by Classification and with Subtotals and a Grand Total. Additionally, the IBNR Claim estimates from Exhibit VIII-C are also displayed. IBNR and Pending claims are multiplied by an Award Ratio, since all reported claims do not result in payment awards.

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

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

Each of the Four Major Classes is given its own Award Ratio. The Other Classes were given the Award Ratio based on the Grand Total data.

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

- C. Pages 1 through 4 display FOD Basic Reported Claims for the Four (4) Major Classifications. Page 5 displays FOD Basic Reported Claims for the six (6) Other Classifications combined. Page 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 show the IBNR calculations for the Other Classifications. Adjustment Factors were used for each of the Other Classifications to lower the expected probability of having a FOD Basic claim since the Other Classifications have produced fewer FOD Basic claims and lower FOD Basic claim frequencies than the All Classifications experience. The adjustment factors were updated for this filing. See the Summary of Significant Changes from Last Year's Filing section of this Report.

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

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

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

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

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

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

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

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

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

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

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

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

These pages first display claim values (or projected benefits) for a “Base” scenario (i.e., before the impact of Act 57) for SOD (including Medical) and FOD Excess. These values are associated with the Awarded and Pending claims reported to the CMCRB for exposure years 1990 through 2023. For the Base Scenario, all claims are calculated with lifetime SOD Indemnity (Benefit) payments (i.e., Permanent Total basis) except for the Commuted or Compromised claims.

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

The 630-week duration was calculated as follows:

The AMA Guidelines do not apply prior to the expiration of an initial 104-week benefit period. With timely filing for review, timely occurrence of the hearing and

timely issuance of a decision, a floor 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 1.0428% to 1.0121%.
- B. These pages display the Individual Claim Detail for Federal Basic OD claim severities separately for the Four Major Classes and for the Other Classes. The Individual Claim Details come from the CMCRB’s Occupational Disease Severity Model (“Model”). Benefit amounts are accumulated over the lifetime of the miner (and spouse, if applicable) with mortality factors included in the calculation. These values are associated with the Awarded and Pending claims reported to the CMCRB for exposure years 1990 through 2023.

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 discussion. Page 1 provides Traumatic Payrolls; Page 2 provides SOD Payrolls; and Page 3 provides FOD Payrolls.
- 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

In Section 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 Factor or Ratio. Although Exhibit I-B shows calculations that make provision for this load to our Manual Loss Costs, we note that given the magnitude of this value and the number of significant digits that are carried in our Loss Costs, this calculation does not change our Loss Cost values for this filing. We note that this result is typical.

In Section 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. Beginning

with the April 1, 2018 filing, all losses in the twenty (20) most recent Accident Years are reported on a post-Act 44 basis and do not require an Act 44 adjustment. The Statewide Average Weekly Wage Index is used as the Trend factor and is applied to both Indemnity and Medical Losses. The use of this index seems appropriate since Indemnity losses are a direct function of wages and Act 44 limits 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 credibility table that was utilized from April 1, 2004 through March 31, 2024 converted from Expected Losses to Payroll using the proposed overall Unloaded Loss Cost underlying this filing. The table for the excess ratable layer was also updated based on the proposed overall Unloaded Loss Cost underlying this filing.

- B. These pages provide comparisons of the current Experience Mods (as calculated and released by the CMCRB with last year's filing) to the proposed Experience Mods, by file number. In total, there are few new experience-rated accounts. Some accounts which were experience rated last year were not eligible this year. The Experience Rating Plan's Off-Balance factor was calculated to be 1.0393. Since the filed provisions and calculations of the Experience Rating Plan utilize the Off-Balance factor internally, each indicated mod was adjusted by this off-balance factor so that the Experience Rating 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

The CMCRB continues to include adjustments or off-balance factors for the effects of the Merit Rating Plan and the (Certified) Safety Committee Credit, as indicated.

- 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

Introduction – Risk or Uncertainty

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

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

- Changes in claim reserving 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.

Coal Miner Demographic Changes

The CMCRB believes that one potential source of instability in Traumatic Claim Frequencies (and possibly Severities) that deserves specific mention involves an actual or perceived change in the coal mining work force demographics. The CMCRB has heard reports from member companies that a shift in the Pennsylvania coal mining work force began during 2016 and has continued into at least 2022 where older, more experienced miners are being replaced by younger, less experienced miners and that there is greater competition for coal miners due to labor shortages in this industry resulting in miners moving from employer to employer. The CMCRB has also read reports (e.g., see MSHA’s News Release posted June 6, 2017) about this same shift and the potential impact on losses related to it. While the CMCRB does not have access to data to corroborate this change or estimate its effect, the CMCRB understands that MSHA’s opinion is that less experienced miners – both at a mine and at a specific occupation – suffer injuries at a higher rate than more experienced miners. The CMCRB has not directly or indirectly taken this reported demographic shift or its effect into consideration in the subject filing. However, the CMCRB believes that this phenomenon potentially adds to the uncertainty associated with the subject filing, especially concerning the lack of information that is available to predict when the demographic shift will stop or achieve a new demographic equilibrium.

New Insureds

The CMCRB believes that another potential source of instability involves the influx of new and large entities into the CMCRB's database. On Exhibit X-A, the influx of these new entities is associated with the significant changes in payroll as follows:

- Traumatic and SOD payroll increased by about \$123 million or 41% from 2013 to 2014. However, FOD payroll increased by about \$28 million or 10% from 2013 to 2014.
- Traumatic and SOD payroll decreased by about \$74 million or 17% from 2014 to 2015. FOD payroll decreased by about \$60 million or 19% from 2014 to 2015.
- Traumatic and SOD payroll decreased by about \$96 million or 27% from 2015 to 2016. FOD payroll decreased by about \$44 million or 17% from 2015 to 2016.
- The entities that produced the large Traumatic and SOD increases from 2013 to 2014 remained self-insured for FOD exposures through the first half of 2016, but began insuring their FOD exposures at that time.
- For 2017, Traumatic and SOD payroll increased by about \$35 million or 14%. FOD payroll increased by about \$68 million or 31%. However, for 2017, Traumatic and SOD payroll is once again almost the same as FOD payroll.
- For 2018 and 2019, payroll increased more modestly by 2-6% with Traumatic and SOD payrolls almost the same as FOD payrolls.

Novel Coronavirus (or SARS-CoV-2) and Covid-19

The CMCRB wants to acknowledge that the data for this filing spans a time period generally understood to include the presence of the coronavirus (SARS CoV-2 or COVID-19) in Pennsylvania. At this time, the CMCRB believes that some of the payroll change from 2019 to 2020 may be associated with work stoppages or slowdowns related to the coronavirus, but that change also may be attributed to lower demand for coal during 2020. The CMCRB is not aware of any specific impacts to the losses (i.e., specific claims) used in this filing related to the coronavirus. Furthermore, the CMCRB has not included any considerations or loads related to the coronavirus or potential similar future events in this filing.

The CMCRB believes that there is also potential uncertainty related to some indirect COVID-19 phenomena. These phenomena may include, but not be limited to, actual or perceived increased unemployment rates and financial stress and decreased access to medical care and safety and loss control visits to name just a few. Again, the CMCRB has not included any considerations or loads related to these potential concerns in this filing.

FOD Claiming Activity

Beginning with the April 1, 2016 Loss Cost Filing, the CMCRB noted receiving concerning anecdotal reports about claiming activities related to FOD coverage.

- Some reports note that claiming activity was increasing with more reported and awarded claims. Other reports indicate that federal agencies were visiting areas where mining activity had slowed to encourage claim filing.
- The CMCRB remains concerned about the Award Ratio associated with Federal Basic claims in its filing for Pennsylvania in light of Award Ratios associated with these claims outside of Pennsylvania. The CMCRB intends to continue exploring whether or not the ten years that it uses to determine Award Ratios remains appropriate.

- The CMCRB also maintains concerns about claim development. The CMCRB notes that it receives reports of Awarded claims beyond 20th report level, but does not directly include claim development beyond 20th report level.

SOD and FOD Medical Losses

The CMCRB recently began to receive anecdotal reports about new, high cost medical treatments for individuals with coal-related lung disease. The CMCRB believes that there is only a small amount of losses, if any, that have been reported related to this concern, but wants to note that OD Medical Severity estimates do not contain provisions for newer or high cost medical treatment that are not included in the reported data.

Coal Market Outlook

The CMCRB notes that recent reports on the long-term economic outlook for coal mine operators continue to be very negative. The CMCRB also continues to hear reports of slowing and closing of coal mining operations and closings of coal fired power plants. The CMCRB has also received anecdotal reports that “plaintiff” attorneys are advertising in depressed coal mining areas to encourage “out-of-work” miners to file workers compensation claims. The CMCRB remains concerned about the potential impact these activities may have on claim frequencies and/or severities and the associated trend estimates in our filings.

Catastrophe Losses

The CMCRB notes that Catastrophe Losses (i.e., individual claims where on-level losses exceed \$1,250,000) have declined significantly in the last 10 or so years. Since the CMCRB does not have an explanation for this decline, the CMCRB finds this to be another potential limitation.

Experience: Aggregate, Individual Insurers, Individual Insureds

The CMCRB believes that the conclusions in this report are consistent with the combined experience of all carriers in the CMCRB’s database. Data by carrier or insured is not disclosed in the filing to protect the proprietary and trade secret information of these entities. That said, the CMCRB acknowledges that the experience of the CMCRB’s individual members companies may be different (or may be perceived to be different) from the aggregate experience of the CMCRB’s total membership.

Please direct any questions concerning this report to:

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Actuarial Report – Appendix A
Consideration of House Bill 1846 of 2014 (HB 1846)
Regarding the CMCRB’s April 1, 2025 Loss Cost Filing

Reserved for Future Use

For the April 1, 2025 Loss Cost Filing, the CMCRB notes that this Appendix is reserved for future use. The CMCRB anticipates deleting or reusing this Appendix in future filings.

For the April 1, 2025 Loss Cost Filing, the CMCRB notes that each of the five years (i.e., 2019 – 2023) used in its Traumatic Loss indication are again expected to be fully reported on a post-HB 1846 level and that associated adjustment factors are not necessary.

The CMCRB notes that prior versions of this Appendix continue to be available on the CMCRB’s website for reference if needed.

Actuarial Report – Appendix B
Consideration of Protz v. WCAB (Derry Area School District) and
House Bill 1840 (HB 1840 or Act 111 of 2018)
Regarding the CMCRB’s April 1, 2025 Loss Cost Filing

Reserved for Future Use

For the April 1, 2025 Loss Cost Filing, the CMCRB notes that this Appendix is reserved for future use. The CMCRB anticipates deleting or reusing this Appendix in future filings.

For the April 1, 2025 Loss Cost Filing, the CMCRB notes that each of the five years (i.e., 2019 – 2023) used in its Traumatic Loss indication are expected to be fully reported on a post-HB 1840 level and that associated adjustment factors are not necessary.

The CMCRB notes that prior versions of this Appendix continue to be available on the CMCRB’s website for reference if needed.

Actuarial Report – Appendix C
Filing Exhibit Changes
Regarding the CMCRB’s April 1, 2025 Loss Cost Filing

Reserved for Future Use

For the April 1, 2024 Filing, the CMCRB made numerous changes to filing exhibits from the exhibits used for the April 1, 2023 Filing. This Appendix was used for the April 1, 2024 Filing to identify those changes.

For the April 1, 2025 Loss Cost Filing, the CMCRB notes that the filing exhibits are largely consistent with the exhibits used for the April 1, 2024 Filing. Filing Exhibit Changes, if any, are addressed in the Summary of Significant Changes from Last Year’s Filing section of the Actuarial Report. The CMCRB notes that this Appendix is reserved for future use and anticipates deleting or reusing this Appendix in future filings.

The CMCRB notes that prior version of this Appendix continues to be available on the CMCRB’s website for reference if needed.

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

	2023 Developed Payroll	(1) Approved Loss Cost Manual	(2) Proposed Loss Cost Manual	(3) Percent Change
Underground Anthracite:				
Traumatic (1010)	\$199,052	\$14.98	\$11.74	-21.6%
State O.D. (1011)	199,052	20.79	19.20	-7.6%
*Federal Basic/Ex (0160)	<u>252,915</u>	<u>17.74</u>	<u>22.18</u>	<u>25.0%</u>
Total	xx	53.51	53.12	-0.7%
Underground Bituminous:				
Traumatic (1001)	\$145,920,907	\$6.28	\$5.21	-17.0%
State O.D. (1002)	145,920,907	0.79	0.64	-19.0%
*Federal Basic/Ex (0158)	<u>145,920,907</u>	<u>1.12</u>	<u>1.20</u>	<u>7.1%</u>
Total	xx	8.19	7.05	-13.9%
Surface Anthracite:				
Traumatic (1012)	\$35,342,111	\$4.78	\$3.59	-24.9%
State O.D. (1016)	35,342,111	0.90	0.90	0.0%
*Federal Basic/Ex (0153)	<u>35,654,202</u>	<u>1.59</u>	<u>1.45</u>	<u>-8.8%</u>
Total	xx	7.27	5.94	-18.3%
Surface Bituminous:				
Traumatic (1014)	\$33,302,085	\$1.07	\$0.95	-11.2%
State O.D. (1013)	33,302,085	0.61	0.66	8.2%
*Federal Basic/Ex (0156)	<u>34,001,644</u>	<u>0.84</u>	<u>0.97</u>	<u>15.5%</u>
Total	xx	2.52	2.58	2.4%
Four Standard Classifications:				
Traumatic	\$214,764,155	\$5.23	\$4.29	-18.0%
State O.D.	214,764,155	0.80	0.70	-12.5%
*Federal Basic/Ex	<u>215,829,668</u>	<u>1.17</u>	<u>1.23</u>	<u>5.1%</u>
Total	xx	7.20	6.22	-13.6%

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

Sources: Payroll from Exhibit X-A
 Column (1) Loss Costs (Approved 4/1/2024) - Exhibit X-B, Page 2
 Column (2) Proposed - Exhibit I-B, Pages 1 and 2
 Column (3) Traumatic Column (2) / Column (1)
 OD Exhibit III and IV

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

	2023 Developed Payroll	(1) Approved Loss Cost Manual	(2) Proposed Loss Cost Manual	(3) Percent Change
Coke:				
Traumatic (1469)	-	\$4.45	\$3.95	-11.2%
State O.D. (1017)	-	0.09	0.09	0.0%
*Federal Basic/Ex (0154)	-	0.10	0.11	10.0%
Total	xx	4.64	4.15	-10.6%
Auger:				
Traumatic (1015)	\$252,349	\$6.14	\$5.86	-4.6%
State O.D. (1019)	252,349	0.19	0.19	0.0%
*Federal Basic/Ex (0157)	252,349	0.41	0.44	7.3%
Total	xx	6.74	6.49	-3.7%
Co-Gen Anthracite:				
Traumatic (1021)	\$9,705,257	\$6.53	\$4.89	-25.1%
State O.D. (1022)	9,705,257	0.49	0.54	10.2%
*Federal Basic/Ex (0181)	9,739,556	0.37	0.45	21.6%
Total	xx	7.39	5.88	-20.4%
Co-Gen Bituminous:				
Traumatic (1023)	\$24,193,248	\$1.34	\$1.12	-16.4%
State O.D. (1024)	24,193,248	0.19	0.18	-5.3%
*Federal Basic/Ex (0182)	24,193,248	0.25	0.26	4.0%
Total	xx	1.78	1.56	-12.4%
Prep Plant Anthracite:				
Traumatic (1025)	\$16,725,093	\$2.62	\$2.23	-14.9%
State O.D. (1026)	16,725,093	2.98	3.16	6.0%
*Federal Basic/Ex (0183)	16,885,757	0.81	0.80	-1.2%
Total	xx	6.41	6.19	-3.4%
Prep Plant Bituminous:				
Traumatic (1027)	\$41,687,661	\$1.67	\$1.37	-18.0%
State O.D. (1028)	41,687,661	0.21	0.21	0.0%
*Federal Basic/Ex (0184)	41,687,661	0.31	0.35	12.9%
Total	xx	2.19	1.93	-11.9%
Other Classifications:				
Traumatic	\$92,563,608	\$2.28	\$1.84	-19.3%
State O.D.	92,563,608	0.73	0.77	5.5%
*Federal Basic/Ex	92,758,571	0.39	0.42	7.7%
Total	xx	3.40	3.03	-10.9%
Grand Total:				
Traumatic	\$307,327,763	\$4.34	\$3.55	-18.2%
State O.D.	307,327,763	0.78	0.72	-7.7%
*Federal Basic/Ex	308,588,239	0.94	0.99	5.3%
Total	xx	6.06	5.26	-13.2%

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

Sources: Payroll from Exhibit X-A
 Column (1) Loss Costs (Approved 4/1/2024) - Exhibit X-B, Page 2
 Column (2) Proposed - Exhibit I-B, Pages 1 and 2
 Column (3) Traumatic Column (2) / Column (1)
 OD Exhibit III and IV

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

	2023 Developed Payroll	(1) Approved Unloaded Manual	(2) Indicated Unloaded Manual	(3) Proposed Unloaded Manual	(4) Percent Change
Underground Anthracite:					
Traumatic (1010)	\$199,052	\$14.29	\$11.10	\$11.10	-22.3%
State O.D. (1011)	199,052	20.79	19.20	19.20	-7.6%
*Federal Basic/Ex (0160)	<u>252,915</u>	<u>17.74</u>	<u>35.33</u>	<u>22.18</u>	<u>25.0%</u>
Total	xx	52.82	65.63	52.48	-0.6%
Underground Bituminous:					
Traumatic (1001)	\$145,920,907	\$5.80	\$4.72	\$4.72	-18.6%
State O.D. (1002)	145,920,907	0.79	0.64	0.64	-19.0%
*Federal Basic/Ex (0158)	<u>145,920,907</u>	<u>1.12</u>	<u>1.20</u>	<u>1.20</u>	<u>7.1%</u>
Total	xx	7.71	6.56	6.56	-14.9%
Surface Anthracite:					
Traumatic (1012)	\$35,342,111	\$4.61	\$2.64	\$3.46	-24.9%
State O.D. (1016)	35,342,111	0.90	0.90	0.90	0.0%
*Federal Basic/Ex (0153)	<u>35,654,202</u>	<u>1.59</u>	<u>1.45</u>	<u>1.45</u>	<u>-8.8%</u>
Total	xx	7.10	4.99	5.81	-18.2%
Surface Bituminous:					
Traumatic (1014)	\$33,302,085	\$0.98	\$0.88	\$0.88	-10.2%
State O.D. (1013)	33,302,085	0.61	0.66	0.66	8.2%
*Federal Basic/Ex (0156)	<u>34,001,644</u>	<u>0.84</u>	<u>0.97</u>	<u>0.97</u>	<u>15.5%</u>
Total	xx	2.43	2.51	2.51	3.3%
Four Standard Classifications:					
Traumatic	\$214,764,155	\$4.86	\$3.79	\$3.92	-19.3%
State O.D.	214,764,155	0.80	0.70	0.70	-12.5%
*Federal Basic/Ex	<u>215,829,668</u>	<u>1.17</u>	<u>1.25</u>	<u>1.23</u>	<u>5.1%</u>
Total	xx	6.83	5.74	5.85	-14.3%

*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, 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, col(7) (Federal O.D. After Adm/Law)
Column (4) Exhibit II, III or IV

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

	2023 Developed Payroll	(1) Approved Unloaded Manual	(2) Indicated Unloaded Manual	(3) Proposed Unloaded Manual	(4) Percent Change
Coke:					
Traumatic (1469)	-	\$4.28	\$3.81	\$3.81	-11.0%
State O.D. (1017)	-	0.09	0.09	0.09	0.0%
*Federal Basic/Ex (0154)	-	0.10	0.11	0.11	10.0%
Total	xx	4.47	4.01	4.01	-10.3%
Auger:					
Traumatic (1015)	\$252,349	\$5.84	\$5.56	\$5.56	-4.8%
State O.D. (1019)	252,349	0.19	0.19	0.19	0.0%
*Federal Basic/Ex (0157)	252,349	0.41	0.44	0.44	7.3%
Total	xx	6.44	6.19	6.19	-3.9%
Co-Gen Anthracite:					
Traumatic (1021)	\$9,705,257	\$6.31	\$4.26	\$4.73	-25.0%
State O.D. (1022)	9,705,257	0.49	0.54	0.54	10.2%
*Federal Basic/Ex (0181)	9,739,556	0.37	0.45	0.45	21.6%
Total	xx	7.17	5.25	5.72	-20.2%
Co-Gen Bituminous:					
Traumatic (1023)	\$24,193,248	\$1.25	\$1.04	\$1.04	-16.8%
State O.D. (1024)	24,193,248	0.19	0.18	0.18	-5.3%
*Federal Basic/Ex (0182)	24,193,248	0.25	0.26	0.26	4.0%
Total	xx	1.69	1.48	1.48	-12.4%
Prep Plant Anthracite:					
Traumatic (1025)	\$16,725,093	\$2.50	\$2.13	\$2.13	-14.8%
State O.D. (1026)	16,725,093	2.98	3.16	3.16	6.0%
*Federal Basic/Ex (0183)	16,885,757	0.81	0.80	0.80	-1.2%
Total	xx	6.29	6.09	6.09	-3.2%
Prep Plant Bituminous:					
Traumatic (1027)	\$41,687,661	\$1.57	\$1.29	\$1.29	-17.8%
State O.D. (1028)	41,687,661	0.21	0.21	0.21	0.0%
*Federal Basic/Ex (0184)	41,687,661	0.31	0.35	0.35	12.9%
Total	xx	2.09	1.85	1.85	-11.5%
Other Classifications:					
Traumatic	\$92,563,608	\$2.16	\$1.70	\$1.75	-19.0%
State O.D.	92,563,608	0.73	0.77	0.77	5.5%
*Federal Basic/Ex	92,758,571	0.39	0.42	0.42	7.7%
Total	xx	3.28	2.89	2.94	-10.4%
Grand Total:					
Traumatic	\$307,327,763	\$4.05	\$3.16	\$3.27	-19.3%
State O.D.	307,327,763	0.78	0.72	0.72	-7.7%
*Federal Basic/Ex	308,588,239	0.94	1.00	0.99	5.3%
Total	xx	5.77	4.88	4.98	-13.7%

*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, 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, col(7) (Federal O.D. After Adm/Law)
Column (4) Exhibit II, III or IV

**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 unloaded loss cost limited to 25%(Exhibit IV).

Underground Bituminous

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

Surface Anthracite

Traumatic (1012)		Indicated 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 Loss Cost.

Coke

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

Auger

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

Co-Gen Anthracite

Traumatic (1021)		Indicated unloaded loss cost limited to -25%(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 4-1-2025**

	2023 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)	\$199,052	\$11.10	\$0.37	\$11.47	\$11.74	\$11.74
State O.D. (1011)	199,052	19.20				19.20
*Federal Basic/Ex (0160)	<u>252,915</u>	<u>22.18</u>				<u>22.18</u>
Total	xx	52.48				53.12
Underground Bituminous:						
Traumatic (1001)	\$145,920,907	\$4.72	\$0.37	\$5.09	\$5.21	\$5.21
State O.D. (1002)	145,920,907	0.64				0.64
*Federal Basic/Ex (0158)	<u>145,920,907</u>	<u>1.20</u>				<u>1.20</u>
Total	xx	6.56				7.05
Surface Anthracite:						
Traumatic (1012)	\$35,342,111	\$3.46	\$0.05	\$3.51	\$3.59	\$3.59
State O.D. (1016)	35,342,111	0.90				0.90
*Federal Basic/Ex (0153)	<u>35,654,202</u>	<u>1.45</u>				<u>1.45</u>
Total	xx	5.81				5.94
Surface Bituminous:						
Traumatic (1014)	\$33,302,085	\$0.88	\$0.05	\$0.93	\$0.95	\$0.95
State O.D. (1013)	33,302,085	0.66				0.66
*Federal Basic/Ex (0156)	<u>34,001,644</u>	<u>0.97</u>				<u>0.97</u>
Total	xx	2.51				2.58
Four Standard Classifications:						
Traumatic	\$214,764,155	\$3.92	\$0.27	\$4.19	\$4.29	\$4.29
State O.D.	214,764,155	0.70				0.70
*Federal Basic/Ex	<u>215,829,668</u>	<u>1.23</u>				<u>1.23</u>
Total	xx	5.85				6.22

*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

Exhibit XIV-A	Experience Rating	1.0000
Exhibit XIV-B	Merit Rating	1.0000
	Safety Rating	<u>1.0238</u>
	Combined	1.0238

(5)(b) Loss-based Assessment factor in present rates
applied to Traumatic & State OD loss costs =1.0003

**Coal Mine Compensation Rating Bureau
Manual Loss Cost Loaded (after Capping)
For Catastrophe, Off-Balances, and Assessment
Proposed to Become Effective 4-1-2025**

	2023 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)	-	\$3.81	\$0.05	\$3.86	\$3.95	\$3.95
State O.D. (1017)	-	0.09				0.09
*Federal Basic/Ex (0154)	-	0.11				0.11
Total	xx	4.01				4.15
Auger:						
Traumatic (1015)	\$252,349	\$5.56	\$0.16	\$5.72	\$5.86	\$5.86
State O.D. (1019)	252,349	0.19				0.19
*Federal Basic/Ex (0157)	252,349	0.44				0.44
Total	xx	6.19				6.49
Co-Gen Anthracite:						
Traumatic (1021)	\$9,705,257	\$4.73	\$0.05	\$4.78	\$4.89	\$4.89
State O.D. (1022)	9,705,257	0.54				0.54
*Federal Basic/Ex (0181)	9,739,556	0.45				0.45
Total	xx	5.72				5.88
Co-Gen Bituminous:						
Traumatic (1023)	\$24,193,248	\$1.04	\$0.05	\$1.09	\$1.12	\$1.12
State O.D. (1024)	24,193,248	0.18				0.18
*Federal Basic/Ex (0182)	24,193,248	0.26				0.26
Total	xx	1.48				1.56
Prep Plant Anthracite:						
Traumatic (1025)	\$16,725,093	\$2.13	\$0.05	\$2.18	\$2.23	\$2.23
State O.D. (1026)	16,725,093	3.16				3.16
*Federal Basic/Ex (0183)	16,885,757	0.80				0.80
Total	xx	6.09				6.19
Prep Plant Bituminous:						
Traumatic (1027)	\$41,687,661	\$1.29	\$0.05	\$1.34	\$1.37	\$1.37
State O.D. (1028)	41,687,661	0.21				0.21
*Federal Basic/Ex (0184)	41,687,661	0.35				0.35
Total	xx	1.85				1.93
Other Classifications:						
Traumatic	\$92,563,608	\$1.75	\$0.05	\$1.80	\$1.84	\$1.84
State O.D.	\$92,563,608	0.77				0.77
*Federal Basic/Ex	92,758,571	0.42				0.42
Total	xx	2.94				3.03
Grand Total:						
Traumatic	\$307,327,763	\$3.27	\$0.20	\$3.47	\$3.55	\$3.55
State O.D.	307,327,763	0.72				0.72
*Federal Basic/Ex	308,588,239	0.99				0.99
Total	xx	4.98				5.26

*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

Exhibit XIV-A	Experience Rating	1.0000
Exhibit XIV-B	Merit Rating	1.0000
	Safety Rating	1.0238
	Combined	1.0238

(5)(b) Loss-based Assessment factor in present rates
applied to Traumatic & State OD loss costs =1.0003

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

Exhibit II

<u>Classification</u>	<u>Code</u>	(1)	(2)	(3)	(4)	(5)	
		<u>2023 Developed Payroll</u>	<u>Approved Unloaded Loss Cost (Eff 4/01/2024)</u>	<u>Indicated Unloaded Loss Cost</u>	<u>Proposed Unloaded Loss Cost</u>	<u>Percent Change</u>	
Underground:	Anthracite	1010	199,052	14.29	11.10	11.10	-22.3%
	Bituminous	1001	145,920,907	5.80	4.72	4.72	-18.6%
Surface:	Anthracite	1012	35,342,111	4.61	2.64	3.46	-24.9%
	Bituminous	1014	33,302,085	<u>0.98</u>	<u>0.88</u>	<u>0.88</u>	<u>-10.2%</u>
Four Standard Classes			214,764,155	4.86	3.79	3.92	-19.3%
Other Classes	Coke	1469	-	4.28	3.81	3.81	-11.0%
	Auger	1015	252,349	5.84	5.56	5.56	-4.8%
Co-Gen:	Anthracite	1021	9,705,257	6.31	4.26	4.73	-25.0%
	Bituminous	1023	24,193,248	1.25	1.04	1.04	-16.8%
Prep Plants:	Anthracite	1025	16,725,093	2.50	2.13	2.13	-14.8%
	Bituminous	1027	41,687,661	<u>1.57</u>	<u>1.29</u>	<u>1.29</u>	<u>-17.8%</u>
Other Classes			92,563,608	2.16	1.70	1.75	-19.0%
All Classes Combined			307,327,763	4.05	3.16	3.27	-19.3%

Sources: Column (1) Exhibit X-A, Page 1
Column (2) Exhibit V-A, Page 1
Column (3) Exhibit V-A, Page 1
Column (4) Exhibit V-A, Page 1
Column (5) = [Column (4) divided by Column (2)] minus 1

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

Exhibit III

Classification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<u>2023 Developed Payroll</u>	<u>Approved Unloaded Loss Cost</u>	<u>Average Freq. per \$1 mill.</u>	<u>Indicated Average Severity</u>	<u>Loss Cost (Rate)</u>	<u>Indicated Change</u>	<u>Proposed Change</u>	<u>Proposed Loss Cost</u>
Underground								
1011 Anthracite	\$199,052	\$20.79	0.207362	\$926,107	\$19.20	-7.6%	-7.6%	\$19.20
1002 Bituminous	\$145,920,907	\$0.79	0.019413	\$331,836	0.64	-19.0%	-19.0%	0.64
Surface								
1016 Anthracite	\$35,342,111	\$0.90	0.013672	\$656,212	0.90	0.0%	0.0%	0.90
1013 Bituminous	\$33,302,085	<u>0.61</u>	0.014547	\$453,689	<u>0.66</u>	<u>8.2%</u>	<u>8.2%</u>	<u>0.66</u>
Four Standard Classes	\$214,764,155	\$0.80			\$0.70	-12.5%	-12.5%	\$0.70
1017 Coke	\$ -	0.09	0.002024	453,689	0.09	0.0%	0.0%	0.09
1019 Auger	\$252,349	0.19	0.004079	453,689	0.19	0.0%	0.0%	0.19
Co-Gen								
1022 Anthracite	\$9,705,257	0.49	0.008213	656,212	0.54	10.2%	10.2%	0.54
1024 Bituminous	\$24,193,248	0.19	0.003868	453,689	0.18	-5.3%	-5.3%	0.18
Prep Plant								
1026 Anthracite	\$16,725,093	2.98	0.048186	656,212	3.16	6.0%	6.0%	3.16
1028 Bituminous	\$41,687,661	<u>0.21</u>	0.004734	453,689	<u>0.21</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.21</u>
Other Classes	\$92,563,608	\$0.73			\$0.77	5.5%	5.5%	\$0.77
All Classes Combined	\$307,327,763	\$0.78			\$0.72	-7.7%	-7.7%	\$0.72

Sources: Column (1): Exhibit X-A, Page 2
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**

Exhibit IV

Classification		(1)	(2)	(3) (4)		(5)	(6)	(7)	(8)
		2023 Developed Payroll	Approved Unloaded Loss Cost	Average Freq. per \$1 mill.	Average Severity	Loss Cost (Rate)	Indicated Change	Loss Cost w/ Limitation 25%	% Change w/Limitation 25%
Underground									
Anthracite:	Basic			0.576990	592,344	34.18			
	Excess			0.074799	153,103	1.15			
	Total	\$252,915	\$17.74			35.33	99.2%	\$ 22.18	25.0%
	Bituminous:								
	Basic			0.020737	472,570	0.98			
	Excess			0.007364	293,107	0.22			
	Total	\$145,920,907	\$1.12			1.20	7.1%	\$ 1.20	7.1%
Surface									
Anthracite:	Basic			0.032721	425,889	1.39			
	Excess			0.006301	95,539	0.06			
	Total	\$35,654,202	\$1.59			1.45	-8.8%	\$ 1.45	-8.8%
	Bituminous:								
	Basic			0.019508	437,854	0.85			
	Excess			0.004679	256,778	0.12			
	Total	\$34,001,644	\$0.84			0.97	15.5%	\$ 0.97	15.5%
Four Standard Classes	Basic					1.07			
	Excess					0.18			
	Total	\$215,829,668	\$1.17			1.25	6.8%	\$ 1.23	5.1%
Coke	Basic			0.002032	437,854	0.09			
	Excess			0.000777	256,778	0.02			
	Total	\$ -	\$0.10			0.11	10.0%	\$ 0.11	10.0%
Auger	Basic			0.009228	437,854	0.40			
	Excess			0.001650	256,778	0.04			
	Total	\$252,349	\$0.41			0.44	7.3%	\$ 0.44	7.3%
Co-Gen									
Anthracite:	Basic			0.009947	425,889	0.42			
	Excess			0.002656	95,539	0.03			
	Total	\$9,739,556	\$0.37			0.45	21.6%	\$ 0.45	21.6%
	Bituminous:								
	Basic			0.005298	437,854	0.23			
	Excess			0.001332	256,778	0.03			
	Total	\$24,193,248	\$0.25			0.26	4.0%	\$ 0.26	4.0%
Prep Plants									
Anthracite:	Basic			0.014596	425,889	0.62			
	Excess			0.018952	95,539	0.18			
	Total	\$16,885,757	\$0.81			0.80	-1.2%	\$ 0.80	-1.2%
	Bituminous:								
	Basic			0.007112	437,854	0.31			
	Excess			0.001520	256,778	0.04			
	Total	\$41,687,661	\$0.31			0.35	12.9%	\$ 0.35	12.9%
Other Classes	Basic					0.36			
	Excess					0.06			
	Total	\$92,758,571	\$0.39			0.42	7.7%	\$ 0.42	7.7%
All Classes Combined	Basic					0.86			
	Excess					0.14			
	Total	\$308,588,239	\$0.94			1.00	6.4%	\$ 0.99	5.3%

Sources: Column (1): Exhibit X-A, Page 3
Column (2): Exhibit X-B, Page 2
Column (3): Exhibit VIII-B-1, Page 1 col. (10) (Basic) and Exhibit VIII-B-1, 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
Traumatic Loss and Classification Credibility

Classification	Code	(1)	2023 Payroll	(2) (3) (4) Loss Cost/Unloaded		5 Year Expected Losses	(5) (6) Credibility		(7) (8) Indicated w/ Credibility		(9) Proposed Change after Limitation	(10) Proposed Loss Cost	(11) Proposed Change Excluding Trend
		5 Year Payroll		Approved (Eff 4/01/2024)	Approved on Level		Indicated (Eff 04/01/2025)	Five Year Expected Losses	Credibility Factor	Indicated Loss Cost			
Underground: Bituminous	1001	\$728,966,650	\$145,920,907	5.80	5.62	4.72	42,280,066	1.00	4.72	-18.6%	-18.6%	4.72	-16.0%
Surface: Anthracite	1012	\$135,283,296	\$35,342,111	4.61	4.47	2.64	6,236,560	1.00	2.64	-42.7%	-25.0%	3.46	-22.5%
Surface: Bituminous	1014	\$158,051,324	\$33,302,085	0.98	0.95	0.81	1,548,903	0.50	0.88	-10.2%	-10.2%	0.88	-7.3%
Three Major Classifications		\$1,022,301,270	\$214,565,103	4.90	4.75	3.84	50,065,529						
Coke	1469	\$4,780,558	\$0	4.28	4.15	2.27	204,608	0.18	3.81	-11.0%	-11.0%	3.81	-8.1%
Co-Gen: Anthracite	1021	\$42,862,896	\$9,705,257	6.31	6.11	3.31	2,704,649	0.66	4.26	-32.5%	-25.0%	4.73	-22.6%
Co-Gen: Bituminous	1023	\$76,356,340	\$24,193,248	1.25	1.21	0.78	954,454	0.39	1.04	-16.8%	-16.8%	1.04	-14.1%
Prep Plants: Anthracite	1025	\$69,771,463	\$16,725,093	2.50	2.42	1.87	1,744,287	0.53	2.13	-14.8%	-14.8%	2.13	-12.1%
Prep Plants: Bituminous	1027	\$187,699,081	\$41,687,661	1.57	1.52	1.19	2,946,876	0.69	1.29	-17.8%	-17.8%	1.29	-15.2%
Auger	1015	\$1,606,935	\$252,349	5.84	5.66	4.80	93,845	0.12	5.56	-4.8%	-4.8%	5.56	-1.7%
Subtotal (6)		\$383,077,273	\$92,563,608	2.26	2.19	1.50	8,648,719						
Underground: Anthracite	1010	\$978,981	\$199,052	14.29	13.85	8.34 ^a	139,896	0.15	11.10 ^b	-22.3%	-22.3%	11.10 ^c	-19.8%
Subtotal (7)		\$384,056,254	\$92,762,660	2.29	2.22	1.52	8,788,615						
Total (Based on 5-year Payroll)		\$1,406,357,524	\$307,327,763	4.18	4.05	3.21	\$58,854,144		3.29				
Total (Based on 2023 Payroll, see Exhibit II)			\$307,327,763	4.05					3.16	-22.0%	-19.3%	3.27	

Source: (1) Exhibit V-B

- (2) Unloaded Loss Cost Current (Eff 4/01/2024) Exhibit X-B, Page 2
- (3) = (2) X Trend = (2) X (0.969)
 0.969 = Weighted average of 0.987 and 0.958
 Weights derived from 5 year Medical (17,116,802) and Indemnity (27,864,967) ultimate losses. Exhibit V-B, Page 1
- (4) Exhibit V-B except Underground Anthracite, see Exhibit V-A, Page 2
- (5) Expected Losses = Column (1) times Column (2) divided by 100
- (6) Factor Z = [(5) divided by 6,236,560]^(1/2) Capped at 1.00
- (7) [Column (4) times Column (6)] plus [Column (3) times (1.0 minus Column (6))], except Underground Anthracite is the average of Column(3) and Column(4).
- (8) Column(7) / Column(2) - 1.0
- (9) Loss costs changes limited to +25% increase, -25% decrease
- (10) When Column (8) equals Column (9), then Column (7).
 Otherwise, Column (2) * [1 + (9)].
- (11) Column(10)/.969/Column(2)-1.000

- a Indicated Loss Cost from V-A, Page 2
- b Average of Col. (3) and Col. (4)
- c Average of Col. (3) and Proposed Loss Cost from V-A, Page 2

Calculation of Anthracite Underground Loss Cost

	<u>Indicated</u>	<u>Proposed</u>
Multiplicative Method (Anthracite: Underground vs. Surface)		
Differential Factor from Study	2.66	2.66
Indicated Anthracite Surface Loss Cost	2.64 *	3.46 *
Indicated Anthracite Underground Loss Cost	<u>7.02</u>	<u>9.20</u>
Comparative Hazard Method #1 (Anthracite vs. Bituminous)		
Differential Factor from Study	2.41	2.41
Indicated Bituminous Underground Loss Cost:	4.72 *	4.72 *
Indicated Anthracite Underground Loss Cost	<u>11.38</u>	<u>11.38</u>
Comparative Hazard Method #2 (Surface vs. Underground)		
Differential Factor from Study	2.51	2.51
Indicated Anthracite Surface Loss Cost:	2.64 *	3.46 *
Indicated Anthracite Underground Loss Cost	<u>6.63</u>	<u>8.68</u>
Average	8.34	9.75

* Souce: Exhibit V-A, Page 1

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

Exhibit V-B
 Page 1

Accident Year	(1) <u>Reported Losses</u>	(2) <u>Loss Development</u>	(3) <u>Trend Factor</u>	(4) <u>Ultimate Losses</u>	(5) <u>Loss Cost</u>
<u>Indemnity</u>					
2019	7,815,186	1.0368	0.7485	6,064,934	1.95
2020	7,829,662	1.0659	0.7814	6,521,282	2.57
2021	5,737,053	1.0774	0.8156	5,041,307	2.00
2022	4,063,486	1.1882	0.8514	4,110,758	1.46
<u>2023</u>	<u>4,078,638</u>	1.7250	0.8887	<u>6,126,686</u> *	<u>1.99</u>
5 Years	\$29,524,025			\$27,864,967	1.98

<u>Medical</u>					
2019	3,847,348	1.0625	0.9155	3,742,387	1.20
2020	3,509,464	1.0748	0.9275	3,498,502	1.38
2021	3,303,358	1.0524	0.9397	3,266,823	1.29
2022	2,490,506	1.0270	0.9521	2,435,233	0.86
<u>2023</u>	<u>4,281,580</u>	0.9998	0.9647	<u>4,173,857</u> *	<u>1.36</u>
5 Years	\$17,432,256			\$17,116,802	1.22

Indemnity & Medical	(6) <u>Developed Payroll</u>			
2019	310,590,243		9,807,321	3.16
2020	254,187,589		10,019,784	3.94
2021	252,398,864		8,308,130	3.29
2022	281,853,065		6,545,991	2.32
<u>2023</u>	<u>307,327,763</u>		<u>10,300,543</u>	<u>3.35</u>
5 Years	\$1,406,357,524		\$44,981,769	3.20

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

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

Coal Mine Compensation Rating Bureau
Traumatic Loss Cost Indication

Exhibit V-B
Page 2

Three 100% Credibility Classifications (3 Classes)

Accident Year	(1) <u>Reported Losses</u>	(2) <u>Loss Development</u>	(3) <u>Trend Factor</u>	(4) <u>Ultimate Losses</u>	(5) <u>Loss Cost</u>
<u>Indemnity</u>					
2019	6,637,314	1.0368	0.7485	5,150,853	2.18
2020	6,389,747	1.0659	0.7814	5,321,984	2.82
2021	5,517,095	1.0774	0.8156	4,848,023	2.65
2022	3,309,395	1.1882	0.8514	3,347,894	1.68
<u>2023</u>	<u>3,870,955</u>	1.7250	0.8887	<u>5,808,307</u> *	<u>2.71</u>
5 Years	\$25,724,506			\$24,477,061	2.39

<u>Medical</u>					
2019	3,450,125	1.0625	0.9155	3,356,001	1.42
2020	2,705,734	1.0748	0.9275	2,697,284	1.43
2021	2,965,981	1.0524	0.9397	2,933,178	1.61
2022	1,958,772	1.0270	0.9521	1,915,300	0.96
<u>2023</u>	<u>3,971,047</u>	0.9998	0.9647	<u>3,874,345</u> *	<u>1.81</u>
5 Years	\$15,051,659			\$14,776,108	1.45

Indemnity & <u>Medical</u>	(6) <u>Developed Payroll</u>			
2019	236,420,528		8,506,854	3.60
2020	188,745,658		8,019,268	4.25
2021	182,745,580		7,781,201	4.26
2022	199,824,401		5,263,194	2.63
<u>2023</u>	<u>214,565,103</u>		<u>9,682,652</u>	<u>4.51</u>
5 Years	\$1,022,301,270		\$39,253,169	3.84

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

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

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

Exhibit V-B
 Page 3

Accident Year	(1) <u>Reported Losses</u>	(2) <u>Loss Development</u>	(3) <u>Trend Factor</u>	(4) <u>Ultimate Losses</u>	(5) <u>Loss Cost</u>
<u>Indemnity</u>					
2019	5,837,801	1.0368	0.7485	4,530,395	2.55
2020	5,772,784	1.0659	0.7814	4,808,119	3.46
2021	4,883,217	1.0774	0.8156	4,291,017	3.32
2022	2,807,080	1.1882	0.8514	2,839,736	2.07
<u>2023</u>	<u>3,568,946</u>	1.7250	0.8887	<u>5,345,325</u> *	<u>3.66</u>
5 Years	\$22,869,828			\$21,814,592	2.99

<u>Medical</u>					
2019	2,949,450	1.0625	0.9155	2,868,985	1.61
2020	2,243,664	1.0748	0.9275	2,236,657	1.61
2021	2,422,212	1.0524	0.9397	2,395,423	1.85
2022	1,594,977	1.0270	0.9521	1,559,579	1.14
<u>2023</u>	<u>3,610,369</u>	0.9998	0.9647	<u>3,526,469</u> *	<u>2.42</u>
5 Years	\$12,820,672			\$12,587,113	1.73

Indemnity & <u>Medical</u>	(6) <u>Developed Payroll</u>			
2019	177,833,672		7,399,380	4.16
2020	139,028,472		7,044,776	5.07
2021	129,326,591		6,686,440	5.17
2022	136,857,008		4,399,315	3.21
<u>2023</u>	<u>145,920,907</u>		<u>8,871,794</u>	<u>6.08</u>
5 Years	\$728,966,650		\$34,401,705	4.72

Source: (1) CMCRB Database as of 04-30-2024
 (2) Exhibit V-F, Pages 1 and 2
 (3) Exhibit V-C
 (4) (1) times (2) times (3)
 (5) (4) divided by (6) times 100
 (6) Exhibit X-A, Page 1

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

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

Exhibit V-B
 Page 3b

Adjustment for Large Claim(s) (Accident Year 2023)

	Indemnity	Medical	Total
Uncapped Excess Claims	239,494	1,000,000	1,239,494
Percent of Total	19.3%	80.7%	100.00%
Percent x 1,250,000	241,250	1,008,750	1,250,000
Total Reported Loss as of 04-30-2024	3,568,946	3,610,369	
Uncapped Excess Claims	239,494	1,000,000	
Reported Loss ex. Excess Claims	3,329,452	2,610,369	
Loss Development Factor	1.7250	0.9998	
Trend Factor	0.8887	0.9647	
Dev & Trended Loss ex. Excess Claims	5,104,075	2,517,719	
Excess Claims Capped at \$1,250,000	241,250	1,008,750	
Dev & Trended Loss w/Excess Claims Capped	5,345,325	3,526,469	

Source: Exhibit V-E page 3

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

Exhibit V-B
Page 4

Accident Year	(1) <u>Reported Losses</u>	(2) <u>Loss Development</u>	(3) <u>Trend Factor</u>	(4) <u>Ultimate Losses</u>	(5) <u>Loss Cost</u>
<u>Indemnity</u>					
2019	482,004	1.0368	0.7485	374,057	1.61
2020	267,792	1.0659	0.7814	223,042	0.99
2021	572,357	1.0774	0.8156	502,946	2.07
2022	463,088	1.1882	0.8514	468,475	1.57
<u>2023</u>	<u>245,001</u>	1.7250	0.8887	<u>375,588</u>	<u>1.06</u>
5 Years	\$2,030,242			\$1,944,108	1.44
<u>Medical</u>					
2019	321,472	1.0625	0.9155	312,702	1.35
2020	370,725	1.0748	0.9275	369,567	1.65
2021	457,808	1.0524	0.9397	452,745	1.86
2022	288,916	1.0270	0.9521	282,504	0.94
<u>2023</u>	<u>219,978</u>	0.9998	0.9647	<u>212,170</u>	<u>0.60</u>
5 Years	\$1,658,899			\$1,629,688	1.20
<u>Indemnity & Medical</u>					
	(6) <u>Developed Payroll</u>				
2019	23,224,142			686,759	2.96
2020	22,443,061			592,609	2.64
2021	24,346,630			955,691	3.93
2022	29,927,352			750,979	2.51
<u>2023</u>	<u>35,342,111</u>			<u>587,758</u>	<u>1.66</u>
5 Years	\$135,283,296			\$3,573,796	2.64

Source: (1) CMCRB Database as of 04-30-2024
(2) Exhibit V-F, Pages 1 and 2
(3) Exhibit V-C
(4) (1) times (2) times (3)
(5) (4) divided by (6) times 100
(6) Exhibit X-A, Page 1

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

Exhibit V-B
Page 5

Accident <u>Year</u>	(1) Reported <u>Losses</u>	(2) Loss <u>Development</u>	(3) Trend <u>Factor</u>	(4) Ultimate <u>Losses</u>	(5) Loss <u>Cost</u>
<u>Indemnity</u>					
2019	317,509	1.0368	0.7485	246,401	0.70
2020	349,171	1.0659	0.7814	290,823	1.07
2021	61,521	1.0774	0.8156	54,060	0.19
2022	39,227	1.1882	0.8514	39,683	0.12
<u>2023</u>	<u>57,008</u>	1.7250	0.8887	<u>87,394</u>	<u>0.26</u>
5 Years	\$824,436			\$718,361	0.45
<u>Medical</u>					
2019	179,203	1.0625	0.9155	174,314	0.49
2020	91,345	1.0748	0.9275	91,060	0.33
2021	85,961	1.0524	0.9397	85,010	0.29
2022	74,879	1.0270	0.9521	73,217	0.22
<u>2023</u>	<u>140,700</u>	0.9998	0.9647	<u>135,706</u>	<u>0.41</u>
5 Years	\$572,088			\$559,307	0.35
(6)					
Indemnity & <u>Medical</u>	Developed <u>Payroll</u>				
2019	35,362,714			420,715	1.19
2020	27,274,125			381,883	1.40
2021	29,072,359			139,070	0.48
2022	33,040,041			112,900	0.34
<u>2023</u>	<u>33,302,085</u>			<u>223,100</u>	<u>0.67</u>
5 Years	\$158,051,324			\$1,277,668	0.81

Source: (1) CMCRB Database as of 04-30-2024
(2) Exhibit V-F, Pages 1 and 2
(3) Exhibit V-C
(4) (1) times (2) times (3)
(5) (4) divided by (6) times 100
(6) Exhibit X-A, Page 1

Coal Mine Compensation Rating Bureau
Traumatic Loss Cost Indication

Exhibit V-B
Page 6

Seven Less Than 100% Credibility Classifications (7 Classes)

Accident Year	(1) <u>Reported Losses</u>	(2) <u>Loss Development</u>	(3) <u>Trend Factor</u>	(4) <u>Ultimate Losses</u>	(5) <u>Loss Cost</u>
<u>Indemnity</u>					
2019	1,177,872	1.0368	0.7485	914,081	1.23
2020	1,439,915	1.0659	0.7814	1,199,298	1.83
2021	219,958	1.0774	0.8156	193,284	0.28
2022	754,091	1.1882	0.8514	762,864	0.93
<u>2023</u>	<u>207,683</u>	1.7250	0.8887	<u>318,379</u>	<u>0.34</u>
5 Years	\$3,799,519			\$3,387,906	0.88
<u>Medical</u>					
2019	397,223	1.0625	0.9155	386,386	0.52
2020	803,730	1.0748	0.9275	801,218	1.22
2021	337,377	1.0524	0.9397	333,645	0.48
2022	531,734	1.0270	0.9521	519,933	0.63
<u>2023</u>	<u>310,533</u>	0.9998	0.9647	<u>299,512</u>	<u>0.32</u>
5 Years	\$2,380,597			\$2,340,694	0.61
<u>Indemnity & Medical</u>					
	(6) <u>Developed Payroll</u>				
2019	74,169,715			1,300,467	1.75
2020	65,441,931			2,000,516	3.06
2021	69,653,284			526,929	0.76
2022	82,028,664			1,282,797	1.56
<u>2023</u>	<u>92,762,660</u>			<u>617,891</u>	<u>0.67</u>
5 Years	\$384,056,254			\$5,728,600	1.49

Source: (1) Sum of Exhibit V-B, pages 7-13 - column (1)
(2) Exhibit V-F, Pages 1 and 2
(3) Exhibit V-C
(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

Exhibit V-B
Page 7

Coke 1469

Accident Year	(1) Reported Losses	(2) Loss Development	(3) Trend Factor	(4) Ultimate Losses	(5) Loss Cost
<u>Indemnity</u>					
2019	129,350	1.0368	0.7485	100,381	2.25
2020	0	1.0659	0.7814	0	0.00
2021	0	1.0774	0.8156	0	0.00
2022	0	1.1882	0.8514	0	0.00
<u>2023</u>	<u>0</u>	1.7250	0.8887	<u>0</u>	<u>0.00</u>
5 Years	\$129,350			\$100,381	2.10

<u>Medical</u>					
2019	8,215	1.0625	0.9155	7,991	0.18
2020	0	1.0748	0.9275	0	0.00
2021	0	1.0524	0.9397	0	0.00
2022	0	1.0270	0.9521	0	0.00
<u>2023</u>	<u>0</u>	0.9998	0.9647	<u>0</u>	<u>0.00</u>
5 Years	\$8,215			\$7,991	0.17

Indemnity & <u>Medical</u>	(6) Developed Payroll		
2019	4,466,971	108,372	2.43
2020	313,587	0	0.00
2021	0	0	0.00
2022	0	0	0.00
<u>2023</u>	<u>0</u>	<u>0</u>	<u>0.00</u>
5 Years	\$4,780,558	\$108,372	2.27

Source: (1) CMCRB Database as of 04-30-2024
 (2) Exhibit V-F, Pages 1 and 2
 (3) Exhibit V-C
 (4) (1) times (2) times (3)
 (5) (4) divided by (6) times 100
 (6) Exhibit X-A, Page 1

Coal Mine Compensation Rating Bureau
Traumatic Loss Cost Indication
Auger 1015

Exhibit V-B
Page 8

Accident Year	(1) Reported Losses	(2) Loss Development	(3) Trend Factor	(4) Ultimate Losses	(5) Loss Cost
<u>Indemnity</u>					
2019	0	1.0368	0.7485	0	0.00
2020	88,701	1.0659	0.7814	73,879	19.21
2021	0	1.0774	0.8156	0	0.00
2022	0	1.1882	0.8514	0	0.00
<u>2023</u>	<u>0</u>	1.7250	0.8887	<u>0</u>	<u>0.00</u>
5 Years	\$88,701			\$73,879	4.60

<u>Medical</u>					
2019	2,299	1.0625	0.9155	2,236	0.41
2020	817	1.0748	0.9275	814	0.21
2021	0	1.0524	0.9397	0	0.00
2022	0	1.0270	0.9521	0	0.00
<u>2023</u>	<u>226</u>	0.9998	0.9647	<u>218</u>	<u>0.09</u>
5 Years	\$3,342			\$3,268	0.20

Indemnity & <u>Medical</u>	(6) Developed Payroll		
2019	539,914	2,236	0.41
2020	384,571	74,693	19.42
2021	206,478	0	0.00
2022	223,623	0	0.00
<u>2023</u>	<u>252,349</u>	<u>218</u>	<u>0.09</u>
5 Years	\$1,606,935	\$77,147	4.80

Source: (1) CMCRB Database as of 04-30-2024
(2) Exhibit V-F, Pages 1 and 2
(3) Exhibit V-C
(4) (1) times (2) times (3)
(5) (4) divided by (6) times 100
(6) Exhibit X-A, Page 1

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

Exhibit V-B
Page 9

Accident Year	(1) <u>Reported Losses</u>	(2) <u>Loss Development</u>	(3) <u>Trend Factor</u>	(4) <u>Ultimate Losses</u>	(5) <u>Loss Cost</u>
<u>Indemnity</u>					
2019	24,221	1.0368	0.7485	18,797	0.23
2020	765,690	1.0659	0.7814	637,739	8.33
2021	298	1.0774	0.8156	262	0.00
2022	28,040	1.1882	0.8514	28,366	0.32
<u>2023</u>	<u>25,239</u>	1.7250	0.8887	<u>38,692</u>	<u>0.40</u>
5 Years	\$843,488			\$723,856	1.69
<u>Medical</u>					
2019	53,068	1.0625	0.9155	51,620	0.63
2020	501,333	1.0748	0.9275	499,767	6.52
2021	45,442	1.0524	0.9397	44,939	0.54
2022	38,249	1.0270	0.9521	37,400	0.42
<u>2023</u>	<u>62,467</u>	0.9998	0.9647	<u>60,250</u>	<u>0.62</u>
5 Years	\$700,559			\$693,976	1.62
<u>Indemnity & Medical</u>					
	(6) <u>Developed Payroll</u>				
2019	8,191,669			70,417	0.86
2020	7,660,069			1,137,506	14.85
2021	8,371,756			45,201	0.54
2022	8,934,145			65,766	0.74
<u>2023</u>	<u>9,705,257</u>			<u>98,942</u>	<u>1.02</u>
5 Years	\$42,862,896			\$1,417,832	3.31

Source: (1) CMCRB Database as of 04-30-2024
(2) Exhibit V-F, Pages 1 and 2
(3) Exhibit V-C
(4) (1) times (2) times (3)
(5) (4) divided by (6) times 100
(6) Exhibit X-A, Page 1

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

Exhibit V-B
Page 10

Accident Year	(1) <u>Reported Losses</u>	(2) <u>Loss Development</u>	(3) <u>Trend Factor</u>	(4) <u>Ultimate Losses</u>	(5) <u>Loss Cost</u>
<u>Indemnity</u>					
2019	4,267	1.0368	0.7485	3,311	0.03
2020	7,540	1.0659	0.7814	6,280	0.06
2021	156,542	1.0774	0.8156	137,558	1.12
2022	29,065	1.1882	0.8514	29,403	0.17
<u>2023</u>	<u>82,647</u>	1.7250	0.8887	<u>126,698</u>	<u>0.52</u>
5 Years	\$280,061			\$303,250	0.40
<u>Medical</u>					
2019	11,225	1.0625	0.9155	10,919	0.09
2020	21,008	1.0748	0.9275	20,942	0.20
2021	101,554	1.0524	0.9397	100,431	0.82
2022	87,578	1.0270	0.9521	85,634	0.49
<u>2023</u>	<u>74,335</u>	0.9998	0.9647	<u>71,697</u>	<u>0.30</u>
5 Years	\$295,700			\$289,623	0.38
<u>Indemnity & Medical</u>					
	(6) <u>Developed Payroll</u>				
2019	11,818,883			14,230	0.12
2020	10,678,482			27,222	0.25
2021	12,282,842			237,989	1.94
2022	17,382,885			115,037	0.66
<u>2023</u>	<u>24,193,248</u>			<u>198,395</u>	<u>0.82</u>
5 Years	\$76,356,340			\$592,873	0.78

Source: (1) CMCRB Database as of 04-30-2024
(2) Exhibit V-F, Pages 1 and 2
(3) Exhibit V-C
(4) (1) times (2) times (3)
(5) (4) divided by (6) times 100
(6) Exhibit X-A, Page 1

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

Exhibit V-B
 Page 11

Accident Year	(1) <u>Reported Losses</u>	(2) <u>Loss Development</u>	(3) <u>Trend Factor</u>	(4) <u>Ultimate Losses</u>	(5) <u>Loss Cost</u>
<u>Indemnity</u>					
2019	173,341	1.0368	0.7485	134,520	1.04
2020	266,982	1.0659	0.7814	222,368	1.77
2021	17,688	1.0774	0.8156	15,543	0.12
2022	310,188	1.1882	0.8514	313,797	2.13
<u>2023</u>	<u>11,092</u>	1.7250	0.8887	<u>17,004</u>	<u>0.10</u>
5 Years	\$779,291			\$703,232	1.01
 <u>Medical</u>					
2019	141,680	1.0625	0.9155	137,815	1.07
2020	128,278	1.0748	0.9275	127,877	1.02
2021	63,080	1.0524	0.9397	62,382	0.48
2022	220,491	1.0270	0.9521	215,598	1.46
<u>2023</u>	<u>59,754</u>	0.9998	0.9647	<u>57,633</u>	<u>0.34</u>
5 Years	\$613,283			\$601,305	0.86
 <u>Indemnity & Medical</u>					
	(6) <u>Developed Payroll</u>				
2019	12,873,320			272,335	2.12
2020	12,543,358			350,245	2.79
2021	12,875,453			77,925	0.61
2022	14,754,239			529,395	3.59
<u>2023</u>	<u>16,725,093</u>			<u>74,637</u>	<u>0.45</u>
5 Years	\$69,771,463			\$1,304,537	1.87

Source: (1) CMCRB Database as of 04-30-2024
 (2) Exhibit V-F, Pages 1 and 2
 (3) Exhibit V-C
 (4) (1) times (2) times (3)
 (5) (4) divided by (6) times 100
 (6) Exhibit X-A, Page 1

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

Exhibit V-B
 Page 12

Accident Year	(1) <u>Reported Losses</u>	(2) <u>Loss Development</u>	(3) <u>Trend Factor</u>	(4) <u>Ultimate Losses</u>	(5) <u>Loss Cost</u>
<u>Indemnity</u>					
2019	846,693	1.0368	0.7485	657,072	1.82
2020	311,002	1.0659	0.7814	259,032	0.77
2021	45,430	1.0774	0.8156	39,921	0.11
2022	386,798	1.1882	0.8514	391,298	0.96
<u>2023</u>	<u>88,705</u>	1.7250	0.8887	<u>135,985</u>	<u>0.33</u>
5 Years	\$1,678,628			\$1,483,308	0.79
 <u>Medical</u>					
2019	180,736	1.0625	0.9155	175,805	0.49
2020	152,294	1.0748	0.9275	151,818	0.45
2021	127,301	1.0524	0.9397	125,893	0.35
2022	185,416	1.0270	0.9521	181,301	0.45
<u>2023</u>	<u>113,751</u>	0.9998	0.9647	<u>109,714</u>	<u>0.26</u>
5 Years	\$759,498			\$744,531	0.40
 <u>Indemnity & Medical</u>					
	(6) <u>Developed Payroll</u>				
2019	36,099,579			832,877	2.31
2020	33,562,164			410,850	1.22
2021	35,684,224			165,814	0.46
2022	40,665,453			572,599	1.41
<u>2023</u>	<u>41,687,661</u>			<u>245,699</u>	<u>0.59</u>
5 Years	\$187,699,081			\$2,227,839	1.19

Source: (1) CMCRB Database as of 04-30-2024
 (2) Exhibit V-F, Pages 1 and 2
 (3) Exhibit V-C
 (4) (1) times (2) times (3)
 (5) (4) divided by (6) times 100
 (6) Exhibit X-A, Page 1

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

Exhibit V-B
 Page 13

Accident Year	(1) <u>Reported Losses</u>	(2) <u>Loss Development</u>	(3) <u>Trend Factor</u>	(4) <u>Ultimate Losses</u>	(5) <u>Loss Cost</u>
<u>Indemnity</u>					
2019	0	1.0368	0.7485	0	0.00
2020	0	1.0659	0.7814	0	0.00
2021	0	1.0774	0.8156	0	0.00
2022	0	1.1882	0.8514	0	0.00
<u>2023</u>	<u>0</u>	1.7250	0.8887	<u>0</u>	<u>0.00</u>
5 Years	\$0			\$0	0.00
 <u>Medical</u>					
2019	0	1.0625	0.9155	0	0.00
2020	0	1.0748	0.9275	0	0.00
2021	0	1.0524	0.9397	0	0.00
2022	0	1.0270	0.9521	0	0.00
<u>2023</u>	<u>0</u>	0.9998	0.9647	<u>0</u>	<u>0.00</u>
5 Years	\$0			\$0	0.00
 <u>Indemnity & Medical</u>					
	(6) <u>Developed Payroll</u>				
2019	179,379			0	0.00
2020	299,700			0	0.00
2021	232,531			0	0.00
2022	68,319			0	0.00
<u>2023</u>	<u>199,052</u>			<u>0</u>	<u>0.00</u>
5 Years	\$978,981			-	0.00

Source: (1) CMCRB Database as of 04-30-2024
 (2) Exhibit V-F, Pages 1 and 2
 (3) Exhibit V-C
 (4) (1) times (2) times (3)
 (5) (4) divided by (6) times 100
 (6) Exhibit X-A, Page 1

Coal Mine Compensation Rating Bureau
Traumatic Loss Cost Indication

Exhibit V-B
Page 14

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

Accident Year	(1) <u>Reported Losses</u>	(2) <u>Loss Development</u>	(3) <u>Trend Factor</u>	(4) <u>Ultimate Losses</u>	(5) <u>Loss Cost</u>
<u>Indemnity</u>					
2019	1,177,872	1.0368	0.7485	914,081	1.24
2020	1,351,214	1.0659	0.7814	1,125,419	1.74
2021	219,958	1.0774	0.8156	193,284	0.28
2022	754,091	1.1882	0.8514	762,864	0.93
<u>2023</u>	<u>207,683</u>	1.7250	0.8887	<u>318,379</u>	<u>0.34</u>
5 Years	\$3,710,818			\$3,314,027	0.87

<u>Medical</u>					
2019	394,924	1.0625	0.9155	384,150	0.52
2020	802,913	1.0748	0.9275	800,404	1.24
2021	337,377	1.0524	0.9397	333,645	0.48
2022	531,734	1.0270	0.9521	519,933	0.64
<u>2023</u>	<u>310,307</u>	0.9998	0.9647	<u>299,294</u>	<u>0.32</u>
5 Years	\$2,377,255			\$2,337,426	0.61

Indemnity & <u>Medical</u>	(6) <u>Developed Payroll</u>			
2019	73,450,422		1,298,231	1.77
2020	64,757,660		1,925,823	2.97
2021	69,214,275		526,929	0.76
2022	81,736,722		1,282,797	1.57
<u>2023</u>	<u>92,311,259</u>		<u>617,673</u>	<u>0.67</u>
5 Years	\$381,470,338		\$5,651,453	1.48

Source: (1) Exhibit V-B, page 6 minus page 8, column (1) minus page 13, column (1)
(2) Exhibit V-F, Pages 1 and 2
(3) Exhibit V-C
(4) (1) times (2) times (3)
(5) (4) divided by (6) times 100
(6) Exhibit V-B, page 6 minus page 13 - column (6)

Coal Mine Compensation Rating Bureau
Traumatic Loss Trend
Indemnity and Medical - All Classes Combined

Exhibit V-C

Trend Factors

Indemnity and Funeral

Annual Percentage Change: -4.2%

Accident	Year	Trend Period	Years	Formula	Trend Factor	Freq. Adj. Factor	HB 1846 Adj. Factor	HB 1840 Adj. Factor	Adj. Trend Factor
	2019	7/1/2019 to 4/1/2026	6.75	(1 - 0.042) ^ 6.75	0.7485	1.000	1.0000	1.0000	0.7485
	2020	7/1/2020 to 4/1/2026	5.75	(1 - 0.042) ^ 5.75	0.7814	1.000	1.0000	1.0000	0.7814
	2021	7/1/2021 to 4/1/2026	4.75	(1 - 0.042) ^ 4.75	0.8156	1.000	1.0000	1.0000	0.8156
	2022	7/1/2022 to 4/1/2026	3.75	(1 - 0.042) ^ 3.75	0.8514	1.000	1.0000	1.0000	0.8514
	2023	7/1/2023 to 4/1/2026	2.75	(1 - 0.042) ^ 2.75	0.8887	1.000	1.0000	1.0000	0.8887

Medical and Medical Only

Annual Percentage Change: -1.3%

Accident	Year	Trend Period	Years	Formula	Trend Factor	Freq. Adj. Factor	HB 1846 Adj. Factor	HB 1840 Adj. Factor	Adj. Trend Factor
	2019	7/1/2019 to 4/1/2026	6.75	(1 - 0.013) ^ 6.75	0.9155	1.000	1.0000	1.0000	0.9155
	2020	7/1/2020 to 4/1/2026	5.75	(1 - 0.013) ^ 5.75	0.9275	1.000	1.0000	1.0000	0.9275
	2021	7/1/2021 to 4/1/2026	4.75	(1 - 0.013) ^ 4.75	0.9397	1.000	1.0000	1.0000	0.9397
	2022	7/1/2022 to 4/1/2026	3.75	(1 - 0.013) ^ 3.75	0.9521	1.000	1.0000	1.0000	0.9521
	2023	7/1/2023 to 4/1/2026	2.75	(1 - 0.013) ^ 2.75	0.9647	1.000	1.0000	1.0000	0.9647

Source: Exhibit V-D, Pages 1 and 2 (Selected Trend Factors)

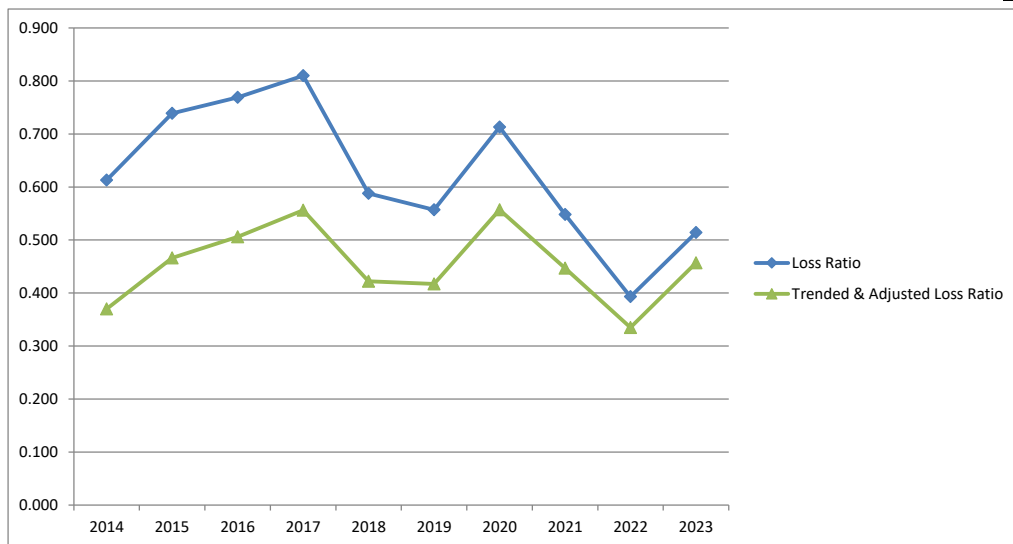
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Accident	On-Level	Actual		Adjusted	Change	Trend	Trended &	Change to
Year	Loss Cost	Loss	Adjustment	Loss Ratio	from Prior	Period	Adjusted	Trended /
	Premium	Ratio			Year		Loss Ratio	Adjusted
2014	20,568,169	0.613	1.000	0.613		11.75	0.370	-39.6%
2015	17,056,876	0.739	1.000	0.739	1.206	10.75	0.466	-36.9%
2016	12,202,177	0.769	1.000	0.769	1.041	9.75	0.506	-34.2%
2017	13,894,194	0.810	1.000	0.810	1.053	8.75	0.556	-31.4%
2018	14,624,997	0.588	1.000	0.588	0.726	7.75	0.422	-28.2%
2019	14,548,685	0.557	1.000	0.557	0.947	6.75	0.417	-25.1%
2020	11,710,481	0.713	1.000	0.713	1.280	5.75	0.557	-21.9%
2021	11,288,594	0.548	1.000	0.548	0.769	4.75	0.447	-18.4%
2022	12,284,644	0.393	1.000	0.393	0.717	3.75	0.335	-14.8%
2023	13,347,154	0.514	1.000	0.514	1.308	2.75	0.457	-11.1%

Source: X-B-1 V-E-1 Judgement (2)*(3) (4)*(1+Sel.)^(6) (7)/(2) - 1

	Thru 2023	Thru 2022	Results - Actual
A) Geometric Mean (2015 -)	-4.4%	-8.6%	9-year avg 0.626
B) Geometric Mean (2016 -)	-5.6%	-10.6%	9-year wtd avg 0.630
C) Geometric Mean (2017 -)	-7.3%	-13.5%	5-year avg 0.545
D) Geometric Mean (2018 -)	-2.7%	-9.6%	5-year wtd avg 0.543
E) Regression (2015 -)	-6.5%	-7.5%	3-year avg 0.485
F) Regression (2016 -)	-7.3%	-8.9%	3-year wtd avg 0.484
G) Regression (2017 -)	-7.5%	-9.7%	
H) Regression (2018 -)	-5.5%	-7.9%	Results - w/ Trend & Adjust
Average - All	-5.86%	-9.53%	9-year avg 0.463
Average - All, except C & G	-5.34%	-8.84%	9-year wtd avg 0.462

Selected Trend (Sel.)	-4.20%
Selected Trend for 4-1-2024	-0.30%

Number of Indications < Selected:	7	8	Sel. Freq.	-1.25%
Number of Indications > Selected:	1	0	Sel. Sev.	-3.00%
			Ind. Freq-Sev	-4.20%



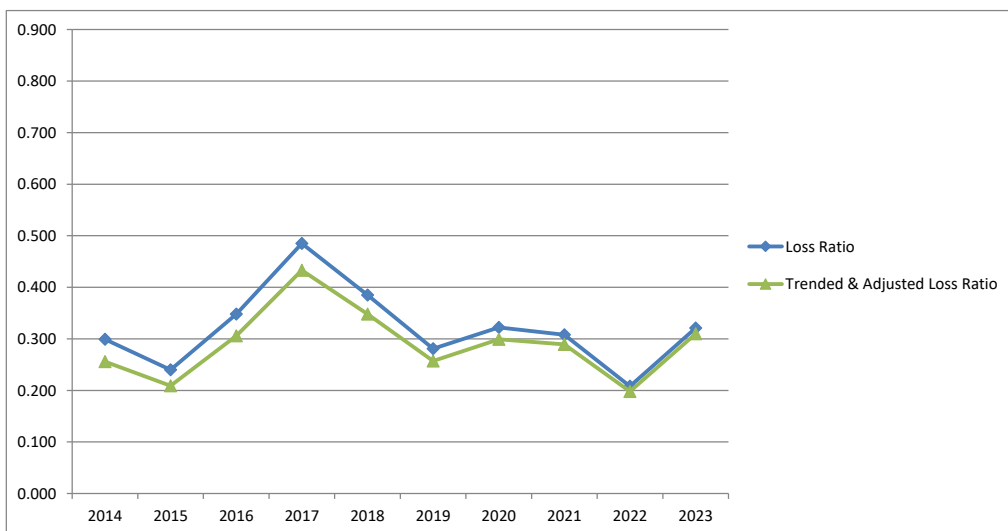
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Accident	On-Level	Actual		Adjusted	Change	Trend	Trended &	Change to
Year	Premium	Loss	Adjustment	Loss Ratio	from Prior	Period	Adjusted	Trended /
		Ratio			Year		Loss Ratio	Adjusted
2014	20,568,169	0.299	1.000	0.299		11.75	0.256	-14.4%
2015	17,056,876	0.240	1.000	0.240	0.803	10.75	0.209	-12.9%
2016	12,202,177	0.348	1.000	0.348	1.450	9.75	0.306	-12.1%
2017	13,894,194	0.485	1.000	0.485	1.394	8.75	0.433	-10.7%
2018	14,624,997	0.385	1.000	0.385	0.794	7.75	0.348	-9.6%
2019	14,548,685	0.281	1.000	0.281	0.730	6.75	0.257	-8.5%
2020	11,710,481	0.322	1.000	0.322	1.146	5.75	0.299	-7.1%
2021	11,288,594	0.308	1.000	0.308	0.957	4.75	0.289	-6.2%
2022	12,284,644	0.208	1.000	0.208	0.675	3.75	0.198	-4.8%
2023	13,347,154	0.321	1.000	0.321	1.543	2.75	0.310	-3.4%

Source: X-B-1 V-E-2 Judgement (2)*(3) (4)*(1+Sel.)^(6) (7)/(2) - 1

	Thru 2023	Thru 2022	Results - Actual
A) Geometric Mean (2015 -)	3.7%	-2.0%	9-year avg 0.322
B) Geometric Mean (2016 -)	-1.1%	-8.2%	9-year wtd avg 0.321
C) Geometric Mean (2017 -)	-6.6%	-15.6%	5-year avg 0.288
D) Geometric Mean (2018 -)	-3.6%	-14.3%	5-year wtd avg 0.288
E) Regression (2015 -)	-2.4%	-3.7%	3-year avg 0.279
F) Regression (2016 -)	-6.1%	-9.0%	3-year wtd avg 0.279
G) Regression (2017 -)	-8.1%	-12.7%	
H) Regression (2018 -)	-5.2%	-10.8%	Results - w/ Trend & Adjust
Average - All	-3.69%	-9.53%	9-year avg 0.294
Average - All, except C & G	-2.45%	-7.98%	9-year wtd avg 0.293

Selected Trend (Sel.)	-1.30%
Selected Trend for 4-1-2024	1.50%

Number of Indications < Selected:	6	8
Number of Indications > Selected:	2	0
Sel. Freq.	-1.25%	
Sel. Sev.	0.00%	
Ind. Freq-Sev	-1.30%	



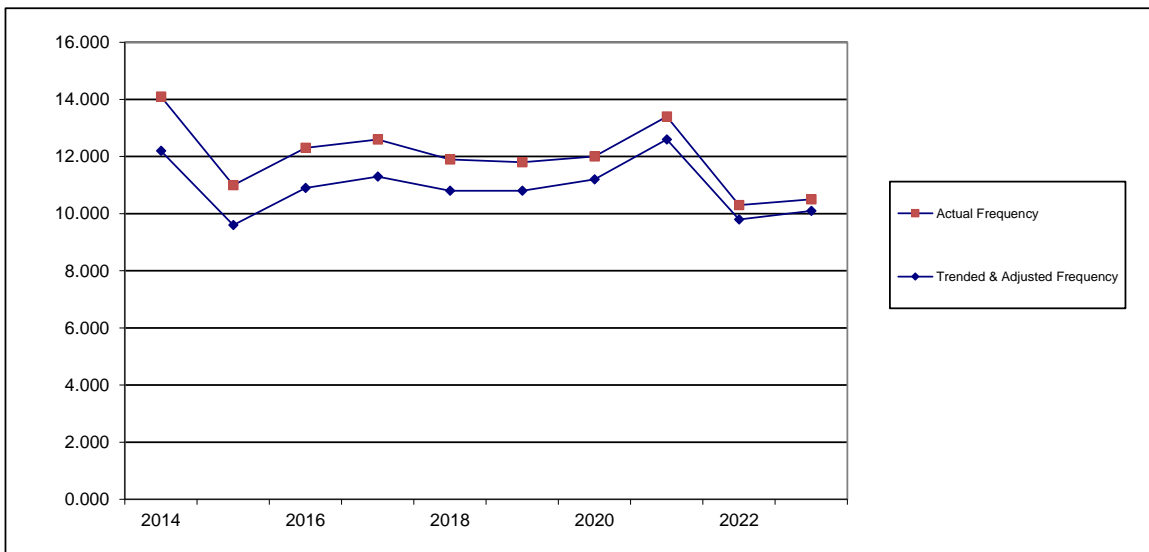
Coal Mine Compensation Rating Bureau
 Traumatic Loss Trend - Indemnity and Funeral Claims - All Classes Combined - Frequency Trend

Accident Year	(1) On-Level Loss Cost Premium	(2) Actual Frequency	(3) Adjustment	(4) Adjusted Frequency	(5) Change from Prior Year	(6) Trend Period	(7) Trended & Adjusted Frequency	(8) Change to Trended & Adjusted
2014	20,568,169	14.100	1.000	14.100		11.75	12.200	-13.5%
2015	17,056,876	11.000	1.000	11.000	0.780	10.75	9.600	-12.7%
2016	12,202,177	12.300	1.000	12.300	1.118	9.75	10.900	-11.4%
2017	13,894,194	12.600	1.000	12.600	1.024	8.75	11.300	-10.3%
2018	14,624,997	11.900	1.000	11.900	0.944	7.75	10.800	-9.2%
2019	14,548,685	11.800	1.000	11.800	0.992	6.75	10.800	-8.5%
2020	11,710,481	12.000	1.000	12.000	1.017	5.75	11.200	-6.7%
2021	11,288,594	13.400	1.000	13.400	1.117	4.75	12.600	-6.0%
2022	12,284,644	10.300	1.000	10.300	0.769	3.75	9.800	-4.9%
2023	13,347,154	10.500	1.000	10.500	1.019	2.75	10.100	-3.8%

Source: X-B-1 V-E-1 Judgement (2)*(3) (4)*(1+Sel.)^(6) (7)/(2) - 1

	Thru 2023	Thru 2022	Results - Actual	
A) Geometric Mean (2015 -)	-0.6%	-0.9%	9-year avg	11.756
B) Geometric Mean (2016 -)	-2.2%	-2.9%	9-year wtd avg	11.715
C) Geometric Mean (2017 -)	-3.0%	-3.9%	5-year avg	11.600
D) Geometric Mean (2018 -)	-2.5%	-3.5%	5-year wtd avg	11.557
E) Regression (2015 -)	-1.0%	-0.2%	3-year avg	11.400
F) Regression (2016 -)	-2.1%	-1.4%	3-year wtd avg	11.320
G) Regression (2017 -)	-2.5%	-1.8%	Results - w/ Trend & Adjust	
H) Regression (2018 -)	-2.6%	-1.6%	9-year avg	10.789
Average - All	-2.05%	-2.04%	9-year wtd avg	10.726
Average - All, except C & G	-1.82%	-1.77%	5-year avg	10.900
Selected Trend (Sel.)	-1.25%		5-year wtd avg	10.853
Selected Trend for 4-1-2024	-0.50%		3-year avg	10.833
			3-year wtd avg	10.765

Number of Indications < Selected: 6 6
 Number of Indications > Selected: 2 2



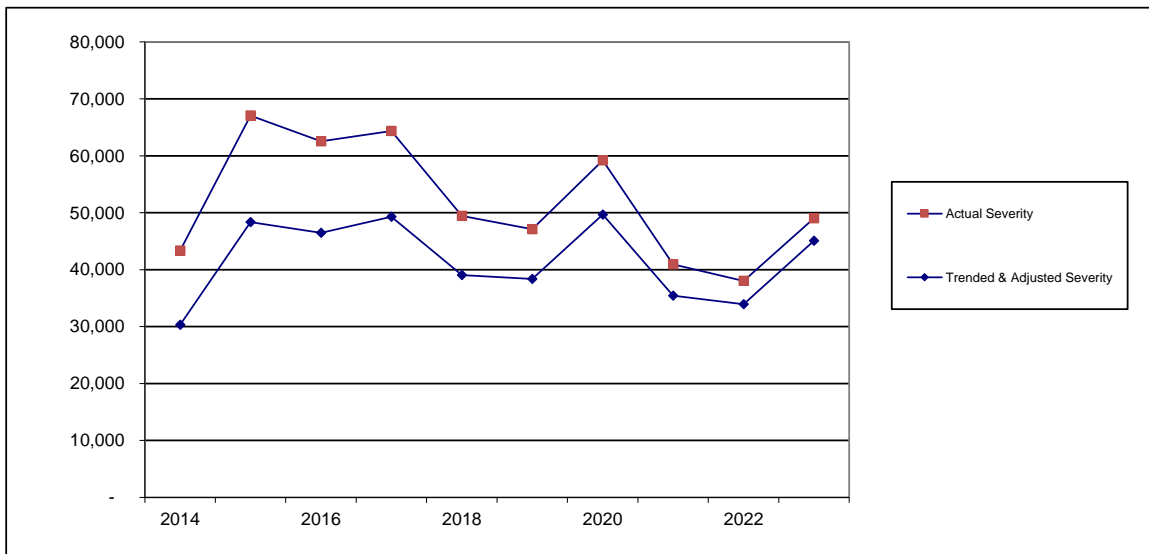
Coal Mine Compensation Rating Bureau
Traumatic Loss Trend - Indemnity and Funeral Claims - All Classes Combined - Severity Trend

Accident Year	(1) On-Level Loss Cost Premium	(2) Actual Severity	(3) Adjustment	(4) Adjusted Severity	(5) Change from Prior Year	(6) Trend Period	(7) Trended & Adjusted Severity	(8) Change to Trended & Adjusted
2014	20,568,169	43,346	1.000	43,346		11.75	30,305	-30.1%
2015	17,056,876	67,054	1.000	67,054	1.547	10.75	48,330	-27.9%
2016	12,202,177	62,526	1.000	62,526	0.932	9.75	46,461	-25.7%
2017	13,894,194	64,349	1.000	64,349	1.029	8.75	49,294	-23.4%
2018	14,624,997	49,443	1.000	49,443	0.768	7.75	39,047	-21.0%
2019	14,548,685	47,109	1.000	47,109	0.953	6.75	38,354	-18.6%
2020	11,710,481	59,189	1.000	59,189	1.256	5.75	49,680	-16.1%
2021	11,288,594	40,934	1.000	40,934	0.692	4.75	35,420	-13.5%
2022	12,284,644	38,018	1.000	38,018	0.929	3.75	33,914	-10.8%
2023	13,347,154	49,027	1.000	49,027	1.290	2.75	45,088	-8.0%

Source: X-B-1 V-E-1 Judgement (2)*(3) (4)*(1+Sel.)^(6) (7)/(2) - 1

	Thru 2023	Thru 2022	Results - Actual
A) Geometric Mean (2015 -)	-3.8%	-7.8%	9-year avg 53,072
B) Geometric Mean (2016 -)	-3.4%	-8.0%	9-year wtd avg 53,621
C) Geometric Mean (2017 -)	-4.4%	-10.0%	5-year avg 46,855
D) Geometric Mean (2018 -)	-0.1%	-6.3%	5-year wtd avg 46,882
E) Regression (2015 -)	-5.6%	-7.3%	3-year avg 42,660
F) Regression (2016 -)	-5.4%	-7.6%	3-year wtd avg 42,889
G) Regression (2017 -)	-5.2%	-8.1%	
H) Regression (2018 -)	-3.0%	-6.4%	Results - w/ Trend & Adjust
Average - All	-3.87%	-7.70%	9-year avg 42,843
Average - All, except C & G	-3.57%	-7.24%	9-year wtd avg 43,034
			5-year avg 40,491
Selected Trend (Sel.)	-3.00%		5-year wtd avg 40,488
Selected Trend for 4-1-2024	0.25%		3-year avg 38,141
			3-year wtd avg 38,414

Number of Indications < Selected: 6 8
Number of Indications > Selected: 2 0



Coal Mine Compensation Rating Bureau
 Traumatic Loss Trend - All Medical Claims - All Classes Combined - Severity Trend

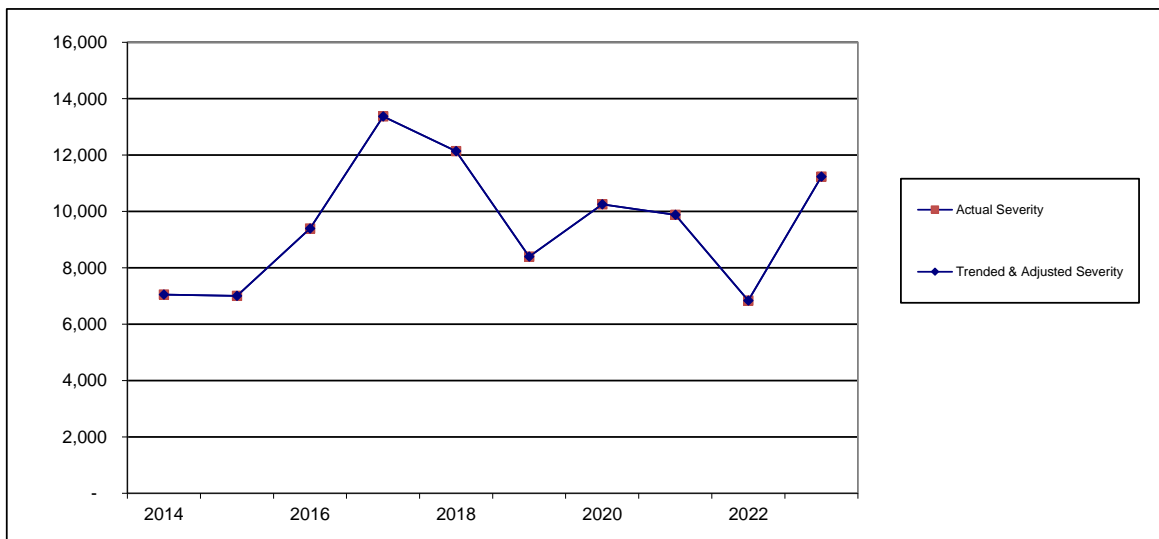
Accident Year	(1) On-Level Loss Cost Premium	(2) Actual Severity	(3) Adjustment	(4) Adjusted Severity	(5) Change from Prior Year	(6) Trend Period	(7) Trended & Adjusted Severity	(8) Change to Trended & Adjusted
2014	20,568,169	7,051	1.000	7,051		11.75	7,051	0.0%
2015	17,056,876	7,000	1.000	7,000	0.993	10.75	7,000	0.0%
2016	12,202,177	9,392	1.000	9,392	1.342	9.75	9,392	0.0%
2017	13,894,194	13,370	1.000	13,370	1.424	8.75	13,370	0.0%
2018	14,624,997	12,141	1.000	12,141	0.908	7.75	12,141	0.0%
2019	14,548,685	8,394	1.000	8,394	0.691	6.75	8,394	0.0%
2020	11,710,481	10,250	1.000	10,250	1.221	5.75	10,250	0.0%
2021	11,288,594	9,876	1.000	9,876	0.964	4.75	9,876	0.0%
2022	12,284,644	6,839	1.000	6,839	0.692	3.75	6,839	0.0%
2023	13,347,154	11,230	1.000	11,230	1.642	2.75	11,230	0.0%

Source: X-B-1 V-E-2 Judgement (2)*(3) (4)*(1+Sel.)^(6) (7)/(2) - 1

	Thru 2023	Thru 2022	Results - Actual
A) Geometric Mean (2015 -)	6.1%	-0.3%	9-year avg 9,832
B) Geometric Mean (2016 -)	2.6%	-5.2%	9-year wtd avg 9,796
C) Geometric Mean (2017 -)	-2.9%	-12.6%	5-year avg 9,318
D) Geometric Mean (2018 -)	-1.6%	-13.4%	5-year wtd avg 9,300
E) Regression (2015 -)	0.3%	-1.3%	3-year avg 9,315
F) Regression (2016 -)	-3.0%	-6.0%	3-year wtd avg 9,355
G) Regression (2017 -)	-5.2%	-10.2%	
H) Regression (2018 -)	-2.9%	-9.4%	Results - w/ Trend & Adjust
Average - All	-0.83%	-7.29%	9-year avg 9,832
Average - All, except C & G	0.25%	-5.92%	9-year wtd avg 9,796
			5-year avg 9,318
			5-year wtd avg 9,300
			3-year avg 9,315
			3-year wtd avg 9,355

Selected Trend (Sel.)	0.00%
Selected Trend for 4-1-2024	2.00%

Number of Indications < Selected: 5 8
 Number of Indications > Selected: 3 0



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

Exhibit V-E
Page 1

<u>Year</u>	(1) Indemnity Case Incurred <u>Losses</u>	(2) Loss Dev. <u>Factors</u>	(3) Ultimate <u>Losses</u>	(4)	(5) Loss Cost <u>Premium</u>	(6) Loss <u>Ratio</u>	(7) Annual Loss Ratio <u>Change</u>	(8) Claim <u>Count</u>	(9) Freq. per (\$MM)	(10) Annual Freq. <u>Change</u>	(11) Average <u>Loss</u>
2014	12,388,158	1.0182	12,613,622		20,568,169	0.613		291	14.1		43,346
2015	12,377,230	1.0185	12,606,209		17,056,876	0.739	20.6%	188	11.0	-22.0%	67,054
2016	9,156,463	1.0243	9,378,965		12,202,177	0.769	4.1%	150	12.3	11.8%	62,526
2017	10,990,776	1.0246	11,261,149		13,894,194	0.810	5.3%	175	12.6	2.4%	64,349
2018	8,239,654	1.0441	8,603,023		14,624,997	0.588	-27.4%	174	11.9	-5.6%	49,443
2019	7,815,186	1.0368	8,102,785		14,548,685	0.557	-5.3%	172	11.8	-0.8%	47,109
2020	7,829,662	1.0659	8,345,637		11,710,481	0.713	28.0%	141	12.0	1.7%	59,189
2021	5,737,053	1.0774	6,181,101		11,288,594	0.548	-23.1%	151	13.4	11.7%	40,934
2022	4,063,486	1.1882	4,828,234		12,284,644	0.393	-28.3%	127	10.3	-23.1%	38,018
2023	4,078,638	1.7250	6,863,774	*	13,347,154	0.514	30.8%	140	10.5	1.9%	49,027
Source:	VI-A	V-F-1	(1)*(2)		X-B-1	(3)/(5)		VI-C-1			(3)/(8)

Note: Col. 4 - Ultimate losses for the years marked with an asterisk ("*") reflect limitations on large claims.
See Exhibit V-E, Page 3.

Coal Mine Compensation Rating Bureau
Traumatic Loss Trend - Medical and Medical Only Losses for All Classes Combined

Exhibit V-E
Page 2

Year	(1) Case Incurred Losses	(2) Loss Dev. Factors	(3) Ultimate Losses	(4)	(5) Loss Cost Premium	(6) Loss Ratio	(7) Annual Loss Ratio Change	(8) Claim Count	(9)	(10)	(11) Average Loss
2014	5,886,404	1.0445	6,148,349		20,568,169	0.299		872			7,051
2015	3,892,133	1.0503	4,087,907		17,056,876	0.240	-19.7%	584			7,000
2016	4,037,329	1.0515	4,245,251		12,202,177	0.348	45.0%	452			9,392
2017	6,409,683	1.0513	6,738,500		13,894,194	0.485	39.4%	504			13,370
2018	5,297,769	1.0634	5,633,648		14,624,997	0.385	-20.6%	464			12,141
2019	3,847,348	1.0625	4,087,807		14,548,685	0.281	-27.0%	487			8,394
2020	3,509,464	1.0748	3,771,972		11,710,481	0.322	14.6%	368			10,250
2021	3,303,358	1.0524	3,476,454		11,288,594	0.308	-4.3%	352			9,876
2022	2,490,506	1.0270	2,557,750		12,284,644	0.208	-32.5%	374			6,839
2023	4,281,580	0.9998	4,289,674	*	13,347,154	0.321	54.3%	382			11,230

Source: VI-B V-F-2 (1)*(2) X-B-1 (3)/(5) VI-C-(1+2) (3)/(8)

Note: Col. 4 - Ultimate losses for the years marked with an asterisk ("*") reflect limitations on large claims.
See Exhibit V-E, Page 3.

Columns (9) and (10) are not used on this page.

Allocation of Claim 51989 Between Indemnity and Medical
Accident Year 2023

	Reported <u>Incurring</u>	Percent <u>Distribution</u>	Loss Development <u>Factor</u>	Developed <u>Losses</u>
Indemnity	239,494	19.3%	1.7250	413,127
Medical	<u>1,000,000</u>	<u>80.7%</u>	0.9998	<u>999,800</u>
	1,239,494	100.0%		1,412,927

Developed Incurring is greater than catastrophe limit (\$1.25M) so capping and allocation are necessary.

Total Reported Indemnity (2023) = 4,078,638

	(1) <u>Incurring</u>	(2) <u>LDF</u>	(3) = (1)x(2)
Total	4,078,638	1.7250	7,035,651
This Claim	239,494	1.7250	<u>413,127</u>
Total Indemnity excluding this claim after development=			6,622,524

Maximum <u>Claim Size</u>	% <u>Indemnity</u>	Limited <u>Indemnity</u>
1,250,000	19.3%	241,250

Total developed Indemnity including this limited claim = 6,863,774

Total Reported Medical (2023) = 4,281,580

	(1) <u>Incurring</u>	(2) <u>LDF</u>	(3) = (1)x(2)
Total	4,281,580	0.9998	4,280,724
This Claim	1,000,000	0.9998	<u>999,800</u>
Total Medical excluding this claim after development=			3,280,924

Maximum <u>Claim Size</u>	% <u>Medical</u>	Limited <u>Medical</u>
1,250,000	80.7%	1,008,750

Total developed Medical including this limited claim = 4,289,674

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	1.4518	1.3282	0.1236	1.4518	1.4518	0.0000	1.7250
2:3	1.1028	1.0633	0.0395	1.1028	1.1028	0.0000	1.1882
3:4	1.0108	1.0129	-0.0021	1.0108	1.0108	0.0000	1.0774
4:5	1.0281	1.0009	0.0272	1.0281	1.0281	0.0000	1.0659
5:6	0.9930	1.0045	-0.0115	1.0025	0.9930	0.0000	1.0368
6:7	1.0190	1.0026	0.0164	1.0024	1.0190	0.0000	1.0441
7:8	1.0003	1.0034	-0.0031	1.0023	1.0003	0.0000	1.0246
8:9	1.0057	0.9996	0.0061	1.0022	1.0057	0.0000	1.0243
9:10	1.0003	1.0006	-0.0003	1.0021	1.0003	0.0000	1.0185
10:11	1.0081	1.0031	0.0050	1.0020	1.0081	0.0000	1.0182
11:12	1.0014	1.0018	-0.0004	1.0019	1.0014	0.0000	1.0100
12:13	1.0027	1.0019	0.0008	1.0018	1.0027	0.0000	1.0086
13:14	0.9980	1.0019	-0.0039	1.0017	0.9980	0.0000	1.0059
14:15	0.9986	0.9999	-0.0013	1.0016	0.9986	0.0000	1.0079
15:16	1.0023	1.0006	0.0017	1.0015	1.0023	0.0000	1.0093
16:17	0.9999	1.0008	-0.0009	1.0014	0.9999	0.0000	1.0070
17:18	1.0009	1.0020	-0.0011	1.0013	1.0009	0.0000	1.0071
18:19	0.9963	1.0003	-0.0040	1.0012	0.9963	0.0000	1.0062
19:20	1.0008	1.0001	0.0007	1.0011	1.0008	0.0000	1.0099
20:Ult	xx	1.0091	xx	1.0091	1.0091		1.0091

Sources:

- (1) Reports spanned by age-to-age factors
- (2) Exhibit VI-A
- (3) Exhibit V-G, Page 2
- (4) Col.(2) - Col.(3)
- (5) Exhibit V-G, Page 1
- (6) Periods 1:2 to 19:20 - Column (2), Period 20:Ult - Column (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

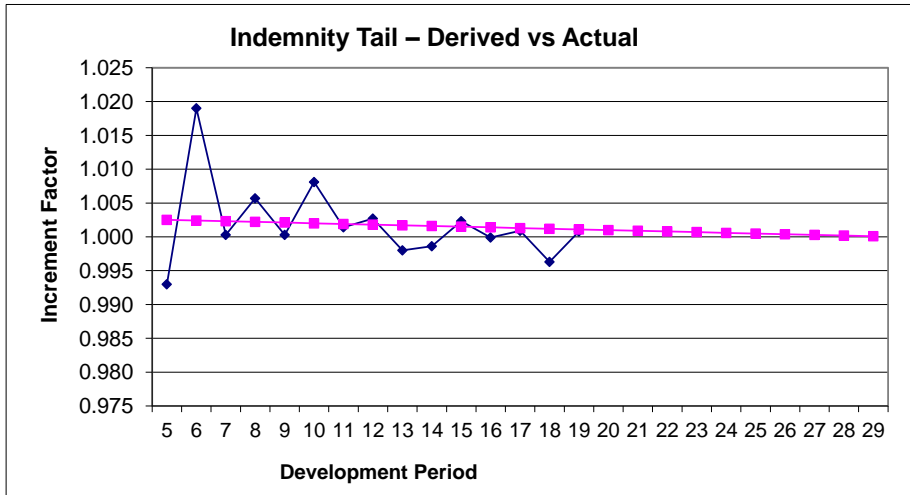
(1) Development Period	(2) Average of Middle Four	(3) PCRB Factor	(4) CMCRB vs. PCRB Comparison	(5) Derived Development Factor	(6) Selected Factor	(7) Differences Average vs Selected	(8) Accumulated Selected Factor
1:2	0.9735	1.0425	-0.0690	0.9735	0.9735	0.0000	0.9998
2:3	0.9759	1.0021	-0.0262	0.9759	0.9759	0.0000	1.0270
3:4	0.9792	0.9975	-0.0183	1.0018	0.9792	0.0000	1.0524
4:5	1.0116	0.9966	0.0150	1.0018	1.0116	0.0000	1.0748
5:6	0.9992	1.0030	-0.0038	1.0017	0.9992	0.0000	1.0625
6:7	1.0115	1.0003	0.0112	1.0017	1.0115	0.0000	1.0634
7:8	0.9998	1.0025	-0.0027	1.0016	0.9998	0.0000	1.0513
8:9	1.0011	1.0065	-0.0054	1.0016	1.0011	0.0000	1.0515
9:10	1.0056	0.9967	0.0089	1.0015	1.0056	0.0000	1.0503
10:11	1.0060	0.9949	0.0111	1.0015	1.0060	0.0000	1.0445
11:12	1.0055	1.0001	0.0054	1.0014	1.0055	0.0000	1.0383
12:13	0.9995	1.0004	-0.0009	1.0014	0.9995	0.0000	1.0326
13:14	1.0058	1.0046	0.0012	1.0013	1.0058	0.0000	1.0331
14:15	1.0039	1.0051	-0.0012	1.0013	1.0039	0.0000	1.0271
15:16	0.9997	1.0024	-0.0027	1.0012	0.9997	0.0000	1.0231
16:17	0.9917	1.0005	-0.0088	1.0012	0.9917	0.0000	1.0234
17:18	1.0041	1.0048	-0.0007	1.0011	1.0041	0.0000	1.0320
18:19	0.9988	1.0025	-0.0037	1.0011	0.9988	0.0000	1.0278
19:20	1.0009	1.0017	-0.0008	1.0010	1.0009	0.0000	1.0290
20:Ult	xx	1.0335	xx	1.0281	1.0281		1.0281

Sources:

- (1) Reports spanned by age-to-age factors
- (2) Exhibit VI-B
- (3) Exhibit V-H, Page 2
- (4) Col.(2) - Col.(3)
- (5) Exhibit V-H, Page 1
- (6) Periods 1:2 to 19:20 - Column (2), Period 20:Ult - Column (5)
- (7) Col.(2) - Col.(6)
- (8) Upward accumulation of Col.(6)

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	1.4518	1.4518	1.7094	1.4518	xx	xx	xx			
2	1.1028	1.1028	1.1774	1.1028	xx	xx	xx			
3	1.0108	1.0108	1.0677	1.0108	xx	xx	xx			
4	1.0281	1.0281	1.0563	1.0281	xx	xx	xx			
5	0.9930	1.0025	1.0274	1.0025	1.0274	1.0025	1.0274			
6	1.0190	1.0024	1.0346	1.0024	1.0249	1.0024	1.0249			
7	1.0003	1.0023	1.0153	1.0023	1.0224	1.0023	1.0224			
8	1.0057	1.0022	1.0150	1.0022	1.0200	1.0022	1.0200			
9	1.0003	1.0021	1.0093	1.0021	1.0178	1.0021	1.0178			
10	1.0081	1.0020	1.0090	1.0020	1.0156	1.0020	1.0156			
11	1.0014	1.0019	1.0009	1.0019	1.0136	1.0019	1.0136			
12	1.0027	1.0018	0.9995	1.0018	1.0117	1.0018	1.0117	20	1.0010	1.0054
13	0.9980	1.0017	0.9968	1.0017	1.0099	1.0017	1.0099	21	1.0009	1.0044
14	0.9986	1.0016	0.9988	1.0016	1.0081	1.0016	1.0081	22	1.0008	1.0035
15	1.0023	1.0015	1.0002	1.0015	1.0065	1.0015	1.0065	23	1.0007	1.0027
16	0.9999	1.0014	0.9979	1.0014	1.0050	1.0014	1.0050	24	1.0006	1.0020
17	1.0009	1.0013	0.9980	1.0013	1.0036	1.0013	1.0036	25	1.0005	1.0014
18	0.9963	1.0012	0.9971	1.0012	1.0023	1.0012	1.0023	26	1.0004	1.0010
19	1.0008	1.0011	1.0008	1.0011	1.0011	1.0011	1.0011	27	1.0003	1.0006
20		1.0010						28	1.0002	1.0003
21		1.0009						29	1.0001	1.0001
22		1.0008								
23		1.0007								
24		1.0006								
25		1.0005								
26		1.0004								
27		1.0003								
28		1.0002								
29		1.0001								



Source:

- (1) Development Period: e.g."1" = 12 months to 24 months
- (2) Exhibit VI-A
- (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 Factor Development Periods
- (10) Final Tail Calculation
- (11) Accumulation of Col. (10)

Prior Method - Informational Only

CMCRB tail factor	1.0054
PCRB tail factor	1.0091
Selected Tail Factor	1.0073

CMCRB tail factor *	1.0090
PCRB tail factor	1.0091
Selected Tail Factor	1.0091

* CMCRB tail factor from Exhibit VI-E, Page 1

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

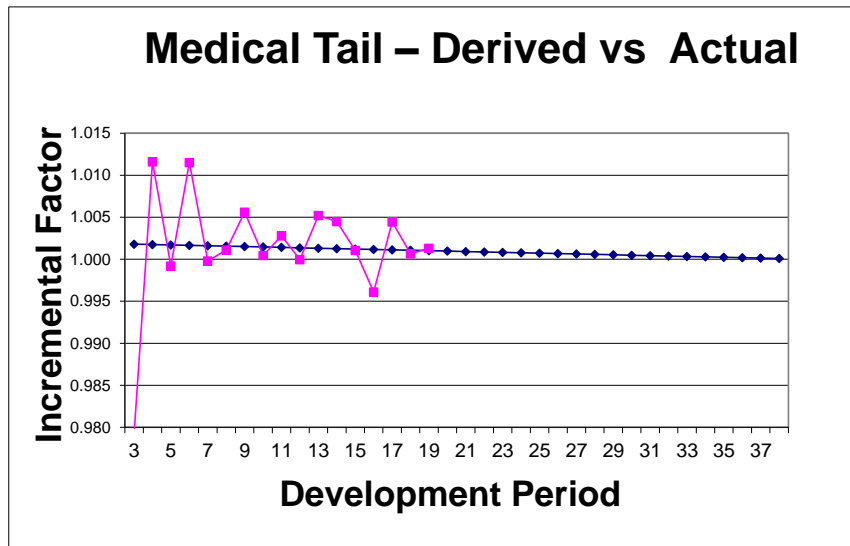
(1) <u>Span of Maturities</u>	(2) <u>Age-to-Age Incurred Loss Factors</u>	(3) <u>Span of Maturities</u>	(4) <u>Cumulative Incurred Loss Factors</u>
1 to 2	1.3282	1 to Ult	1.4785
2 to 3	1.0633	2 to Ult	1.1132
3 to 4	1.0129	3 to Ult	1.0469
4 to 5	1.0009	4 to Ult	1.0336
5 to 6	1.0045	5 to Ult	1.0326
6 to 7	1.0026	6 to Ult	1.0280
7 to 8	1.0034	7 to Ult	1.0254
8 to 9	0.9996	8 to Ult	1.0219
9 to 10	1.0006	9 to Ult	1.0223
10 to 11	1.0031	10 to Ult	1.0217
11 to 12	1.0018	11 to Ult	1.0185
12 to 13	1.0019	12 to Ult	1.0167
13 to 14	1.0019	13 to Ult	1.0148
14 to 15	0.9999	14 to Ult	1.0128
15 to 16	1.0006	15 to Ult	1.0129
16 to 17	1.0008	16 to Ult	1.0123
17 to 18	1.0020	17 to Ult	1.0115
18 to 19	1.0003	18 to Ult	1.0095
19 to 20	1.0001	19 to Ult	1.0092
20 to Ult	1.0091	20 to Ult	1.0091

Source:PCRB Loss Cost Filing effective April 1, 2024 - Exhibit 5 - Indemnity - Selected Incurred LDF

The 20:Ult Factor is the PCRB's "Beyond 19-20" factor

Coal Mine Compensation Rating Bureau
Medical Tail – Derived vs Actual

(1) Development Period	(2) Average Age-to-Age 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	0.9735		0.9735	0.9731	0.9735	0.9731	20	1.0010	1.0101
2	0.9759		0.9759	0.9996	0.9759	0.9996	21	1.0009	1.0091
3	0.9792		0.9792	1.0243	1.0018	1.0243	22	1.0009	1.0082
4	1.0116		1.0116	1.0461	1.0018	1.0224	23	1.0008	1.0073
5	0.9992		0.9992	1.0341	1.0017	1.0206	24	1.0008	1.0065
6	1.0115		1.0115	1.0349	1.0017	1.0189	25	1.0007	1.0057
7	0.9998		0.9998	1.0232	1.0016	1.0172	26	1.0007	1.0050
8	1.0011		1.0011	1.0234	1.0016	1.0156	27	1.0006	1.0043
9	1.0056		1.0056	1.0222	1.0015	1.0140	28	1.0006	1.0037
10	1.0060	0.9949	1.0005	1.0165	1.0015	1.0125	29	1.0005	1.0031
11	1.0055	1.0001	1.0028	1.0161	1.0014	1.0110	30	1.0005	1.0026
12	0.9995	1.0004	1.0000	1.0132	1.0014	1.0096	31	1.0004	1.0021
13	1.0058	1.0046	1.0052	1.0133	1.0013	1.0082	32	1.0004	1.0016
14	1.0039	1.0051	1.0045	1.0081	1.0013	1.0069	33	1.0003	1.0013
15	0.9997	1.0024	1.0011	1.0035	1.0012	1.0056	34	1.0003	1.0009
16	0.9917	1.0005	0.9961	1.0025	1.0012	1.0044	35	1.0002	1.0006
17	1.0041	1.0048	1.0045	1.0064	1.0011	1.0032	36	1.0002	1.0004
18	0.9988	1.0025	1.0007	1.0020	1.0011	1.0021	37	1.0001	1.0002
19	1.0009	1.0017	1.0013	1.0013	1.0010	1.0010	38	1.0001	1.0001



- Sources: (1) Development period:e.g. "1" =12 months to 24 months
 (2) Exhibit VI-B
 (3) Exhibit V-H, Page 2
 (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)

Prior Method - Informational Only

CMCRB tail factor	1.0101
PCRB tail factor	1.0335
Selected tail factor	1.0218

CMCRB tail factor *	1.0226
PCRB tail factor	1.0335
Selected	1.0281

* CMCRB tail factor from Exhibit VI-E, Page 2

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

(1) Span of <u>Maturities</u>	(2) Age-to-Age Incurred Loss <u>Factors</u>	(3) Span of <u>Maturities</u>	(4) Cumulative Incurred Loss <u>Factors</u>
1 to 2	1.0425	1 to Ult.	1.1015
2 to 3	1.0021	2 to Ult.	1.0566
3 to 4	0.9975	3 to Ult.	1.0544
4 to 5	0.9966	4 to Ult.	1.0570
5 to 6	1.0030	5 to Ult.	1.0606
6 to 7	1.0003	6 to Ult.	1.0575
7 to 8	1.0025	7 to Ult.	1.0571
8 to 9	1.0065	8 to Ult.	1.0545
9 to 10	0.9967	9 to Ult.	1.0477
10 to 11	0.9949	10 to Ult.	1.0512
11 to 12	1.0001	11 to Ult.	1.0565
12 to 13	1.0004	12 to Ult.	1.0564
13 to 14	1.0046	13 to Ult.	1.0560
14 to 15	1.0051	14 to Ult.	1.0512
15 to 16	1.0024	15 to Ult.	1.0459
16 to 17	1.0005	16 to Ult.	1.0433
17 to 18	1.0048	17 to Ult.	1.0428
18 to 19	1.0025	18 to Ult.	1.0378
19 to 20	1.0017	19 to Ult.	1.0353
20 to Ult.	1.0335	20 to Ult.	1.0335

Source:PCRB Loss Cost Filing effective April 1, 2024 - Exhibit 5 - Medical - Selected Incurred LDF

The 20:Ult Factor is the PCRB's "Beyond 19-20" factor.

**Coal Mine Compensation Rating Bureau
Traumatic Loss Development**

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

A. Medical Only Reported Incurred Losses as of 04/30/24

Report	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1	440,355	393,342	475,073	645,531	538,996	499,273	689,845	830,417	739,070	657,505	844,733	693,513	566,845	710,306	617,796	583,508	446,068	408,624	444,342	402,563
2	489,659	395,971	492,413	667,028	564,408	475,294	714,306	875,488	730,189	725,991	815,806	646,094	561,393	751,295	615,524	606,070	465,344	342,247	474,516	
3	499,930	570,553	464,396	651,680	574,474	487,309	733,721	857,971	733,490	761,471	817,528	618,570	543,998	750,831	584,188	625,437	468,749	369,704		
4	499,000	577,565	464,210	654,006	561,921	487,349	733,721	860,990	734,013	762,094	804,432	612,724	545,870	758,162	581,295	637,173	475,023			
5	499,175	577,565	464,210	657,948	569,251	487,454	733,721	862,257	734,091	762,711	805,516	612,724	542,126	757,079	581,295	639,204				
6	499,175	577,565	464,210	663,201	578,077	487,454	733,721	862,257	734,170	763,168	806,301	612,724	542,126	760,082	581,295					
7	499,175	577,565	464,210	663,201	584,120	487,454	733,721	862,257	704,535	763,168	806,301	612,724	543,140	760,647						
8	499,182	439,393	464,210	663,201	586,976	487,454	733,721	862,257	704,535	763,168	806,301	612,724	543,140							
9	499,182	439,393	464,210	663,201	593,200	487,454	733,728	862,257	704,535	763,168	806,301	612,724								
10	499,182	439,463	464,210	663,201	600,587	488,067	733,514	862,257	704,535	763,168	806,301									

B. Annual Loss Development Factors

1:2										1.1042	0.9658	0.9316	0.9904	1.0577	0.9963	1.0387	1.0432	0.8376	1.0679
2:3									1.0045	1.0489	1.0021	0.9574	0.9690	0.9994	0.9491	1.0320	1.0073	1.0802	
3:4								1.0035	1.0007	1.0008	0.9840	0.9905	1.0034	1.0098	0.9950	1.0188	1.0134		
4:5							1.0000	1.0015	1.0001	1.0008	1.0013	1.0000	0.9931	0.9986	1.0000	1.0032			
5:6						1.0000	1.0000	1.0000	1.0001	1.0006	1.0010	1.0000	1.0000	1.0040	1.0000				
6:7					1.0105	1.0000	1.0000	1.0000	0.9596	1.0000	1.0000	1.0000	1.0019	1.0007					
7:8				1.0000	1.0049	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000						
8:9			1.0000	1.0000	1.0106	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000							
9:10		1.0002	1.0000	1.0000	1.0125	1.0013	0.9997	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	1.0033	1.0069	1.0052	1.0115	1.0340	1.0138	1.0094	1.0094	1.0094	2023	406,347
2:3	1.0050	1.0062	1.0022	1.0026	1.0019	1.0003	1.0029	1.0000	1.0000	2022	474,516
3:4	1.0020	1.0052	1.0014	1.0021	1.0054	1.0051	1.0036	1.0000	1.0000	2021	369,704
4:5	0.9999	0.9994	1.0000	1.0003	1.0000	0.9996	0.9999	1.0000	1.0000	2020	475,023
5:6	1.0006	1.0009	1.0006	1.0002	1.0004	1.0010	1.0006	1.0000	1.0000	2019	639,204
6:7	0.9973	0.9937	0.9968	1.0003	1.0002	0.9933	0.9970	1.0000	1.0000	2018	581,295
7:8	1.0005	1.0000	1.0004	1.0000	1.0000	1.0000	1.0001	1.0000	1.0000	2017	760,647
8:9	1.0011	1.0000	1.0009	1.0000	1.0000	1.0000	1.0002	1.0000	1.0000	2016	543,140
9:10	1.0014	1.0002	1.0012	1.0002	1.0000	1.0001	1.0004	1.0000	1.0000	2015	612,724

Source: A. CMCRB Database - Validated 2024-08-02

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

A. Indemnity Reported Incurred Losses as of 4-30-2024														
Report	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
20	18,292,186	20,513,393	20,217,996	20,860,130	12,309,663	12,617,517	8,812,465	8,772,260	8,050,069	7,481,735	8,511,961	11,517,844	7,615,583	7,599,329
21	18,333,703	20,558,219	20,349,934	20,980,430	12,317,236	12,495,852	8,723,455	8,772,260	8,050,069	7,481,735	8,525,229	11,517,844	7,637,427	
22	18,369,549	20,603,256	20,482,482	20,925,089	12,324,768	12,516,159	8,738,003	8,772,260	8,050,069	7,481,735	8,538,452	11,517,844		
23	18,405,346	20,668,664	20,232,958	20,918,567	12,335,359	12,541,689	8,753,082	8,772,260	8,050,069	7,481,735	8,551,220			
24	18,442,202	20,714,352	20,252,601	20,996,288	12,340,077	12,562,918	8,778,485	8,772,260	8,050,069	7,481,735				
25	18,482,989	20,571,390	20,202,054	21,075,961	12,348,062	12,590,391	8,792,665	8,772,260	8,050,069					
26	18,515,327	20,605,775	20,291,287	21,157,060	12,356,255	12,617,819	8,806,732	8,772,260						
27	18,550,303	20,639,355	20,354,008	21,238,192	12,364,105	12,634,212	8,820,799							
28	18,586,779	20,673,209	20,426,119	21,319,156	12,372,422	12,658,915								
29	18,459,007	20,707,277	20,502,050	21,391,647	12,380,907									
30	18,479,889	20,649,182	20,557,241	21,338,908										
31	18,500,979	20,664,413	20,631,998											
32	18,522,175	20,679,780												
33	18,543,608													

B. Annual Loss Development Factors														
20:21	1.0023	1.0022	1.0065	1.0058	1.0006	0.9904	0.9899	1.0000	1.0000	1.0000	1.0016	1.0000	1.0029	
21:22	1.0020	1.0022	1.0065	0.9974	1.0006	1.0016	1.0017	1.0000	1.0000	1.0000	1.0016	1.0000		
22:23	1.0019	1.0032	0.9878	0.9977	1.0009	1.0020	1.0017	1.0000	1.0000	1.0000	1.0015			
23:24	1.0020	1.0022	1.0010	1.0037	1.0004	1.0017	1.0029	1.0000	1.0000	1.0000				
24:25	1.0022	0.9931	0.9975	1.0038	1.0006	1.0022	1.0016	1.0000	1.0000					
25:26	1.0017	1.0017	1.0044	1.0038	1.0007	1.0022	1.0016	1.0000						
26:27	1.0019	1.0016	1.0031	1.0038	1.0006	1.0013	1.0016							
27:28	1.0020	1.0016	1.0035	1.0038	1.0007	1.0020								
28:29	0.9931	1.0016	1.0037	1.0034	1.0007									
29:30	1.0011	0.9972	1.0027	0.9975										
30:31	1.0011	1.0007	1.0036											
31:32	1.0011	1.0007												
32:33	1.0012													

C. Summary	Incr.	Cum.	Incr.	Cum.	Sum of Current: 1991 - 2003:	Sum of 20th: 1991 - 2003:	Cum.
	Straight	Straight	Wtd (1)	Wtd (1)			Wtd (2)
	<u>Average</u>	<u>Average</u>	<u>Average</u>	<u>Average</u>			<u>Average</u>
20:21	1.0002	1.0130	1.0010	1.0145			1.0090
21:22	1.0011	1.0129	1.0014	1.0135			
22:23	0.9999	1.0117	0.9994	1.0121			
23:24	1.0014	1.0119	1.0017	1.0127			
24:25	1.0001	1.0104	0.9998	1.0110			
25:26	1.0020	1.0103	1.0023	1.0112			
26:27	1.0020	1.0083	1.0022	1.0088			
27:28	1.0023	1.0063	1.0024	1.0066			
28:29	1.0005	1.0040	1.0007	1.0042			
29:30	0.9996	1.0035	0.9996	1.0035			
30:31	1.0018	1.0039	1.0019	1.0040			
31:32	1.0009	1.0021	1.0009	1.0021			
32:33	1.0012	1.0012	1.0012	1.0012			

Indicated Tail Factors (20th - ultimate) 1.0130 1.0145 1.0090

Notes: Wtd (1) is the Report Level to Report Level Weighted Average
Wtd (2) is the 20th Report Level to Current Report Level Weighted Average

Source: A. CMCRB Database as of 4-30-2024.

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

A. Medical Reported Incurred Losses as of 4-30-2024														
Report	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
20	7,374,324	9,423,492	6,153,930	5,467,814	5,276,620	4,528,080	5,023,209	3,834,646	3,536,162	2,872,279	3,019,006	4,040,089	3,221,016	4,589,348
21	7,341,277	9,423,580	6,292,650	5,466,325	5,329,409	4,507,722	5,065,799	3,897,432	3,535,038	2,872,279	3,029,006	4,138,767	3,221,016	
22	7,345,895	9,552,517	6,450,880	5,508,600	5,299,278	4,507,843	5,065,799	3,926,473	3,535,038	2,872,279	3,025,436	4,138,767		
23	7,337,896	9,599,613	6,405,131	5,519,050	5,389,747	4,507,914	5,065,798	3,926,473	3,535,038	2,872,279	3,025,436			
24	7,349,963	9,576,084	6,467,660	5,519,690	5,390,064	4,507,988	4,852,206	3,926,473	3,535,038	2,872,279				
25	7,382,345	9,570,920	6,458,578	5,549,041	5,400,065	4,508,054	4,978,207	3,931,634	3,535,038					
26	7,575,353	9,571,421	6,553,577	5,549,944	5,430,124	4,508,119	5,139,395	4,009,206						
27	7,575,327	9,586,622	6,538,824	5,664,944	5,376,621	4,528,185	5,139,394							
28	7,571,147	9,611,849	6,548,824	5,713,086	5,376,621	4,530,896								
29	7,570,142	9,661,849	6,584,565	5,712,653	5,412,638									
30	7,570,288	9,656,532	6,523,750	5,663,091										
31	7,569,125	9,656,532	6,556,300											
32	7,546,712	9,656,532												
33	7,453,488													

B. Annual Loss Development Factors														
20:21	0.9955	1.0000	1.0225	0.9997	1.0100	0.9955	1.0085	1.0164	0.9997	1.0000	1.0033	1.0244	1.0000	
21:22	1.0006	1.0137	1.0251	1.0077	0.9943	1.0000	1.0000	1.0075	1.0000	1.0000	0.9988	1.0000		
22:23	0.9989	1.0049	0.9929	1.0019	1.0171	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			
23:24	1.0016	0.9975	1.0098	1.0001	1.0001	1.0000	0.9578	1.0000	1.0000	1.0000				
24:25	1.0044	0.9995	0.9986	1.0053	1.0019	1.0000	1.0260	1.0013	1.0000					
25:26	1.0261	1.0001	1.0147	1.0002	1.0056	1.0000	1.0324	1.0197						
26:27	1.0000	1.0016	0.9977	1.0207	0.9901	1.0045	1.0000							
27:28	0.9994	1.0026	1.0015	1.0085	1.0000	1.0066								
28:29	0.9999	1.0052	1.0055	0.9999	1.0067									
29:30	1.0000	0.9994	0.9908	0.9913										
30:31	0.9998	1.0000	1.0050											
31:32	0.9970	1.0000												
32:33	0.9876													

C. Summary	Incr.	Cum.	Incr.	Cum.	Sum of Current: 1991 - 2003:	Sum of 20th: 1991 - 2003:	Cum. Wtd (2)
	Straight	Straight	Wtd (1)	Wtd (1)			
	<u>Average</u>	<u>Average</u>	<u>Average</u>	<u>Average</u>			<u>Average</u>
20:21	1.0058	1.0150	1.0055	1.0160			1.0226
21:22	1.0040	1.0091	1.0054	1.0105			
22:23	1.0014	1.0051	1.0017	1.0050	65,214,081	63,770,667	
23:24	0.9967	1.0037	0.9970	1.0034			
24:25	1.0041	1.0070	1.0037	1.0064			
25:26	1.0124	1.0029	1.0117	1.0027			
26:27	1.0021	0.9906	1.0018	0.9911			
27:28	1.0021	0.9886	1.0021	0.9893			
28:29	1.0034	0.9865	1.0035	0.9872			
29:30	0.9954	0.9831	0.9961	0.9838			
30:31	1.0016	0.9877	1.0013	0.9877			
31:32	0.9985	0.9861	0.9987	0.9864			
32:33	0.9876	0.9876	0.9876	0.9876			

Indicated Tail Factors (20th - ultimate) 1.0150 1.0160 1.0226

Notes: Wtd (1) is the Report Level to Report Level Weighted Average
Wtd (2) is the 20th Report Level to Current Report Level Weighted Average

Source: A. CMCR8 Database as of 4-30-2024.

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

Exhibit VII-A
Page 1
Underground Anthracite

	<u>State O.D.</u>			<u>Federal Excess O.D.</u>			
	<u>Base</u>	<u>All PP</u>	<u>Weighted 100%-0%</u>	<u>Base</u>	<u>All PP</u>	<u>Weighted 100%-0%</u>	
<u>(a) After AMA Guidelines</u>				<u>(a) After AMA Guidelines</u>			
(1) Number of Claims	# 9			# 9			
(2) Average Amounts	\$1,031,494	\$593,424	\$1,031,494	\$138,725	\$317,342	\$138,725	
(3) Index (Base)	100%		100.0000%	100%		100.0000%	
<u>(b) Social Security Offset</u>				<u>(b) Social Security Onset</u>			
(1) Total (including above)	-	-	-	\$147,316	\$317,342	\$147,316	
(2) Difference- Social Security (Federal= b-1 minus a-2)	\$86,038	\$0	\$86,038	8,591	0	8,591	
(3) Index (to a(2))	8.3411%	0.0000%	8.3411%	6.1928%	0.0000%	6.1928%	
(4) Complement	91.6589%	100.0000%	91.6589%	93.8072%	100.0000%	93.8072%	
<u>(c) Pension Offset (after Social Security Offset)</u>				<u>(c) Pension Onset</u>			
(1) Total (including above)	-	-	-	\$193,615	\$325,784	\$193,615	
(2) Difference (Federal= c-1 minus b-1)	\$154,795	\$70,650	\$154,795	46,299	8,442	46,299	
(3) % Pension (VII-G, P. 2)	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	
(4) Net Pension	19,349	8,831	19,349	5,787	1,055	5,787	
(5) Index (to a-2)	1.8759%	1.4882%	1.8759%	4.1718%	0.3325%	4.1718%	
(6) Complement	98.1241%	98.5118%	98.1241%				
<u>(d) Combined Social Security and Pension Offsets</u>				<u>(d) Combined Social Sec. Pension Onsets</u>			
(1) Average Amounts (b-2 plus c-4)	\$105,387	\$8,831	\$105,387	\$14,378	\$1,055	\$14,378	
(2) Index (to a-2)	10.2170%	1.4882%	10.2170%			10.3647%	
(3) Complement	89.7830%	98.5118%	89.7830%	Factor		110.3647%	
(4) Total Average	926,107	584,593	926,107			153,103	
<u>(e) Wage Level Decrease</u>				<u>(e) Wage Level Increase</u>			
(1) Percentage from Exhibit VII-G, Page 1			0				
(2) Complement			100.0000%				
(3) Dollar Decrease			0	Dollar Increase		\$0	
(4) Factor						100.0000%	
<u>(f) Combined Social Security, Pension and Wage Level</u>				<u>(f) Combined Percentage</u>			
(1) Percentage level Excl. AMA Guidelines (d-3 times e-2)			89.7830%	(d-3) times (e-4)		110.3647%	
(2) AMA Guidelines (a-3)			<u>100.0000%</u>			<u>100.0000%</u>	
(3) Full Effect of Act 57 (1 X 2)			89.7830%			110.3647%	
(4) Percentage Decrease			10.2170%	Increase		10.3647%	
<u>(g) Combined Dollar Effect</u>							
(1) (d-1) plus (e-3) Decrease			\$105,387	Increase		\$14,378	
(2) Average after Act 57 (a-2 plus or minus g-1)			\$926,107			\$153,103	

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 2
Underground Bituminous

	<u>State O.D.</u>			<u>Federal Excess O.D.</u>			
	<u>Base</u>	<u>All PP</u>	<u>Weighted 100%-0%</u>	<u>Base</u>	<u>All PP</u>	<u>Weighted 100%-0%</u>	
<u>(a) After AMA Guidelines</u>				<u>(a) After AMA Guidelines</u>			
(1) Number of Claims	# 75			# 75			
(2) Average Amounts	\$373,716	\$294,397	\$373,716	\$279,983	\$308,434	\$279,983	
(3) Index (Base)	100%		100.0000%	100%		100.0000%	
<u>(b) Social Security Offset</u>				<u>(b) Social Security Onset</u>			
(1) Total (including above)	-	-	-	\$288,323	\$315,462	\$288,323	
(2) Difference- Social Security (Federal= b-1 minus a-2)	\$30,885	\$15,416	\$30,885	8,340	7,028	8,340	
(3) Index (to a(2))	8.2643%	5.2365%	8.2643%	2.9788%	2.2786%	2.9788%	
(4) Complement	91.7357%	94.7635%	91.7357%	97.0212%	97.7214%	97.0212%	
<u>(c) Pension Offset (after Social Security Offset)</u>				<u>(c) Pension Onset</u>			
(1) Total (including above)	-	-	-	\$326,592	\$347,780	\$326,592	
(2) Difference (Federal= c-1 minus b-1)	\$87,958	\$71,919	\$87,958	38,269	32,318	38,269	
(3) % Pension (VII-G, P. 2)	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	
(4) Net Pension	10,995	8,990	10,995	4,784	4,040	4,784	
(5) Index (to a-2)	2.9420%	3.0537%	2.9420%	1.7085%	1.3098%	1.7085%	
(6) Complement	97.0580%	96.9463%	97.0580%				
<u>(d) Combined Social Security and Pension Offsets</u>				<u>(d) Combined Social Sec. Pension Onsets</u>			
(1) Average Amounts (b-2 plus c-4)	\$41,880	\$24,406	\$41,880	\$13,124	\$11,068	\$13,124	
(2) Index (to a-2)	11.2063%	8.2901%	11.2063%			4.6873%	
(3) Complement	88.7937%	91.7099%	88.7937%	Factor		104.6873%	
(4) Total Average	331,836	269,991	331,836			293,107	
<u>(e) Wage Level Decrease</u>				<u>(e) Wage Level Increase</u>			
(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%	
<u>(f) Combined Social Security, Pension and Wage Level</u>				<u>(f) Combined Percentage</u>			
(1) Percentage level Excl. AMA Guidelines (d-3 times e-2)			88.7937%			104.6873%	
(2) AMA Guidelines (a-3)			<u>100.0000%</u>			<u>100.0000%</u>	
(3) Full Effect of Act 57 (1 X 2)			88.7937%			104.6873%	
(4) Percentage Decrease			11.2063%	Increase		4.6873%	
<u>(g) Combined Dollar Effect</u>							
(1) (d-1) plus (e-3)			\$41,880	Increase		\$13,124	
(2) Average after Act 57 (a-2 plus or minus g-1)			\$331,836			\$293,107	

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

	<u>State O.D.</u>			<u>Federal Excess O.D.</u>		
	<u>Base</u>	<u>All PP</u>	<u>Weighted 100%-0%</u>	<u>Base</u>	<u>All PP</u>	<u>Weighted 100%-0%</u>
<u>(a) After AMA Guidelines</u>				<u>(a) After AMA Guidelines</u>		
(1) Number of Claims	# 39			# 39		
(2) Average Amounts	\$683,481	\$481,871	\$683,481	\$93,443	\$169,351	\$93,443
(3) Index (Base)	100%		100.0000%	100%		100.0000%
<u>(b) Social Security Offset</u>				<u>(b) Social Security Onset</u>		
(1) Total (including above)	-	-	-	\$93,532	\$169,398	\$93,532
(2) Difference- Social Security (Federal= b-1 minus a-2)	\$10,553	\$5,144	\$10,553	89	47	89
(3) Index (to a(2))	1.5440%	1.0675%	1.5440%	0.0952%	0.0278%	0.0952%
(4) Complement	98.4560%	98.9325%	98.4560%	99.9048%	99.9722%	99.9048%
<u>(c) Pension Offset (after Social Security Offset)</u>				<u>(c) Pension Onset</u>		
(1) Total (including above)	-	-	-	\$109,588	\$183,931	\$109,588
(2) Difference (Federal= c-1 minus b-1)	\$133,732	\$100,389	\$133,732	16,056	14,533	16,056
(3) % Pension (VII-G, P. 2)	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%
(4) Net Pension	16,717	12,549	16,717	2,007	1,817	2,007
(5) Index (to a-2)	2.4458%	2.6041%	2.4458%	2.1478%	1.0727%	2.1478%
(6) Complement	97.5542%	97.3959%	97.5542%			
<u>(d) Combined Social Security and Pension Offsets</u>				<u>(d) Combined Social Sec. Pension Onsets</u>		
(1) Average Amounts (b-2 plus c-4)	\$27,270	\$17,693	\$27,270	\$2,096	\$1,864	\$2,096
(2) Index (to a-2)	3.9898%	3.6717%	3.9898%			2.2431%
(3) Complement	96.0102%	96.3283%	96.0102%	Factor		102.2431%
(4) Total Average	656,212	464,178	656,212			95,539
<u>(e) Wage Level Decrease</u>				<u>(e) Wage Level Increase</u>		
(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%
<u>(f) Combined Social Security, Pension and Wage Level</u>				<u>(f) Combined Percentage</u>		
(1) Percentage level Excl. AMA Guidelines (d-3 times e-2)			96.0102%			102.2431%
(2) AMA Guidelines (a-3)			<u>100.0000%</u>			<u>100.0000%</u>
(3) Full Effect of Act 57 (1 X 2)			96.0102%			102.2431%
(4) Percentage Decrease			3.9898%	Increase		2.2431%
<u>(g) Combined Dollar Effect</u>						
(1) (d-1) plus (e-3)			\$27,270	Increase		\$2,096
(2) Average after Act 57 (a-2 plus or minus g-1)			\$656,212			\$95,539

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 4
Surface Bituminous

	<u>State O.D.</u>			<u>Federal Excess O.D.</u>			
	<u>Base</u>	<u>All PP</u>	<u>Weighted 100%-0%</u>	<u>Base</u>	<u>All PP</u>	<u>Weighted 100%-0%</u>	
<u>(a) After AMA Guidelines</u>				<u>(a) After AMA Guidelines</u>			
(1) Number of Claims	# 24			# 24			
(2) Average Amounts	\$487,914	\$368,190	\$487,914	\$246,271	\$286,747	\$246,271	
(3) Index (Base)	100%		100.0000%	100%		100.0000%	
<u>(b) Social Security Offset</u>				<u>(b) Social Security Onset</u>			
(1) Total (including above)	-	-	-	\$252,084	\$290,140	\$252,084	
(2) Difference- Social Security (Federal= b-1 minus a-2)	\$23,592	\$7,185	\$23,592	5,813	3,393	5,813	
(3) Index (to a(2))	4.8353%	1.9514%	4.8353%	2.3604%	1.1833%	2.3604%	
(4) Complement	95.1647%	98.0486%	95.1647%	97.6396%	98.8167%	97.6396%	
<u>(c) Pension Offset (after Social Security Offset)</u>				<u>(c) Pension Onset</u>			
(1) Total (including above)	-	-	-	\$289,632	\$320,670	\$289,632	
(2) Difference (Federal= c-1 minus b-1)	\$85,062	\$62,804	\$85,062	37,548	30,530	37,548	
(3) % Pension (VII-G, P. 2)	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	
(4) Net Pension	10,633	7,851	10,633	4,694	3,816	4,694	
(5) Index (to a-2)	2.1792%	2.1322%	2.1792%	1.9058%	1.3309%	1.9058%	
(6) Complement	97.8208%	97.8678%	97.8208%				
<u>(d) Combined Social Security and Pension Offsets</u>				<u>(d) Combined Social Sec. Pension Onsets</u>			
(1) Average Amounts (b-2 plus c-4)	\$34,225	\$15,036	\$34,225	\$10,507	\$7,209	\$10,507	
(2) Index (to a-2)	7.0145%	4.0836%	7.0145%			4.2662%	
(3) Complement	92.9855%	95.9164%	92.9855%	Factor		104.2662%	
(4) Total Average	453,689	353,155	453,689			256,778	
<u>(e) Wage Level Decrease</u>				<u>(e) Wage Level Increase</u>			
(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%	
<u>(f) Combined Social Security, Pension and Wage Level</u>				<u>(f) Combined Percentage</u>			
(1) Percentage level Excl. AMA Guidelines (d-3 times e-2)			92.9855%			104.2662%	
(2) AMA Guidelines (a-3)			<u>100.0000%</u>			<u>100.0000%</u>	
(3) Full Effect of Act 57 (1 X 2)			92.9855%			104.2662%	
(4) Percentage Decrease			7.0145%	Increase		4.2662%	
<u>(g) Combined Dollar Effect</u>							
(1) (d-1) plus (e-3)			\$34,225	Increase		\$10,507	
(2) Average after Act 57 (a-2 plus or minus g-1)			\$453,689			\$256,778	

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

	<u>State O.D.</u>			<u>Federal Excess O.D.</u>		
	<u>Base</u>	<u>All PP</u>	<u>Weighted 100%-0%</u>	<u>Base</u>	<u>All PP</u>	<u>Weighted 100%-0%</u>
<u>(a) After AMA Guidelines</u>				<u>(a) After AMA Guidelines</u>		
(1) Number of Claims	# 17			# 17		
(2) Average Amounts	\$363,946	\$274,232	\$363,946	\$271,428	\$301,180	\$271,428
(3) Index (Base)	100%		100.0000%	100%		100.0000%
<u>(b) Social Security Offset</u>				<u>(b) Social Security Onset</u>		
(1) Total (including above)	-	-	-	\$285,410	\$311,884	\$285,410
(2) Difference- Social Security (Federal= b-1 minus a-2)	\$26,237	\$14,265	\$26,237	13,982	10,704	13,982
(3) Index (to a(2))	7.2090%	5.2018%	7.2090%	5.1513%	3.5540%	5.1513%
(4) Complement	92.7910%	94.7982%	92.7910%	94.8487%	96.4460%	94.8487%
<u>(c) Pension Offset (after Social Security Offset)</u>				<u>(c) Pension Onset</u>		
(1) Total (including above)	-	-	-	\$300,476	\$321,416	\$300,476
(2) Difference (Federal= c-1 minus b-1)	\$61,133	\$41,516	\$61,133	15,066	9,532	15,066
(3) % Pension (VII-G, P. 2)	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%
(4) Net Pension	7,642	5,190	7,642	1,883	1,192	1,883
(5) Index (to a-2)	2.0997%	1.8924%	2.0997%	0.6938%	0.3956%	0.6938%
(6) Complement	97.9003%	98.1076%	97.9003%			
<u>(d) Combined Social Security and Pension Offsets</u>				<u>(d) Combined Social Sec. Pension Onsets</u>		
(1) Average Amounts (b-2 plus c-4)	\$33,879	\$19,455	\$33,879	\$15,865	\$11,896	\$15,865
(2) Index (to a-2)	9.3087%	7.0942%	9.3087%			5.8451%
(3) Complement	90.6913%	92.9058%	90.6913%	Factor		105.8451%
(4) Total Average	330,067	254,778	330,067			287,293
<u>(e) Wage Level Decrease</u>				<u>(e) Wage Level Increase</u>		
(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%
<u>(f) Combined Social Security, Pension and Wage Level</u>				<u>(f) Combined Percentage</u>		
(1) Percentage level Excl. AMA Guidelines (d-3 times e-2)			90.6913%			105.8451%
(2) AMA Guidelines (a-3)			<u>100.0000%</u>			<u>100.0000%</u>
(3) Full Effect of Act 57 (1 X 2)			90.6913%			105.8451%
(4) Percentage Decrease			9.3087%	Increase		5.8451%
<u>(g) Combined Dollar Effect</u>						
(1) (d-1) plus (e-3)			\$33,879	Increase		\$15,865
(2) Average after Act 57 (a-2 plus or minus g-1)			\$330,067			\$287,293

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)	(2)		(3)	(4)	(5) (6) Credibility		(7)	(8)	(9)	(10)
		Estimated Miner Years 2014-2023	Claim Frequency per 100 Miner Years Indicated (Eff 4/1/2024)	Trended to 4/1/2025	Indicated (Eff 4/1/2025)	Expected Awarded Claims	Factor	Claim Frequency Indicated w/ Credibility	Change in Indication After Cred.	10 Year 2014-2023 Payroll	Claim Frequency Per \$100 of Payroll	
Underground: Anthracite	1011	35.6	1.328759	1.328759	0.128288	0.473	0.092	1.218316	-8.3%	2,091,615	0.207362	
Bituminous	1002	20,608.6	0.191281	0.191281	0.156237	39.420	0.839	0.161879	-15.4%	1,718,470,144	0.019413	
Surface: Anthracite	1016	3,994.4	0.083509	0.083509	0.080156	3.336	0.244	0.082691	-1.0%	241,585,510	0.013672	
Bituminous	1013	<u>5,946.8</u>	<u>0.082055</u>	0.082055	<u>0.094587</u>	<u>4.880</u>	0.295	<u>0.085752</u>	<u>4.5%</u>	<u>350,546,159</u>	0.014547	
Four Standard Classifications		30,585.4	0.157293	0.157293	0.134282	48.109		0.137965	-9.6%	2,312,693,428	0.018246	
Coke	1017	483.9	0.011596	0.011596	0.003037	0.056	0.032	0.011322	-2.4%	27,071,255	0.002024	
Auger	1019	76.5	0.023811	0.023811	0.009883	0.018	0.018	0.023560	-1.1%	4,418,173	0.004079	
Co-Gen: Anthracite	1022	1,544.2	0.044604	0.044604	0.082676	0.689	0.111	0.048830	9.5%	91,808,061	0.008213	
Bituminous	1024	2,210.9	0.025024	0.025024	0.010158	0.553	0.099	0.023552	-5.9%	134,631,635	0.003868	
Prep Plants: Anthracite	1026	1,798.7	0.279456	0.279456	0.330647	5.027	0.299	0.294762	5.5%	110,028,877	0.048186	
Bituminous	1028	<u>4,095.7</u>	<u>0.038900</u>	0.038900	<u>0.047732</u>	<u>1.593</u>	0.169	<u>0.040393</u>	<u>3.8%</u>	<u>349,476,508</u>	0.004734	
Other Classes		10,209.9	0.077730		0.092320	7.936		0.081331	2.5%	717,434,509	0.011574	
Total		40,795.3	0.137381		0.123780	56.045		0.123791	-6.6%	3,030,127,937	0.016666	

Source: (1) Estimated Miner Years from Exhibit VII-B-2
 (2) Exhibit VII-B-1, Page 2 Col. 10
 (3) Approved claim frequency trended to 4/1/2025 @ 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) / 56.045)^0.5
 (7)=(4)*(6)+((3)*(1-(6)))
 (8)=(7)/(2)-1 Totals and subtotals are weighted with 10 year estimated miner years.
 (9) Exhibit X-A, Page 2
 (10)=(7) x (1) / ((9) x 100) / 1,000,000

COAL MINE COMPENSATION RATING BUREAU
State Occupational Disease Classification Credibility

Classification	Code	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
		Approved Claim Freq. <u>4/1/2024</u>	Payroll <u>2013-2022</u>	Expected Awarded Claims 2013-2022 <u>(1) x (2)</u>	Estimated Miner Years <u>2014-2023</u>	Estimated Miner Years <u>2023</u>	Adjustment <u>Factor</u>	Average Weekly Wage <u>2013</u>	Payroll <u>2013</u>	Estimated Miner Years <u>2013-2022</u>	Frequency Per 100 <u>Miner Years</u>
Underground: Anthracite	1011	0.234854	2,274,439	0.534161	35.6	2.8	1.089	917	381,876	40.2	1.328759
Bituminous	1002	0.023559	1,722,296,329	40.575579	20,608.6	1,422.2	1.550	917	149,747,092	21,212.5	0.191281
Surface: Anthracite	1016	0.014374	228,693,223	3.287236	3,994.4	490.3	1.089	917	22,449,824	3,936.4	0.083509
Bituminous	1013	0.014448	<u>378,593,819</u>	<u>5,469,223</u>	<u>5,946.8</u>	<u>462.0</u>	1.089	917	<u>61,349,745</u>	6,666.2	0.082055
Four Standard Classifications			2,331,857,810	49.866899	30,585.4	2,377.3			233,928,537	31,855.3	
Coke	1017	0.002097	31,863,165	0.066817	483.9	-	1.089	917	4,791,910	576.2	0.011596
Auger	1019	0.004252	5,191,223	0.022073	76.5	3.5	1.089	917	1,025,399	92.7	0.023811
Co-Gen: Anthracite	1022	0.007744	90,445,455	0.700410	1,544.2	134.6	1.089	917	8,342,651	1,570.3	0.044604
Bituminous	1024	0.004298	120,794,271	0.519174	2,210.9	335.6	1.089	917	10,355,884	2,074.7	0.025024
Prep Plants: Anthracite	1026	0.047486	101,569,449	4.823127	1,798.7	232.0	1.089	917	8,265,665	1,725.9	0.279456
Bituminous	1028	0.004723	<u>342,042,544</u>	<u>1,615,467</u>	<u>4,095.7</u>	<u>406.3</u>	1.550	917	<u>34,253,697</u>	<u>4,152.9</u>	0.038900
Other Classes			691,906,107		10,209.9	1,112.0			67,035,206	10,192.7	
Total			3,023,763,917		40,795.3	3,489.3			300,963,743	42,048.0	

Source: (1) Approved Claim Frequency (4/1/24): See Exhibit III from filing effective 4/1/2024 (See Exhibit X-F)
(2) 10 years Payroll(2013-2022): Exhibit X-A, Page 2
(3) Expected Awarded Claims = (1)x(2) / 1,000,000
(4) Estimated Miner Years 2014-2023: See Exhibit VII-B-2
(5) Estimated Miner Years 2023: See Exhibit VII-B-2
(6) Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G
(7) Average Weekly Wage 2013: See Exhibit XII-D
(8) Payroll 2013: See Exhibit X-A, Page 2
(9) Estimated Miner Years 2013-2022 = (4)-(5)+(8)/((6)x(7)x52)
(10) Frequency Per 100 Miner Years = (3)/((9)/100))

STATE OCCUPATIONAL DISEASE FREQUENCY WITH FEDERAL EXCESS FREQUENCY

ANTHRACITE UNDERGROUND (1011)

Award Ratio = 43 / (43 + 5) = 0.896

Table with columns: YEAR, REPORTED, AWARDED, PENDING, DENIED, IBNR, PENDING, IBNR + PENDING, Payroll, EXPECTED ULTIMATE AWARDED, Statewide Average Weekly Wage, Adjustment Factor, Estimated Miner Years, Frequency Claims per 100 Miner Years, Weighted Frequency. Rows for years 2014-2023 and a TOTAL row.

Average: State Frequency
Federal Excess Frequency (times 40.0%)

BITUMINOUS UNDERGROUND (1002)

Award Ratio = 43 / (43 + 5) = 0.896

Table with columns: YEAR, REPORTED, AWARDED, PENDING, DENIED, IBNR, PENDING, IBNR + PENDING, Payroll, EXPECTED ULTIMATE AWARDED, Statewide Average Weekly Wage, Adjustment Factor, Estimated Miner Years, Frequency Claims per 100 Miner Years, Weighted Frequency. Rows for years 2014-2023 and a TOTAL row.

Average: State Frequency
Federal Excess Frequency (times 40.0%)

ANTHRACITE SURFACE (1016)

Award Ratio = 43 / (43 + 5) = 0.896

Table with columns: YEAR, REPORTED, AWARDED, PENDING, DENIED, IBNR, PENDING, IBNR + PENDING, Payroll, EXPECTED ULTIMATE AWARDED, Statewide Average Weekly Wage, Adjustment Factor, Estimated Miner Years, Frequency Claims per 100 Miner Years, Weighted Frequency. Rows for years 2014-2023 and a TOTAL row.

Average: State Frequency
Federal Excess Frequency (times 40.0%)

BITUMINOUS SURFACE (1013)

Award Ratio = 43 / (43 + 5) = 0.896

Table with columns: YEAR, REPORTED, AWARDED, PENDING, DENIED, IBNR, PENDING, IBNR + PENDING, Payroll, EXPECTED ULTIMATE AWARDED, Statewide Average Weekly Wage, Adjustment Factor, Estimated Miner Years, Frequency Claims per 100 Miner Years, Weighted Frequency. Rows for years 2014-2023 and a TOTAL row.

Average: State Frequency
Federal Excess Frequency (times 40.0%)

FOUR STANDARD CLASSES

Award Ratio = 43 / (43 + 5) = 0.896

Table with columns: YEAR, REPORTED, AWARDED, PENDING, DENIED, IBNR, PENDING, IBNR + PENDING, Payroll, EXPECTED ULTIMATE AWARDED, Statewide Average Weekly Wage, Adjustment Factor, Estimated Miner Years, Frequency Claims per 100 Miner Years, Weighted Frequency. Rows for years 2014-2023 and a TOTAL row.

Average: State Frequency
Federal Excess Frequency (times 40.0%)

Source: Claim counts - CMCRB OD Database as of 08/02/2024

IBNR: Exhibit VII-C

Exhibit X-A, Page 2

The Award Ratios for all classes were set equal to the Grand Total Award Ratio calculated on Exhibit VII-B-2 Page 3.

The Grand Total Award Ratio is equal to Awarded ÷ (Awarded plus Denied) = 43 / [43 + 05] = 0.896

The Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G

Estimated Miner Years = Payroll / (SAWW x Adj. Factor x 52)

Frequency per 100 Miner Years = [Expected Ult. Awarded / Est. Miner Years] x 100 or N/A if Payroll=0

File: C:\OneDrive\Clients\Coal Mine\2024 Rate Filing\XL\2024-07-B-2.xlsx\VII-B-1

Run Date: October 11, 2024 - 09:29:03 AM

PAB

Effective Date - April 01, 2025

9,251,050,761.332400

STATE OCCUPATIONAL DISEASE FREQUENCY WITH FEDERAL EXCESS FREQUENCY

COKE (1017)

Award Ratio = 43 / (43 + 5) = 0.896

IBNR Factor adjusted by 0.4000

Table with 14 columns: YEAR, REPORTED, AWARDED, PENDING, DENIED, IBNR, PENDING, IBNR + PENDING, Payroll, EXPECTED ULTIMATE AWARDED, Statewide Average Weekly Wage, Adjustment Factor, Estimated Miner Years, Frequency Claims per 100 Miner Years, Weighted Frequency. Rows include years 2014-2023 and a TOTAL row.

Average: State Frequency
Federal Excess Frequency (times 40.0%)

AUGER (1019)

Award Ratio = 43 / (43 + 5) = 0.896

IBNR Factor adjusted by 0.4000

Table with 14 columns: YEAR, REPORTED, AWARDED, PENDING, DENIED, IBNR, PENDING, IBNR + PENDING, Payroll, EXPECTED ULTIMATE AWARDED, Statewide Average Weekly Wage, Adjustment Factor, Estimated Miner Years, Frequency Claims per 100 Miner Years, Weighted Frequency. Rows include years 2014-2023 and a TOTAL row.

Average: State Frequency
Federal Excess Frequency (times 40.0%)

ANTHRACITE CO-GEN (1022)

Award Ratio = 43 / (43 + 5) = 0.896

IBNR Factor adjusted by 0.4000

Table with 14 columns: YEAR, REPORTED, AWARDED, PENDING, DENIED, IBNR, PENDING, IBNR + PENDING, Payroll, EXPECTED ULTIMATE AWARDED, Statewide Average Weekly Wage, Adjustment Factor, Estimated Miner Years, Frequency Claims per 100 Miner Years, Weighted Frequency. Rows include years 2014-2023 and a TOTAL row.

Average: State Frequency
Federal Excess Frequency (times 40.0%)

BITUMINOUS CO-GEN (1024)

Award Ratio = 43 / (43 + 5) = 0.896

IBNR Factor adjusted by 0.4000

Table with 14 columns: YEAR, REPORTED, AWARDED, PENDING, DENIED, IBNR, PENDING, IBNR + PENDING, Payroll, EXPECTED ULTIMATE AWARDED, Statewide Average Weekly Wage, Adjustment Factor, Estimated Miner Years, Frequency Claims per 100 Miner Years, Weighted Frequency. Rows include years 2014-2023 and a TOTAL row.

Average: State Frequency
Federal Excess Frequency (times 40.0%)

Source: Claim counts - CMCRB OD Database as of 08/02/2024

IBNR: Exhibit VII-C
Exhibit X-A, Page 2

The Award Ratios for all classes were set equal to the Grand Total Award Ratio calculated on Exhibit VII-B-2 Page 3.

The Grand Total Award Ratio is equal to Awarded ÷ (Awarded plus Denied) = 43 / [43 + 05] = 0.896

The Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G

Estimated Miner Years = Payroll / (SAWw x Adj. Factor x 52)

Frequency per 100 Miner Years = [Expected Ult. Awarded / Est. Miner Years] x 100 or N/A if Payroll=0

File: C:\OneDrive\Clients\Coal Mine\2024 Rate Filing\XL\2024-07-B-2.xlsx\VII-B-2

Run Date: October 11, 2024 - 09:29:03 AM

STATE OCCUPATIONAL DISEASE FREQUENCY WITH FEDERAL EXCESS FREQUENCY

ANTHRACITE PREP PLANT (1026)

Table for Anthracite Prep Plant (1026) showing award ratios, IBNR/Pending counts, and frequency data from 2014 to 2023.

BITUMINOUS PREP PLANT (1028)

Table for Bituminous Prep Plant (1028) showing award ratios, IBNR/Pending counts, and frequency data from 2014 to 2023.

TOTAL OTHER CLASSES

Table for Total Other Classes showing award ratios, IBNR/Pending counts, and frequency data from 2014 to 2023.

GRAND TOTAL

Table for Grand Total showing award ratios, IBNR/Pending counts, and frequency data from 2014 to 2023.

Source: Claim counts - CMCRB OD Database as of 08/02/2024
IBNR: Exhibit VII-C
Exhibit X-A, Page 2
The Award Ratios for all classes were set equal to the Grand Total Award Ratio calculated on Exhibit VII-B-2 Page 3.
The Grand Total Award Ratio is equal to Awarded ÷ (Awarded plus Denied) = 43 / [43 + 05] = 0.896
The Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G
Estimated Miner Years = Payroll / (\$AWW x Adj. Factor x 52)
Frequency per 100 Miner Years = [Expected Ult. Awarded / Est. Miner Years] x 100 or N/A if Payroll=0
File: C:\OneDrive\Clients\Coal Mine\2024 Rate Filing\XL\2024-07-B-2.xlsx\VII-B-3
Run Date: October 11, 2024 - 09:29:03 AM

**COAL MINE COMPENSATION RATING BUREAU
STATE OCCUPATIONAL DISEASE
ALL CLASSIFICATIONS**

IBNR By Class

		CLASSIFICATION							
		Anthracite		Bituminous		Anthracite		Bituminous	
A. IBNR Factor		<u>Coke</u>	<u>Auger</u>	<u>Co-Gen</u>	<u>Co-Gen</u>	<u>Prep Plant</u>	<u>Prep Plant</u>		
<u>Year</u>		<u>1017</u>	<u>1019</u>	<u>1022</u>	<u>1024</u>	<u>1026</u>	<u>1028</u>		
2014		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		
2015		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		
2016		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		
2017		0.00018	0.00018	0.00018	0.00018	0.00018	0.00018		
2018		0.00168	0.00168	0.00168	0.00168	0.00168	0.00168		
2019		0.00325	0.00325	0.00325	0.00325	0.00325	0.00325		
2020		0.00505	0.00505	0.00505	0.00505	0.00505	0.00505		
2021		0.00777	0.00777	0.00777	0.00777	0.00777	0.00777		
2022		0.01062	0.01062	0.01062	0.01062	0.01062	0.01062		
2023		0.01390	0.01390	0.01390	0.01390	0.01390	0.01390		
B. Adjustment Factor		0.40000	0.40000	0.40000	0.40000	1.00000	0.40000		
C. Payroll Per \$1M									
2014		4.46440	0.80698	9.06088	11.72118	8.23477	43.52004		
2015		4.34038	0.58262	10.46909	11.74821	7.60627	33.56418		
2016		4.43507	0.37250	8.99460	11.32755	7.01893	23.68988		
2017		4.56611	0.44901	8.81970	11.43506	7.74615	28.80346		
2018		4.48474	0.60014	11.60089	12.04330	9.65129	32.19987		
2019		4.46697	0.53991	8.19167	11.81888	12.87332	36.09958		
2020		0.31359	0.38457	7.66007	10.67848	12.54336	33.56216		
2021		0.00000	0.20648	8.37176	12.28284	12.87545	35.68422		
2022		0.00000	0.22362	8.93415	17.38289	14.75424	40.66545		
2023		0.00000	0.25235	9.70526	24.19325	16.72509	41.68766		
D. IBNR									
2014		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
2015		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
2016		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
2017		0.0003	0.0000	0.0006	0.0008	0.0014	0.0021		
2018		0.0030	0.0004	0.0078	0.0081	0.0162	0.0216		
2019		0.0058	0.0007	0.0106	0.0154	0.0418	0.0469		
2020		0.0006	0.0008	0.0155	0.0216	0.0633	0.0678		
2021		0.0000	0.0006	0.0260	0.0382	0.1000	0.1109		
2022		0.0000	0.0009	0.0380	0.0738	0.1567	0.1727		
2023		0.0000	0.0014	0.0540	0.1345	0.2325	0.2318		

Source: IBNR Factor - Exhibit VII-C, Page 6
 Adjustment Factor - Judgement
 Payrolls: Exhibit X-A, Page 2
 IBNR = A times B times C

**COAL MINE COMPENSATION RATING BUREAU
STATE OCCUPATIONAL DISEASE
ALL CLASSIFICATIONS**

IBNR By Class

		CLASSIFICATION							
		Anthracite		Bituminous		Anthracite		Bituminous	
A. IBNR Factor		<u>Coke</u>	<u>Auger</u>	<u>Co-Gen</u>	<u>Co-Gen</u>	<u>Prep Plant</u>	<u>Prep Plant</u>		
	<u>Year</u>	<u>1017</u>	<u>1019</u>	<u>1022</u>	<u>1024</u>	<u>1026</u>	<u>1028</u>		
	2004	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		0.00000
	2005	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		0.00000
	2006	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		0.00000
	2007	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		0.00000
	2008	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		0.00000
	2009	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		0.00000
	2010	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		0.00000
	2011	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		0.00000
	2012	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		0.00000
	2013	0.00000	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									
	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	1.02540	8.34265	10.35588	8.26567	34.25370		
D. IBNR									
	2004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
	2005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
	2006	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
	2007	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
	2008	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
	2009	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
	2010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
	2011	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
	2012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
	2013	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Source: IBNR Factor - Exhibit VII-C, Page 6
 Adjustment Factor - Judgement
 Payrolls: Exhibit X-A, Page 2
 IBNR = A times B times C

Coal Mine Compensation Rating Bureau

State O.D. Severity- Before Act 57

Underground Anthracite

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis		Commuted and Compromised- As Settled		Total Awarded- Permanent plus Commuted/Comp.		Pending, on Permanent Basis		Total Claims	
	(1) Count	Amount	(2) Count	Amount	(3) = (1) + (2) Count	Amount	(4) Count	Amount	(5) Count	Amount
a. Numbers and Amounts										
(i) Total	# 6	7,632,066	# 3	1,651,376	# 9	9,283,442	# 0	-	# 9	9,283,442
(ii) Average		\$1,272,011		\$550,459		\$1,031,494		\$0		\$1,031,494
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 6		# 3		# 9					
(ii) Percentage	66.6667%		33.3333%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$1,272,011		\$550,459						
(ii) Difference (Col. 2 minus Col. 1)						(\$721,552)				
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	66.6667%		33.3333%							
(ii) Total	# 0.0000		# 0.0000				# 0			
e. Pending Average from Above; Commuted and Compromised less Awarded Difference										
(i) Pending Ave.		\$0		\$0						
(ii) C/C Difference		\$0		(\$721,552)						
(iii) (e-i) + (e-ii)		\$0		\$0			limited to zero: negative offset is impossible			
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	# 6	\$7,632,066	\$1,272,011	# 0.0000	\$0	\$0	# 6.0000	\$7,632,066	\$1,272,011	
(ii) Comm./Comp.	# 3	\$1,651,376	\$550,459	# 0.0000	\$0	\$0	# 3.0000	\$1,651,376	\$550,459	
(iii) Total	# 9	\$9,283,442	\$1,031,494	# 0.0000	\$0	\$0	# 9.0000	\$9,283,442	\$1,031,494	
(iv) Average Severity before Adjustment									\$1,031,494	
(v) Impact									\$0	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau

State O.D. Severity- Before Act 57

Underground Bituminous

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis		Commuted and Compromised- As Settled		Total Awarded- Permanent plus Commuted/Comp.		Pending, on Permanent Basis		Total Claims	
	(1) Count	Amount	(2) Count	Amount	(3) = (1) + (2) Count	Amount	(4) Count	Amount	(5) Count	Amount
a. Numbers and Amounts										
(i) Total	# 7	12,116,677	# 67	15,412,403	# 74	27,529,079	# 1	1,858,541	# 75	29,387,620
(ii) Average		\$1,730,954		\$230,036		\$372,015		\$1,858,541		\$391,835
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 7		# 67		# 74					
(ii) Percentage	9.4595%		90.5405%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$1,730,954		\$230,036						
(ii) Difference (Col. 2 minus Col. 1)						(\$1,500,918)				
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	9.4595%		90.5405%							
(ii) Total	# 0.0946		# 0.9054				# 1			
e. Pending Average from Above: Commuted and Compromised less Awarded Difference										
(i) Pending Ave.		\$1,858,541		\$1,858,541						
(ii) C/C Difference		\$0		(\$1,500,918)						
(iii) (e-i) + (e-ii)		\$1,858,541		\$357,623						
(iv) Total		\$175,808		\$323,794						
(d-ii) x (e-iii)										
(v) Total of (e-iv)								\$499,601		
f. Calculation of Impact of Adjustment										
	Awarded			Pending			Total			
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average	
(i) Permanent	# 7	\$12,116,677	\$1,730,954	# 0.0946	\$175,808	\$1,858,541	# 7.0946	\$12,292,484	\$1,732,655	
(ii) Comm./Comp.	# 67	\$15,412,403	\$230,036	# 0.9054	\$323,794	\$357,623	# 67.9054	\$15,736,196	\$231,737	
(iii) Total	# 74	\$27,529,079	\$372,015	# 1.0000	\$499,601	\$499,601	# 75.0000	\$28,028,681	\$373,716	
(iv) Average Severity before Adjustment										\$391,835
(v) Impact										(\$18,119)

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) Total	# 24	\$21,972,687	# 15	\$4,683,057	# 39	\$26,655,744	# 0	-	# 39	\$26,655,744
(ii) Average		\$915,529		\$312,204		\$683,481		\$0		\$683,481
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 24		# 15		# 39					
(ii) Percentage	61.5385%		38.4615%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$915,529		\$312,204						
(ii) Difference (Col. 2 minus Col. 1)						(\$603,325)				
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	61.5385%		38.4615%							
(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		(\$603,325)						
(iii) (e-i) + (e-ii)		\$0		\$0			limited to zero: negative offset is impossible			
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	\$21,972,687	\$915,529	# 0.0000	\$0	\$0	# 24.0000	\$21,972,687	\$915,529	
(ii) Comm./Comp.	# 15	\$4,683,057	\$312,204	# 0.0000	\$0	\$0	# 15.0000	\$4,683,057	\$312,204	
(iii) Total	# 39	\$26,655,744	\$683,481	# 0.0000	\$0	\$0	# 39.0000	\$26,655,744	\$683,481	
(iv) Average Severity before Adjustment									\$683,481	
(v) Impact									\$0	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau

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) Total	# 3	5,344,356	# 21	6,365,575	# 24	11,709,931	# 0	-	# 24	11,709,931
(ii) Average		\$1,781,452		\$303,123		\$487,914		\$0		\$487,914
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 3		# 21		# 24					
(ii) Percentage	12.5000%		87.5000%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$1,781,452		\$303,123						
(ii) Difference (Col. 2 minus Col. 1)						(\$1,478,329)				
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	12.5000%		87.5000%							
(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		(\$1,478,329)						
(iii) (e-i) + (e-ii)		\$0		\$0						limited to zero: negative offset is impossible
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	# 3	\$5,344,356	\$1,781,452	# 0.0000	\$0	\$0	# 3.0000	\$5,344,356	\$1,781,452	
(ii) Comm./Comp.	# 21	\$6,365,575	\$303,123	# 0.0000	\$0	\$0	# 21.0000	\$6,365,575	\$303,123	
(iii) Total	# 24	\$11,709,931	\$487,914	# 0.0000	\$0	\$0	# 24.0000	\$11,709,931	\$487,914	
(iv) Average Severity before Adjustment									\$487,914	
(v) Impact									\$0	

Source: Exhibit IX-A

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis		Commuted and Compromised- As Settled		Total Awarded- Permanent plus Commuted/Comp.		Pending, on Permanent Basis		Total Claims	
	(1) Count	Amount	(2) Count	Amount	(3) = (1) + (2) Count	Amount	(4) Count	Amount	(5) Count	Amount
a. Numbers and Amounts										
(i) Total	# 3	3,274,027	# 14	2,913,052	# 17	6,187,079	# 0	-	# 17	6,187,079
(ii) Average		\$1,091,342		\$208,075		\$363,946		\$0		\$363,946
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 3		# 14		# 17					
(ii) Percentage	17.6471%		82.3529%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$1,091,342		\$208,075						
(ii) Difference (Col. 2 minus Col. 1)						(\$883,267)				
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	17.6471%		82.3529%							
(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		(\$883,267)						
(iii) (e-i) + (e-ii)		\$0		\$0			limited to zero: negative offset is impossible			
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	# 3	\$3,274,027	\$1,091,342	# 0.0000	\$0	\$0	# 3.0000	\$3,274,027	\$1,091,342
(ii) Comm./Comp.	# 14	\$2,913,052	\$208,075	# 0.0000	\$0	\$0	# 14.0000	\$2,913,052	\$208,075
(iii) Total	# 17	\$6,187,079	\$363,946	# 0.0000	\$0	\$0	# 17.0000	\$6,187,079	\$363,946
(iv) Average Severity before Adjustment									\$363,946
(v) Impact									\$0

Source: Exhibit IX-A

State O. D. Severity- Social Security Offset

Underground Anthracite

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) Total	# 6	774,338	# 3	-	# 9	774,338	# 0	-	# 9	774,338
(ii) Average		\$129,056		\$0		\$86,038		\$0		\$86,038
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 6		# 3		# 9					
(ii) Percentage	66.6667%		33.3333%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$129,056		\$0						
(ii) Difference (Col. 2 minus Col. 1)						(\$129,056)				
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		(\$129,056)						
(iii) (e-i) + (e-ii)		\$0		\$0						limited to zero: negative offset is impossible
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	# 6	\$774,338	\$129,056	# 0.0000	\$0	\$0	# 6.0000	\$774,338	\$129,056	
(ii) Comm./Comp.	# 3	\$0	\$0	# 0.0000	\$0	\$0	# 3.0000	\$0	\$0	
(iii) Total	# 9	\$774,338	\$86,038	# 0.0000	\$0	\$0	# 9.0000	\$774,338	\$86,038	
(iv) Average Severity before Adjustment									\$86,038	
(v) Impact									\$0	

Source: Exhibit IX-A

State O. D. Severity- Social Security Offset

Underground Bituminous

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) Total	# 7	1,219,504	# 67	847,526	# 74	2,067,030	# 1	395,659	# 75	2,462,689
(ii) Average		\$174,215		\$12,650		\$27,933		\$395,659		\$32,836
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 7		# 67		# 74					
(ii) Percentage	9.4595%		90.5405%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$174,215		\$12,650						
(ii) Difference (Col. 2 minus Col. 1)						(\$161,565)				
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	9.4595%		90.5405%							
(ii) Number	# 0.0946		# 0.9054				# 1			
e. Pending Average from Above; Commuted and Compromised less Awarded Difference										
(i) Pending Ave.		\$395,659		\$395,659						
(ii) C/C Difference		\$0		(\$161,565)						
(iii) (e-i) + (e-ii)		\$395,659		\$234,093						
(iv) Total		\$37,427		\$211,949						
(d-ii) x (e-iii)										
(v) Total of (e-iv)							\$249,377			
f. Calculation of Impact of Adjustment										
	Awarded			Pending			Total			
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average	
(i) Permanent	# 7	\$1,219,504	\$174,215	# 0.0946	\$37,427	\$395,659	# 7.0946	\$1,256,931	\$177,167	
(ii) Comm./Comp.	# 67	\$847,526	\$12,650	# 0.9054	\$211,949	\$234,093	# 67.9054	\$1,059,476	\$15,602	
(iii) Total	# 74	\$2,067,030	\$27,933	# 1.0000	\$249,377	\$249,377	# 75.0000	\$2,316,407	\$30,885	
(iv) Average Severity before Adjustment									\$32,836	
(v) Impact									(\$1,950)	

Source: Exhibit IX-A

State O. D. Severity- Social Security Offset

Surface Anthracite

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) Total	# 24	339,045	# 15	72,505	# 39	411,550	# 0	-	# 39	411,550
(ii) Average		\$14,127		\$4,834		\$10,553		\$0		\$10,553
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 24		# 15		# 39					
(ii) Percentage	61.5385%		38.4615%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$14,127		\$4,834						
(ii) Difference (Col. 2 minus Col. 1)						(\$9,293)				
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	61.5385%		38.4615%							
(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		(\$9,293)						
(iii) (e-i) + (e-ii)		\$0		\$0			limited to zero: negative offset is impossible			
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	\$339,045	\$14,127	# 0.0000	\$0	\$0	# 24.0000	\$339,045	\$14,127	
(ii) Comm./Comp.	# 15	\$72,505	\$4,834	# 0.0000	\$0	\$0	# 15.0000	\$72,505	\$4,834	
(iii) Total	# 39	\$411,550	\$10,553	# 0.0000	\$0	\$0	# 39.0000	\$411,550	\$10,553	
(iv) Average Severity before Adjustment									\$10,553	
(v) Impact									\$0	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau

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) Total	# 3	393,768	# 21	172,436	# 24	566,204	# 0	-	# 24	566,204
(ii) Average		\$131,256		\$8,211		\$23,592		\$0		\$23,592
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 3		# 21		# 24					
(ii) Percentage	12.5000%		87.5000%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$131,256		\$8,211						
(ii) Difference (Col. 2 minus Col. 1)						(\$123,045)				
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	12.5000%		87.5000%							
(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		(\$123,045)						
(iii) (e-i) + (e-ii)		\$0		\$0						limited to zero: negative offset is impossible
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	# 3	\$393,768	\$131,256	# 0.0000	\$0	\$0	# 3.0000	\$393,768	\$131,256	
(ii) Comm./Comp.	# 21	\$172,436	\$8,211	# 0.0000	\$0	\$0	# 21.0000	\$172,436	\$8,211	
(iii) Total	# 24	\$566,204	\$23,592	# 0.0000	\$0	\$0	# 24.0000	\$566,204	\$23,592	
(iv) Average Severity before Adjustment									\$23,592	
(v) Impact									\$0	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau

State O. D. Severity- Social Security Offset

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis		Commuted and Compromised- As Settled		Total Awarded- Permanent plus Commuted/Comp.		Pending, on Permanent Basis		Total Claims	
	(1) Count	Amount	(2) Count	Amount	(3) = (1) + (2) Count	Amount	(4) Count	Amount	(5) Count	Amount
a. Numbers and Amounts										
(i) Total	# 3	234,748	# 14	211,279	# 17	446,027	# 0	-	# 17	446,027
(ii) Average		\$78,249		\$15,091		\$26,237		\$0		\$26,237
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 3		# 14		# 17					
(ii) Percentage	17.6471%		82.3529%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$78,249		\$15,091						
(ii) Difference (Col. 2 minus Col. 1)						(\$63,158)				
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	17.6471%		82.3529%							
(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		(\$63,158)						
(iii) (e-i) + (e-ii)		\$0		\$0			limited to zero: negative offset is impossible			
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	# 3	\$234,748	\$78,249	# 0.0000	\$0	\$0	# 3.0000	\$234,748	\$78,249	
(ii) Comm./Comp.	# 14	\$211,279	\$15,091	# 0.0000	\$0	\$0	# 14.0000	\$211,279	\$15,091	
(iii) Total	# 17	\$446,027	\$26,237	# 0.0000	\$0	\$0	# 17.0000	\$446,027	\$26,237	
(iv) Average Severity before Adjustment									\$26,237	
(v) Impact									\$0	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau

State O. D. Severity- Private Pension Offset

Underground Anthracite

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) Total	# 6	1,299,249	# 3	93,910	# 9	1,393,159	# 0	-	# 9	1,393,159
(ii) Average		\$216,542		\$31,303		\$154,795		\$0		\$154,795
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 6		# 3		# 9					
(ii) Percentage	66.6667%		33.3333%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$216,542		\$31,303						
(ii) Difference (Col. 2 minus Col. 1)						(\$185,238)				
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		(\$185,238)						
(iii) (e-i) + (e-ii)		\$0		\$0						limited to zero: negative offset is impossible
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	# 6	\$1,299,249	\$216,542	# 0.0000	\$0	\$0	# 6.0000	\$1,299,249	\$216,542	
(ii) Comm./Comp.	# 3	\$93,910	\$31,303	# 0.0000	\$0	\$0	# 3.0000	\$93,910	\$31,303	
(iii) Total	# 9	\$1,393,159	\$154,795	# 0.0000	\$0	\$0	# 9.0000	\$1,393,159	\$154,795	
(iv) Average Severity before Adjustment									\$154,795	
(v) Impact									\$0	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau

Exhibit VII-E-c

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State O. D. Severity- Private Pension Offset

Underground Bituminous

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) Total	# 7	2,622,720	# 67	3,923,840	# 74	6,546,560	# 1	336,492	# 75	6,883,052
(ii) Average		\$374,674		\$58,565		\$88,467		\$336,492		\$91,774
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 7		# 67		# 74					
(ii) Percentage	9.4595%		90.5405%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$374,674		\$58,565						
(ii) Difference (Col. 2 minus Col. 1)						(\$316,110)				
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	9.4595%		90.5405%							
(ii) Number	# 0.0946		# 0.9054				# 1			
e. Pending Average from Above; Commuted and Compromised less Awarded Difference										
(i) Pending Ave.		\$336,492		\$336,492						
(ii) C/C Difference		\$0		(\$316,110)						
(iii) (e-i) + (e-ii)		\$336,492		\$20,382						
(iv) Total		\$31,830		\$18,454						
(d-ii) x (e-iii)										
(v) Total of (e-iv)							\$50,285			
f. Calculation of Impact of Adjustment										
	Awarded			Pending			Total			
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average	
(i) Permanent	# 7	\$2,622,720	\$374,674	# 0.0946	\$31,830	\$336,492	# 7.0946	\$2,654,551	\$374,165	
(ii) Comm./Comp.	# 67	\$3,923,840	\$58,565	# 0.9054	\$18,454	\$20,382	# 67.9054	\$3,942,294	\$58,056	
(iii) Total	# 74	\$6,546,560	\$88,467	# 1.0000	\$50,285	\$50,285	# 75.0000	\$6,596,845	\$87,958	
(iv) Average Severity before Adjustment									\$91,774	
(v) Impact									(\$3,816)	

Source: Exhibit IX-A

State O. D. Severity- Private Pension Offset

Surface Anthracite

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) Total	# 24	4,309,014	# 15	906,531	# 39	5,215,545	# 0	-	# 39	5,215,545
(ii) Average		\$179,542		\$60,435		\$133,732		\$0		\$133,732
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 24		# 15		# 39					
(ii) Percentage	61.5385%		38.4615%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$179,542		\$60,435						
(ii) Difference (Col. 2 minus Col. 1)						(\$119,107)				
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	61.5385%		38.4615%							
(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		(\$119,107)						
(iii) (e-i) + (e-ii)		\$0		\$0						limited to zero: negative offset is impossible
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	\$4,309,014	\$179,542	# 0.0000	\$0	\$0	# 24.0000	\$4,309,014	\$179,542	
(ii) Comm./Comp.	# 15	\$906,531	\$60,435	# 0.0000	\$0	\$0	# 15.0000	\$906,531	\$60,435	
(iii) Total	# 39	\$5,215,545	\$133,732	# 0.0000	\$0	\$0	# 39.0000	\$5,215,545	\$133,732	
(iv) Average Severity before Adjustment									\$133,732	
(v) Impact									\$0	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau

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) Total	# 3	1,058,581	# 21	982,905	# 24	2,041,485	# 0	-	# 24	2,041,485
(ii) Average		\$352,860		\$46,805		\$85,062		\$0		\$85,062
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 3		# 21		# 24					
(ii) Percentage	12.5000%		87.5000%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$352,860		\$46,805						
(ii) Difference (Col. 2 minus Col. 1)						(\$306,055)				
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	12.5000%		87.5000%							
(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		(\$306,055)						
(iii) (e-i) + (e-ii)		\$0		\$0			limited to zero: negative offset is impossible			
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	# 3	\$1,058,581	\$352,860	# 0.0000	\$0	\$0	# 3.0000	\$1,058,581	\$352,860	
(ii) Comm./Comp.	# 21	\$982,905	\$46,805	# 0.0000	\$0	\$0	# 21.0000	\$982,905	\$46,805	
(iii) Total	# 24	\$2,041,485	\$85,062	# 0.0000	\$0	\$0	# 24.0000	\$2,041,485	\$85,062	
(iv) Average Severity before Adjustment									\$85,062	
(v) Impact									\$0	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau
State O. D. Severity- Private Pension Offset

Exhibit VII-E-c
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Other Classes

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) Total	# 3	790,060	# 14	249,207	# 17	1,039,267	# 0	-	# 17	1,039,267
(ii) Average		\$263,353		\$17,801		\$61,133		\$0		\$61,133
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 3		# 14		# 17					
(ii) Percentage	17.6471%		82.3529%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$263,353		\$17,801						
(ii) Difference (Col. 2 minus Col. 1)						(\$245,553)				
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	17.6471%		82.3529%							
(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		(\$245,553)						
(iii) (e-i) + (e-ii)		\$0		\$0			limited to zero: negative offset is impossible			
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	# 3	\$790,060	\$263,353	# 0.0000	\$0	\$0	# 3.0000	\$790,060	\$263,353	
(ii) Comm./Comp.	# 14	\$249,207	\$17,801	# 0.0000	\$0	\$0	# 14.0000	\$249,207	\$17,801	
(iii) Total	# 17	\$1,039,267	\$61,133	# 0.0000	\$0	\$0	# 17.0000	\$1,039,267	\$61,133	
(iv) Average Severity before Adjustment									\$61,133	
(v) Impact									\$0	

Source: Exhibit IX-A

Federal Excess Before Offsets

Underground Anthracite

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) Total	# 6	5	# 3	1,248,516	# 9	1,248,521	# 0	-	# 9	1,248,521
(ii) Average		\$1		\$416,172		\$138,725		\$0		\$138,725
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 6		# 3		# 9					
(ii) Percentage	66.6667%		33.3333%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$1		\$416,172		\$416,171				
(ii) Difference (Col. 2 minus Col. 1)										
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		\$416,171						
(iii) (e-i) + (e-ii)		\$0		\$416,171						
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	# 6	\$5	\$1	# 0.0000	\$0	\$0	# 6.0000	\$5	\$1	
(ii) Comm./Comp.	# 3	\$1,248,516	\$416,172	# 0.0000	\$0	\$0	# 3.0000	\$1,248,516	\$416,172	
(iii) Total	# 9	\$1,248,521	\$138,725	# 0.0000	\$0	\$0	# 9.0000	\$1,248,521	\$138,725	
(iv) Average Severity before Adjustment									\$138,725	
(v) Impact									\$0	

Source: Exhibit IX-A

Federal Excess Before Offsets

Underground Bituminous

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) Total	# 7	701	# 67	20,718,159	# 74	20,718,860	# 1	-	# 75	20,718,860
(ii) Average		\$100		\$309,226		\$279,985		\$0		\$276,251
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 7		# 67		# 74					
(ii) Percentage	9.4595%		90.5405%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$100		\$309,226		\$309,126				
(ii) Difference (Col. 2 minus Col. 1)										
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	9.4595%		90.5405%							
(ii) Number	# 0.0946		# 0.9054				# 1			
e. Pending Average from Above; Commuted and Compromised less Awarded Difference										
(i) Pending Ave.		\$0		\$0						
(ii) C/C Difference		\$0		\$309,126						
(iii) (e-i) + (e-ii)		\$0		\$309,126						
(iv) Total		\$0		\$279,884						
(d-ii) x (e-iii)										
(v) Total of (e-iv)								\$279,884		
f. Calculation of Impact of Adjustment										
	Awarded			Pending			Total			
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average	
(i) Permanent	# 7	\$701	\$100	# 0.0946	\$0	\$0	# 7.0946	\$701	\$99	
(ii) Comm./Comp.	# 67	\$20,718,159	\$309,226	# 0.9054	\$279,884	\$309,126	# 67.9054	\$20,998,043	\$309,225	
(iii) Total	# 74	\$20,718,860	\$279,985	# 1.0000	\$279,884	\$279,884	# 75.0000	\$20,998,745	\$279,983	
(iv) Average Severity before Adjustment									\$276,251	
(v) Impact									\$3,732	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau

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) Total	# 24	53,093	# 15	3,591,184	# 39	3,644,277	# 0	-	# 39	3,644,277
(ii) Average		\$2,212		\$239,412		\$93,443		\$0		\$93,443
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 24		# 15		# 39					
(ii) Percentage	61.5385%		38.4615%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$2,212		\$239,412		\$237,200				
(ii) Difference (Col. 2 minus Col. 1)										
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	61.5385%		38.4615%							
(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		\$237,200						
(iii) (e-i) + (e-ii)		\$0		\$237,200						
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	\$53,093	\$2,212	# 0.0000	\$0	\$0	# 24.0000	\$53,093	\$2,212	
(ii) Comm./Comp.	# 15	\$3,591,184	\$239,412	# 0.0000	\$0	\$0	# 15.0000	\$3,591,184	\$239,412	
(iii) Total	# 39	\$3,644,277	\$93,443	# 0.0000	\$0	\$0	# 39.0000	\$3,644,277	\$93,443	
(iv) Average Severity before Adjustment									\$93,443	
(v) Impact									\$0	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau

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) Total	# 3	0	# 21	5,910,499	# 24	5,910,499	# 0	-	# 24	5,910,499
(ii) Average		\$0		\$281,452		\$246,271		\$0		\$246,271
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 3		# 21		# 24					
(ii) Percentage	12.5000%		87.5000%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$0		\$281,452		\$281,452				
(ii) Difference (Col. 2 minus Col. 1)										
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	12.5000%		87.5000%							
(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		\$281,452						
(iii) (e-i) + (e-ii)		\$0		\$281,452						
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	# 3	\$0	\$0	# 0.0000	\$0	\$0	# 3.0000	\$0	\$0	
(ii) Comm./Comp.	# 21	\$5,910,499	\$281,452	# 0.0000	\$0	\$0	# 21.0000	\$5,910,499	\$281,452	
(iii) Total	# 24	\$5,910,499	\$246,271	# 0.0000	\$0	\$0	# 24.0000	\$5,910,499	\$246,271	
(iv) Average Severity before Adjustment									\$246,271	
(v) Impact									\$0	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau

Exhibit VII-E-d

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Federal Excess Before Offsets

Other Classes

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) Total	# 3	6	# 14	4,614,263	# 17	4,614,269	# 0	-	# 17	4,614,269
(ii) Average		\$2		\$329,590		\$271,428		\$0		\$271,428
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 3		# 14		# 17					
(ii) Percentage	17.6471%		82.3529%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$2		\$329,590						
(ii) Difference (Col. 2 minus Col. 1)						\$329,588				
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	17.6471%		82.3529%							
(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		\$329,588						
(iii) (e-i) + (e-ii)		\$0		\$329,588						
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	# 3	\$6	\$2	# 0.0000	\$0	\$0	# 3.0000	\$6	\$2	
(ii) Comm./Comp.	# 14	\$4,614,263	\$329,590	# 0.0000	\$0	\$0	# 14.0000	\$4,614,263	\$329,590	
(iii) Total	# 17	\$4,614,269	\$271,428	# 0.0000	\$0	\$0	# 17.0000	\$4,614,269	\$271,428	
(iv) Average Severity before Adjustment									\$271,428	
(v) Impact									\$0	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau
Federal Excess After Social Security Offset

Exhibit VII-E-e
Page 1
Underground Anthracite

Adjustment to Severity for Possible Commutation/Compromise of Pending Claims

	Awarded- Permanent Basis		Commuted and Compromised- As Settled		Total Awarded- Permanent plus Commuted/Comp.		Pending, on Permanent Basis		Total Claims	
	(1) Count	Amount	(2) Count	Amount	(3) = (1) + (2) Count	Amount	(4) Count	Amount	Count	Amount
a. Numbers and Amounts										
(i) Total	# 6	77,331	# 3	1,248,516	# 9	1,325,848	# 0	-	# 9	1,325,848
(ii) Average		\$12,889		\$416,172		\$147,316		\$0		\$147,316
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 6		# 3		# 9					
(ii) Percentage	66.6667%		33.3333%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$12,889		\$416,172						
(ii) Difference (Col. 2 minus Col. 1)					\$403,284					
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		\$403,284						
(iii) (e-i) + (e-ii)		\$0		\$403,284						
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	# 6	\$77,331	\$12,889	# 0.0000	\$0	\$0	# 6.0000	\$77,331	\$12,889	
(ii) Comm./Comp.	# 3	\$1,248,516	\$416,172	# 0.0000	\$0	\$0	# 3.0000	\$1,248,516	\$416,172	
(iii) Total	# 9	\$1,325,848	\$147,316	# 0.0000	\$0	\$0	# 9.0000	\$1,325,848	\$147,316	
(iv) Average Severity before Adjustment									\$147,316	
(v) Impact									\$0	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau
Federal Excess After Social Security Offset

Exhibit VII-E-e
Page 2
Underground Bituminous

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) Total	# 7	\$111,265	# 67	\$21,238,340	# 74	\$21,349,604	# 1	\$1,970	# 75	\$21,351,575
(ii) Average		\$15,895		\$316,990		\$288,508		\$1,970		\$284,688
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 7		# 67		# 74					
(ii) Percentage	9.4595%		90.5405%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$15,895		\$316,990						
(ii) Difference (Col. 2 minus Col. 1)						\$301,095				
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	9.4595%		90.5405%							
(ii) Number	# 0.0946		# 0.9054				# 1			
e. Pending Average from Above; Commuted and Compromised less Awarded Difference										
(i) Pending Ave.		\$1,970		\$1,970						
(ii) C/C Difference		\$0		\$301,095						
(iii) (e-i) + (e-ii)		\$1,970		\$303,066						
(iv) Total		\$186		\$274,397						
(d-ii) x (e-iii)										
(v) Total of (e-iv)							\$274,584			
f. Calculation of Impact of Adjustment										
	Awarded			Pending			Total			
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average	
(i) Permanent	# 7	\$111,265	\$15,895	# 0.0946	\$186	\$1,970	# 7.0946	\$111,451	\$15,709	
(ii) Comm./Comp.	# 67	\$21,238,340	\$316,990	# 0.9054	\$274,397	\$303,066	# 67.9054	\$21,512,737	\$316,804	
(iii) Total	# 74	\$21,349,604	\$288,508	# 1.0000	\$274,584	\$274,584	# 75.0000	\$21,624,188	\$288,323	
(iv) Average Severity before Adjustment									\$284,688	
(v) Impact									\$3,635	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau
Federal Excess After Social Security Offset

Exhibit VII-E-e
Page 3
Surface Anthracite

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) Total	# 24	\$56,574	# 15	\$3,591,184	# 39	\$3,647,757	# 0	-	# 39	\$3,647,757
(ii) Average		\$2,357		\$239,412		\$93,532		\$0		\$93,532
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 24		# 15		# 39					
(ii) Percentage	61.5385%		38.4615%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$2,357		\$239,412		\$237,055				
(ii) Difference (Col. 2 minus Col. 1)										
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	61.5385%		38.4615%							
(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		\$237,055						
(iii) (e-i) + (e-ii)		\$0		\$237,055						
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	\$56,574	\$2,357	# 0.0000	\$0	\$0	# 24.0000	\$56,574	\$2,357	
(ii) Comm./Comp.	# 15	\$3,591,184	\$239,412	# 0.0000	\$0	\$0	# 15.0000	\$3,591,184	\$239,412	
(iii) Total	# 39	\$3,647,757	\$93,532	# 0.0000	\$0	\$0	# 39.0000	\$3,647,757	\$93,532	
(iv) Average Severity before Adjustment									\$93,532	
(v) Impact									\$0	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau
Federal Excess After Social Security Offset

Exhibit VII-E-e
Page 4
Surface Bituminous

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) Total	# 3	\$58,109	# 21	\$5,991,917	# 24	\$6,050,026	# 0	-	# 24	\$6,050,026
(ii) Average		\$19,370		\$285,329		\$252,084		\$0		\$252,084
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 3		# 21		# 24					
(ii) Percentage	12.5000%		87.5000%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$19,370		\$285,329		\$265,960				
(ii) Difference (Col. 2 minus Col. 1)										
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	12.5000%		87.5000%							
(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		\$265,960						
(iii) (e-i) + (e-ii)		\$0		\$265,960						
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	# 3	\$58,109	\$19,370	# 0.0000	\$0	\$0	# 3.0000	\$58,109	\$19,370	
(ii) Comm./Comp.	# 21	\$5,991,917	\$285,329	# 0.0000	\$0	\$0	# 21.0000	\$5,991,917	\$285,329	
(iii) Total	# 24	\$6,050,026	\$252,084	# 0.0000	\$0	\$0	# 24.0000	\$6,050,026	\$252,084	
(iv) Average Severity before Adjustment									\$252,084	
(v) Impact									\$0	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau
Federal Excess After Social Security Offset

Exhibit VII-E-e
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Other Classes

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) Total	# 3	57,100	# 14	4,794,868	# 17	4,851,968	# 0	-	# 17	4,851,968
(ii) Average		\$19,033		\$342,491		\$285,410		\$0		\$285,410
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 3		# 14		# 17					
(ii) Percentage	17.6471%		82.3529%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$19,033		\$342,491						
(ii) Difference (Col. 2 minus Col. 1)						\$323,457				
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	17.6471%		82.3529%							
(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		\$323,457						
(iii) (e-i) + (e-ii)		\$0		\$323,457						
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	# 3	\$57,100	\$19,033	# 0.0000	\$0	\$0	# 3.0000	\$57,100	\$19,033	
(ii) Comm./Comp.	# 14	\$4,794,868	\$342,491	# 0.0000	\$0	\$0	# 14.0000	\$4,794,868	\$342,491	
(iii) Total	# 17	\$4,851,968	\$285,410	# 0.0000	\$0	\$0	# 17.0000	\$4,851,968	\$285,410	
(iv) Average Severity before Adjustment									\$285,410	
(v) Impact									\$0	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau

Exhibit VII-E-f

Page 1

Federal Excess After Social Security and Private Pension Offsets

Underground Anthracite

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) Total	# 6	421,998	# 3	1,320,535	# 9	1,742,533	# 0	-	# 9	1,742,533
(ii) Average		\$70,333		\$440,178		\$193,615		\$0		\$193,615
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 6		# 3		# 9					
(ii) Percentage	66.6667%		33.3333%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$70,333		\$440,178		\$369,845				
(ii) Difference (Col. 2 minus Col. 1)										
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		\$369,845						
(iii) (e-i) + (e-ii)		\$0		\$369,845						
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	# 6	\$421,998	\$70,333	# 0.0000	\$0	\$0	# 6.0000	\$421,998	\$70,333	
(ii) Comm./Comp.	# 3	\$1,320,535	\$440,178	# 0.0000	\$0	\$0	# 3.0000	\$1,320,535	\$440,178	
(iii) Total	# 9	\$1,742,533	\$193,615	# 0.0000	\$0	\$0	# 9.0000	\$1,742,533	\$193,615	
(iv) Average Severity before Adjustment									\$193,615	
(v) Impact									\$0	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau

Exhibit VII-E-f

Page 2

Federal Excess After Social Security and Private Pension Offsets

Underground Bituminous

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) Total	# 7	531,531	# 67	23,621,944	# 74	24,153,475	# 1	90,486	# 75	24,243,961
(ii) Average		\$75,933		\$352,566		\$326,398		\$90,486		\$323,253
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 7		# 67		# 74					
(ii) Percentage	9.4595%		90.5405%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$75,933		\$352,566		\$276,633				
(ii) Difference (Col. 2 minus Col. 1)										
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	9.4595%		90.5405%							
(ii) Number	# 0.0946		# 0.9054				# 1			
e. Pending Average from Above; Commuted and Compromised less Awarded Difference										
(i) Pending Ave.		\$90,486		\$90,486						
(ii) C/C Difference		\$0		\$276,633						
(iii) (e-i) + (e-ii)		\$90,486		\$367,120						
(iv) Total		\$8,560		\$332,392						
(d-ii) x (e-iii)										
(v) Total of (e-iv)								\$340,952		
f. Calculation of Impact of Adjustment										
	Awarded			Pending			Total			
	Count	Amount	Average	Count	Amount	Average	Count	Amount	Average	
(i) Permanent	# 7	\$531,531	\$75,933	# 0.0946	\$8,560	\$90,486	# 7.0946	\$540,090	\$76,127	
(ii) Comm./Comp.	# 67	\$23,621,944	\$352,566	# 0.9054	\$332,392	\$367,120	# 67.9054	\$23,954,336	\$352,760	
(iii) Total	# 74	\$24,153,475	\$326,398	# 1.0000	\$340,952	\$340,952	# 75.0000	\$24,494,426	\$326,592	
(iv) Average Severity before Adjustment									\$323,253	
(v) Impact									\$3,340	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau

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) Total	# 24	137,069	# 15	4,136,872	# 39	4,273,941	# 0	-	# 39	4,273,941
(ii) Average		\$5,711		\$275,791		\$109,588		\$0		\$109,588
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 24		# 15		# 39					
(ii) Percentage	61.5385%		38.4615%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$5,711		\$275,791						
(ii) Difference (Col. 2 minus Col. 1)						\$270,080				
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	61.5385%		38.4615%							
(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		\$270,080						
(iii) (e-i) + (e-ii)		\$0		\$270,080						
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	\$137,069	\$5,711	# 0.0000	\$0	\$0	# 24.0000	\$137,069	\$5,711	
(ii) Comm./Comp.	# 15	\$4,136,872	\$275,791	# 0.0000	\$0	\$0	# 15.0000	\$4,136,872	\$275,791	
(iii) Total	# 39	\$4,273,941	\$109,588	# 0.0000	\$0	\$0	# 39.0000	\$4,273,941	\$109,588	
(iv) Average Severity before Adjustment									\$109,588	
(v) Impact									\$0	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau

Exhibit VII-E-f

Page 4

Federal Excess After Social Security and Private Pension Offsets

Surface Bituminous

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) Total	# 3	230,569	# 21	6,720,590	# 24	6,951,159	# 0	-	# 24	6,951,159
(ii) Average		\$76,856		\$320,028		\$289,632		\$0		\$289,632
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 3		# 21		# 24					
(ii) Percentage	12.5000%		87.5000%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$76,856		\$320,028		\$243,172				
(ii) Difference (Col. 2 minus Col. 1)						\$243,172				
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	12.5000%		87.5000%							
(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		\$243,172						
(iii) (e-i) + (e-ii)		\$0		\$243,172						
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	# 3	\$230,569	\$76,856	# 0.0000	\$0	\$0	# 3.0000	\$230,569	\$76,856	
(ii) Comm./Comp.	# 21	\$6,720,590	\$320,028	# 0.0000	\$0	\$0	# 21.0000	\$6,720,590	\$320,028	
(iii) Total	# 24	\$6,951,159	\$289,632	# 0.0000	\$0	\$0	# 24.0000	\$6,951,159	\$289,632	
(iv) Average Severity before Adjustment									\$289,632	
(v) Impact									\$0	

Source: Exhibit IX-A

Coal Mine Compensation Rating Bureau

Exhibit VII-E-f

Page 5

Federal Excess After Social Security and Private Pension Offsets

Other Classes

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) Total	# 3	168,289	# 14	4,939,810	# 17	5,108,100	# 0	-	# 17	5,108,100
(ii) Average		\$56,096		\$352,844		\$300,476		\$0		\$300,476
b. Percentage of Awarded and Commuted/Compromised within Total Awarded										
(i) Number	# 3		# 14		# 17					
(ii) Percentage	17.6471%		82.3529%		100%					
c. Difference Between Average Awarded Permanent Claim and Average Commuted/Compromised Claim										
(i) Average		\$56,096		\$352,844		\$296,747				
(ii) Difference (Col. 2 minus Col. 1)										
d. Pending claims Split into Awarded and Commuted/Comp using Awarded Mix										
(i) Awarded Mix	17.6471%		82.3529%							
(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		\$296,747						
(iii) (e-i) + (e-ii)		\$0		\$296,747						
(iv) Total		\$0		\$0						
(d-ii) x (e-iii)										
(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	# 3	\$168,289	\$56,096	# 0.0000	\$0	\$0	# 3.0000	\$168,289	\$56,096	
(ii) Comm./Comp.	# 14	\$4,939,810	\$352,844	# 0.0000	\$0	\$0	# 14.0000	\$4,939,810	\$352,844	
(iii) Total	# 17	\$5,108,100	\$300,476	# 0.0000	\$0	\$0	# 17.0000	\$5,108,100	\$300,476	
(iv) Average Severity before Adjustment									\$300,476	
(v) Impact									\$0	

Source: Exhibit IX-A

a) Average Weekly Wage (Smoothed):

	Year	U/G		Surface		Wage Level Decrease
		Anthracite	Bituminous	Anthracite	Bituminous	
Pre Act 57:	1990	\$517.23	691.63	479.85	519.76	5.1817%
	1991	533.53	715.29	494.26	536.30	5.1817%
	1992	550.35	739.75	509.10	553.38	5.1817%
	1993	567.70	765.05	524.38	570.99	5.1817%
	1994	585.60	791.22	540.12	589.17	5.1817%
Mixed Pre & Post Act 57:	1995	604.06	818.28	556.34	607.92	5.1817%
	1996	623.11	846.27	573.04	627.27	3.3220% ***
Post Act 57:	1997	642.75 *	875.21 *	590.25 *	647.24	0.0%
	1998	663.01 *	905.15 *	607.97 *	667.84	0.0%
	1999	683.92 *	936.10 *	626.22 *	689.10	0.0%
	2000	705.48 *	968.12 *	645.02 *	711.04	0.0%
	2001	727.72 *	1,001.23 *	664.38 *	733.67	0.0%
	2002	750.66 *	1,035.48 *	684.33 *	757.03	0.0%
	2003	774.32 *	1,070.90 *	704.88 *	781.12	0.0%
	2004	798.73 *	1,107.52 *	726.04 *	805.99	0.0%
	2005	823.92 *	1,145.40 *	747.84 *	831.64	0.0%
	2006	849.89 *	1,184.58 *	770.29 *	858.12	0.0%
	2007	876.68 *	1,225.09 *	793.41 *	885.43	0.0%
	2008	904.32 *	1,267.00 *	817.23 *	913.62	0.0%
	2009	932.83 *	1,310.33 *	841.77 *	942.70	0.0%
	2010	962.24 *	1,355.15 *	867.04 *	972.71	0.0%
	2011	992.57 *	1,401.50 *	893.07 *	1,003.67	0.0%
	2012	1,023.86 *	1,449.43 *	919.88 *	1,035.62	0.0%
	2013	1,056.14 *	1,499.01 *	947.50 *	1,068.59	0.0%
	2014	1,089.44 *	1,550.28 *	975.95 *	1,102.60	0.0%
	2015	1,123.78 *	1,603.30 *	1,005.25 *	1,137.70	0.0%
	2016	1,159.21 *	1,658.14 *	1,035.43 *	1,173.92	0.0%
2017	1,195.76 *	1,714.85 *	1,066.51 *	1,211.29	0.0%	
2018	1,233.45 *	1,773.50 *	1,098.53 *	1,249.84	0.0%	
2019	1,272.34 *	1,834.16 *	1,131.51 *	1,289.63	0.0%	
2020	1,312.45 *	1,896.89 *	1,165.49 *	1,330.68	0.0%	
2021	1,353.82 *	1,961.77 *	1,200.48 *	1,373.04	0.0%	
2022	1,396.50 *	2,028.87 *	1,236.52 *	1,416.75	0.0%	
2023	1,440.53 *	2,098.26 *	1,273.64 *	1,461.84	0.0%	
Average:					1.0121%	
Projected to:						
Pre Act 57:	4/1/2026	1,656.21	2,341.24	1,516.38	1,677.82	
Post Act 57:	4/1/2026	1,570.39 *	2,219.93 *	1,437.80 *	1,590.88	

b) Conversion Calculation:

Conversion Factor:	5.1817%	5.1817%	5.1817%	5.1817%	Note:
Post Act 57:	1996	\$590.82	\$802.42	\$543.35	\$594.77 Pre Act 57 times (1.0 - Factor)
Post Act 57:	1997	609.45	829.86	559.66	613.70 Pre Act 57 times (1.0 - Factor)
Post Act 57:	1998	628.66	858.24	576.46	633.24 Pre Act 57 times (1.0 - Factor)
Post Act 57:	1999	648.48	887.60	593.77	653.39 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2000	668.92	917.96	611.60	674.19 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2001	690.01	949.35	629.96	695.65 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2002	711.76	981.82	648.87	717.80 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2003	734.20	1,015.40	668.35	740.65 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2004	757.35	1,050.13	688.42	764.22 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2005	781.22	1,086.05	709.09	788.55 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2006	805.85	1,123.20	730.37	813.65 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2007	831.26	1,161.61	752.30	839.55 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2008	857.46	1,201.34	774.89	866.28 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2009	884.49	1,242.43	798.15	893.85 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2010	912.38	1,284.93	822.11	922.31 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2011	941.14	1,328.88	846.80	951.67 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2012	970.81	1,374.33	872.22	981.96 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2013	1,001.42	1,421.33	898.40	1,013.22 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2014	1,032.99	1,469.95	925.38	1,045.47 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2015	1,065.55	1,520.22	953.16	1,078.75 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2016	1,099.14	1,572.22	981.78	1,113.09 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2017	1,133.80	1,625.99	1,011.25	1,148.52 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2018	1,169.54	1,681.61	1,041.61	1,185.08 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2019	1,206.41	1,739.12	1,072.88	1,222.80 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2020	1,244.44	1,798.60	1,105.09	1,261.73 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2021	1,283.67	1,860.12	1,138.27	1,301.89 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2022	1,324.14	1,923.74	1,172.44	1,343.33 Pre Act 57 times (1.0 - Factor)
Post Act 57:	2023	1,365.89	1,989.54	1,207.64	1,386.09 Pre Act 57 times (1.0 - Factor)
Post Act 57:	4/1/2026	1,570.39	2,219.93	1,437.80	1,590.88 Pre Act 57 times (1.0 - Factor)

* Post Act 57 for 1997-2023 and Projected to 04/01/2026

** 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 04/01/2026 Weekly Wage - Exhibit VII-H, pages 1, 2, 3 and 4 - Column (6)

Wage level decrease - Exhibit VII-G, Page 2.

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Run Date: August 26, 2024 - 03:03:46 PM

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Effective Date - April 01, 2025

390,269.471402

COAL MINE COMPENSATION RATING BUREAU

WAGE LEVEL OFFSET (Act 57, Section 309) and PENSION PERCENTAGE

State Occupational Disease and Federal Excess

<u>Calculation of Wage Offset</u>		<u>Average Benefits</u>		State OD Claim Count
		Before <u>Offset</u>	After <u>Offset</u>	
(a) Wage Ranges				
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 \div \431.90) 94.8183%
 - (ii) Complement (1.0 minus 0.948183) 5.1817%
 - (iii) Reduced by 10% for Phase-in of Act 5 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)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Statewide	Claimants' Actual	(2) Adjusted For Act 57	(3)/(1)	(3) Ex. High & Low	(1) Adjusted To Claimants' Wage Level	(5) & (6) Adjusted Avg Wages	(8) Exponentially Fitted Wages
	Avg Wage	Avg Wage						
1990	419.00	539.87	539.87	1.2885	539.87		539.87	517.23
1991	436.00	0.00				510.68	510.68	533.53
1992	455.00	608.33	608.33	1.3370	608.33		608.33	550.35
1993	475.00	419.67	419.67	0.8835 Low		556.37	556.37	567.70
1994	493.00	0.00				577.45	577.45	585.60
1995	509.00	0.00				596.19	596.19	604.06
1996	527.00	0.00				617.27	617.27	623.11
1997	542.00	0.00				634.84	634.84	642.75
1998	561.00	0.00				657.10	657.10	663.01
1999	588.00	501.00	528.38	0.8986	528.38		528.38	683.92
2000	611.00	0.00				715.66	715.66	705.48
2001	644.00	0.00				754.31	754.31	727.72
2002	662.00	0.00				775.40	775.40	750.66
2003	675.00	0.00				790.62	790.62	774.32
2004	690.00	0.00				808.19	808.19	798.73
2005	716.00	0.00				838.65	838.65	823.92
2006	745.00	0.00				872.61	872.61	849.89
2007	779.00	0.00				912.44	912.44	876.68
2008	807.00	0.00				945.23	945.23	904.32
2009	836.00	0.00				979.20	979.20	932.83
2010	845.00	0.00				989.74	989.74	962.24
2011	858.00	1400.00	1476.51	1.7209 High		1004.97	1004.97	992.57
2012	888.00	0.00				1040.11	1040.11	1023.86
2013	917.00	1009.57	1064.74	1.1611	1064.74		1064.74	1056.14
2014	932.00	0.00				1091.65	1091.65	1089.44
2015	951.00	0.00				1113.90	1113.90	1123.78
2016	978.00	0.00				1145.53	1145.53	1159.21
2017	995.00	0.00				1165.44	1165.44	1195.76
2018	1025.00	0.00				1200.58	1200.58	1233.45
2019	1049.00	0.00				1228.69	1228.69	1272.34
2020	1081.00	0.00				1266.17	1266.17	1312.45
2021	1130.00	0.00				1323.56	1323.56	1353.82
2022	1205.00	0.00				1411.41	1411.41	1396.50
2023	1273.00	0.00				1491.06	1491.06	1440.53
2024	1325.00							

High 1.7209
Low 0.8835

Average Ratio Claimant/State - High & Low 1.1713

Projected

2025	1,378.00
2026	1,426.00
2027	1,470.00

Projected Avg. Wage at Claimants' Level

4/1/2026 1,414.00 $1,414.00 * 1.1713 =$ \$1,656.21

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)

(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 data in Col.(7)

COAL MINE COMPENSATION RATING BUREAU
Wage Level Adjustment to Current Level - State Occupational Disease Model
Bituminous Underground (1002)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Statewide	Claimants' Actual	(2) Adjusted For Act 57	(3)/(1)	(3) Ex. High & Low	(1) Adjusted To Claimants' Wage Level	(5) & (6) Adjusted Avg Wages	(8) Exponentially Fitted Wages
	Avg Wage	Avg Wage						
1990	419.00	779.92	779.92	1.8614	779.92		779.92	691.63
1991	436.00	827.00	827.00	1.8968	827.00		827.00	715.29
1992	455.00	652.04	652.04	1.4331	652.04		652.04	739.75
1993	475.00	729.40	729.40	1.5356	729.40		729.40	765.05
1994	493.00	1043.85	1043.85	2.1173	1043.85		1043.85	791.22
1995	509.00	1525.00	1525.00	2.9961 High		842.78	842.78	818.28
1996	527.00	706.64	706.64	1.3409	706.64		706.64	846.27
1997	542.00	672.19	708.92	1.3080	708.92		708.92	875.21
1998	561.00	1058.08	1115.90	1.9891	1115.90		1115.90	905.15
1999	588.00	675.00	711.89	1.2107	711.89		711.89	936.10
2000	611.00	901.03	950.27	1.5553	950.27		950.27	968.12
2001	644.00	604.79	637.84	0.9904 Low		1066.31	1066.31	1001.23
2002	662.00	800.15	843.88	1.2747	843.88		843.88	1035.48
2003	675.00	1324.39	1396.77	2.0693	1396.77		1396.77	1070.90
2004	690.00	876.68	924.59	1.3400	924.59		924.59	1107.52
2005	716.00	912.44	962.30	1.3440	962.30		962.30	1145.40
2006	745.00	0.00				1233.54	1233.54	1184.58
2007	779.00	0.00				1289.84	1289.84	1225.09
2008	807.00	1164.02	1227.63	1.5212	1227.63		1227.63	1267.00
2009	836.00	0.00				1384.21	1384.21	1310.33
2010	845.00	0.00				1399.12	1399.12	1355.15
2011	858.00	1269.97	1339.37	1.5610	1339.37		1339.37	1401.50
2012	888.00	1310.62	1382.24	1.5566	1382.24		1382.24	1449.43
2013	917.00	1564.71	1650.22	1.7996	1650.22		1650.22	1499.01
2014	932.00	1405.33	1482.13	1.5903	1482.13		1482.13	1550.28
2015	951.00	1841.04	1941.65	2.0417	1941.65		1941.65	1603.30
2016	978.00	1566.91	1652.54	1.6897	1652.54		1652.54	1658.14
2017	995.00	0.00				1647.48	1647.48	1714.85
2018	1025.00	2108.50	2223.73	2.1695	2223.73		2223.73	1773.50
2019	1049.00	1864.38	1966.27	1.8744	1966.27		1966.27	1834.16
2020	1081.00	2283.13	2407.90	2.2275	2407.90		2407.90	1896.89
2021	1130.00	1163.98	1227.59	1.0864	1227.59		1227.59	1961.77
2022	1205.00	0.00				1995.19	1995.19	2028.87
2023	1273.00	0.00				2107.78	2107.78	2098.26
2024	1325.00							
			High	2.9961				
			Low	0.9904				
			Average Ratio Claimant/State - High & Low	1.6558				

Projected

2025	1,378.00
2026	1,426.00
2027	1,470.00

Projected Avg. Wage at Claimants' Level
 $1,414.00 * 1.6558 = \boxed{\$2,341.24}$

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)
(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 data in Col.(7)

COAL MINE COMPENSATION RATING BUREAU
Wage Level Adjustment to Current Level - State Occupational Disease Model
Anthracite Surface (1016)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Statewide	Claimants' Actual	(2) Adjusted For Act 57	(3)/(1)	(3) Ex. High & Low	(1) Adjusted To Claimants' Wage Level	(5) & (6) Adjusted Avg Wages	(8) Exponentially Fitted Wages
	Avg Wage	Avg Wage						
1990	419.00	549.31	549.31	1.3110	549.31		549.31	479.85
1991	436.00	492.75	492.75	1.1302	492.75		492.75	494.26
1992	455.00	565.40	565.40	1.2426	565.40		565.40	509.10
1993	475.00	548.61	548.61	1.1550	548.61		548.61	524.38
1994	493.00	543.95	543.95	1.1033	543.95		543.95	540.12
1995	509.00	651.71	651.71	1.2804	651.71		651.71	556.34
1996	527.00	453.71	453.71	0.8609	453.71		453.71	573.04
1997	542.00	530.26	559.24	1.0318	559.24		559.24	590.25
1998	561.00	744.92	785.63	1.4004	785.63		785.63	607.97
1999	588.00	571.47	602.70	1.0250	602.70		602.70	626.22
2000	611.00	133.68	140.99	0.2307 Low		655.24	655.24	645.02
2001	644.00	517.49	545.77	0.8475	545.77		545.77	664.38
2002	662.00	589.00	621.19	0.9384	621.19		621.19	684.33
2003	675.00	633.40	668.01	0.9897	668.01		668.01	704.88
2004	690.00	1568.35	1654.06	2.3972 High		739.96	739.96	726.04
2005	716.00	575.91	607.38	0.8483	607.38		607.38	747.84
2006	745.00	0.00				798.94	798.94	770.29
2007	779.00	733.08	773.14	0.9925	773.14		773.14	793.41
2008	807.00	0.00				865.43	865.43	817.23
2009	836.00	0.00				896.53	896.53	841.77
2010	845.00	0.00				906.18	906.18	867.04
2011	858.00	466.84	492.35	0.5738	492.35		492.35	893.07
2012	888.00	0.00				952.29	952.29	919.88
2013	917.00	0.00				983.39	983.39	947.50
2014	932.00	0.00				999.48	999.48	975.95
2015	951.00	0.00				1019.85	1019.85	1005.25
2016	978.00	1419.00	1496.55	1.5302	1496.55		1496.55	1035.43
2017	995.00	0.00				1067.04	1067.04	1066.51
2018	1025.00	0.00				1099.21	1099.21	1098.53
2019	1049.00	0.00				1124.95	1124.95	1131.51
2020	1081.00	0.00				1159.27	1159.27	1165.49
2021	1130.00	0.00				1211.81	1211.81	1200.48
2022	1205.00	0.00				1292.24	1292.24	1236.52
2023	1273.00	1258.09	1326.84	1.0423	1326.84		1326.84	1273.64
2024	1325.00							

High 2.3972
 Low 0.2307
 Average Ratio Claimant/State - High & Low 1.0724

Projected

2025	1,378.00
2026	1,426.00
2027	1,470.00

Projected Avg. Wage at Claimants' Level
 4/1/2026 1,414.00 1,414.00 * 1.0724 = \$1,516.38

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)
- (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 data in Col.(7)

COAL MINE COMPENSATION RATING BUREAU
Wage Level Adjustment to Current Level - State Occupational Disease Model
Bituminous Surface (1013)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Statewide	Claimants' Actual	(2) Adjusted For Act 57	(3)/(1)	(3) Ex. High & Low	(1) Adjusted To Claimants' Wage Level	(5) & (6) Adjusted Avg Wages	(8) Exponentially Fitted Wages
	Avg Wage	Avg Wage						
1990	419.00	481.50	481.50	1.1492	481.50		481.50	519.76
1991	436.00	595.45	595.45	1.3657	595.45		595.45	536.30
1992	455.00	652.89	652.89	1.4349	652.89		652.89	553.38
1993	475.00	705.41	705.41	1.4851 High		563.63	563.63	570.99
1994	493.00	621.91	621.91	1.2615	621.91		621.91	589.17
1995	509.00	477.90	477.90	0.9389	477.90		477.90	607.92
1996	527.00	628.07	644.84	1.2236	644.84		644.84	627.27
1997	542.00	698.16	736.31	1.3585	736.31		736.31	647.24
1998	561.00	500.00	527.32	0.9400	527.32		527.32	667.84
1999	588.00	569.19	600.30	1.0209	600.30		600.30	689.10
2000	611.00	0.00				725.00	725.00	711.04
2001	644.00	0.00				764.16	764.16	733.67
2002	662.00	0.00				785.52	785.52	757.03
2003	675.00	0.00				800.94	800.94	781.12
2004	690.00	0.00				818.74	818.74	805.99
2005	716.00	676.00	712.94	0.9957	712.94		712.94	831.64
2006	745.00	0.00				884.00	884.00	858.12
2007	779.00	0.00				924.35	924.35	885.43
2008	807.00	0.00				957.57	957.57	913.62
2009	836.00	0.00				991.98	991.98	942.70
2010	845.00	0.00				1002.66	1002.66	972.71
2011	858.00	1111.56	1172.31	1.3663	1172.31		1172.31	1003.67
2012	888.00	1157.60	1220.86	1.3748	1220.86		1220.86	1035.62
2013	917.00	0.00				1088.09	1088.09	1068.59
2014	932.00	879.70	927.77	0.9955	927.77		927.77	1102.60
2015	951.00	809.44	853.67	0.8977 Low		1128.44	1128.44	1137.70
2016	978.00	0.00				1160.48	1160.48	1173.92
2017	995.00	0.00				1180.65	1180.65	1211.29
2018	1025.00	0.00				1216.24	1216.24	1249.84
2019	1049.00	0.00				1244.72	1244.72	1289.63
2020	1081.00	0.00				1282.69	1282.69	1330.68
2021	1130.00	0.00				1340.84	1340.84	1373.04
2022	1205.00	0.00				1429.83	1429.83	1416.75
2023	1273.00	0.00				1510.52	1510.52	1461.84
2024	1325.00							

High 1.4851
Low 0.8977
Average Ratio Claimant/State - High & Low 1.1866

Projected

2025	1,378.00
2026	1,426.00
2027	1,470.00

Projected Avg. Wage at Claimants' Level

4/1/2026 1,414.00 $1,414.00 * 1.1866 =$ \$1,677.82

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)
- (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 data in Col.(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.

<u>Year</u>	<u>Annual Changes</u>
1995	2.6%
1996	2.9%
1997	2.1%
1998	1.3%
1999	2.5%
2000	3.5%
2001	2.6%
2002	1.4%
2003	2.1%
2004	2.7%
2005	4.1%
2006	3.3%
2007	2.3%
2008	5.8%
2009	0.0%
2010	0.0%
2011	3.6%
2012	1.7%
2013	1.5%
2014	1.7%
2015	0.0%
2016	0.3%
2017	2.0%
2018	2.8%
2019	1.6%
2020	1.3%
2021	5.9%
2022	8.7%
2023	3.2%
2024	2.5%
Average All years	2.5%
Average latest 10 years	2.8%
Average latest 5 years	4.3%
Average latest 3 years	4.8%
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.

Year	Monthly Wage Amounts Break Points:						Annual	
	90%	Percent	Plus	Percent	Plus	Percent	SS Wage	Percent
	of First:	Change	32% of next:	Change	15% of next:	Change	Base	Change
1995	426		2,141		2,533		61,200	
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%
2016	856	3.6%	4,301	3.5%	4,718	-3.6%	118,500	0.0%
2017	885	3.4%	4,451	3.5%	5,264	11.6%	127,200	7.3%
2018	895	1.1%	4,502	1.1%	5,303	0.7%	128,400	0.9%
2019	926	3.5%	4,657	3.4%	5,492	3.6%	132,900	3.5%
2020	960	3.7%	4,825	3.6%	5,690	3.6%	137,700	3.6%
2021	996	3.8%	5,006	3.8%	5,898	3.7%	142,800	3.7%
2022	1,024	2.8%	5,148	2.8%	6,078	3.1%	147,000	2.9%
2023	1,115	8.9%	5,606	8.9%	6,629	9.1%	160,200	9.0%
2024	1,174	5.3%	5,904	5.3%	6,972	5.2%	168,600	5.2%
2025	1,226	4.4%	6,165	4.4%	7,284	4.5%	176,100	4.4%
Average All years		3.6%		3.6%		3.6%		3.6%
Average latest 10 years		4.0%		4.0%		4.1%		4.1%
Average latest 5 years		5.0%		5.0%		5.1%		5.1%
Average latest 3 years		6.2%		6.2%		6.2%		6.2%
Last Year's Selection		2.5%		2.5%		2.5%		2.5%
Selection		2.5%		2.5%		2.5%		2.5%
<u>Projections</u>		<u>Selected</u>		<u>Selected</u>		<u>Selected</u>		<u>Selected</u>
2025	1,226	Actual	6,165	Actual	7,284	Actual	176,100	Actual
2026	1,257	2.5%	6,319	2.5%	7,466	2.5%	180,500	2.5%
2027	1,288	2.5%	6,477	2.5%	7,653	2.5%	185,000	2.5%
Average Break Point	1,249		6,281		7,421		179,400	
For Policies effective between 4-1-2025 and 4-1-2026								

Note: Weighted average of the three calendar years: 2025, 2026, 2027.
 Weights: 2025 28.125%
 2026 68.750%
 2027 3.125%
 100.00%

Notes:

The above weights assume 1-year policies effective between 4-1-2025 and 4-1-2026
 E.G.: 28.125% of the losses will occur between 4-1-2025 and 12-31-2025.
 68.750% of the losses will occur between 1-1-2026 and 12-31-2026.
 3.125% of the losses will occur between 1-1-2027 and 3-31-2027.

Source: Social Security 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 4-1-2026 with a 4-1-2025 filing effective date.)

	Yearly <u>Maximum</u>	Monthly Wages		
		<u>First Break Point</u>	<u>Second Break Point</u>	<u>Third Break Point</u>
Wage Amount:	179,400	1,249	6,281	7,421
Factor:		90%	32%	15%

II. Example Calculations

<u>Example Number</u>	<u>Monthly Wage</u>	<u>Adjusted Monthly Wage (a)</u>	PIA at each Breakpoint			<u>Total PIA</u>
			<u>First (b)</u>	<u>Second (c)</u>	<u>Third (d)</u>	
1	2,000	2,000	1,249 <u>90%</u> 1,124	751 <u>32%</u> 240	0 <u>15%</u> 0	1,364
2	4,000	4,000	1,249 <u>90%</u> 1,124	2,751 <u>32%</u> 880	0 <u>15%</u> 0	2,004
3	6,000	6,000	1,249 <u>90%</u> 1,124	4,751 <u>32%</u> 1,520	0 <u>15%</u> 0	2,644
4	8,000	8,000	1,249 <u>90%</u> 1,124	6,281 <u>32%</u> 2,010	470 <u>15%</u> 71	3,205
5	10,000	10,000	1,249 <u>90%</u> 1,124	6,281 <u>32%</u> 2,010	2,470 <u>15%</u> 371	3,505
6	12,000	12,000	1,249 <u>90%</u> 1,124	6,281 <u>32%</u> 2,010	4,470 <u>15%</u> 671	3,805

Notes:

- (a) Monthly Wage limited to Monthly Maximum ($\$179,400/12 = \$12,000$)
- (b) minimum of adjusted monthly wage and \$1249
- (c) minimum of (adjusted monthly wage less \$1249) and \$6,281
- (d) minimum of (adjusted monthly wage less \$1249 less \$6,281) and \$7,421

Source: Exhibit VII-J, Page 2

ANTHRACITE UNDERGROUND (0160)

Year	Counts				(5) Pending Awarded <u>(3) * 30%</u>	(6) Denied Reopened # 0.00	(7) Denied Awarded # 0.00	(8) Ultimate Awarded <u>(2)+(5)+(7)</u> # 0.00	(9) Ultimate Denied <u>(1)-(8)</u> # 0.00	(10) IBNR # 0.0000	(11) IBNR Awarded <u>(10)xAwd Ratio</u> # 0.0000
	(1) Reported # 0	(2) Awarded # 0	(3) Pending # 0	(4) Denied # 0							
2004	1	1	-	-	-	-	1.00	-	-	-	-
2005	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-	-	0.0160	0.0065
Total	1	1	-	-	-	-	1.00	-	-	0.0160	0.0065

Year	(12) Total Awarded <u>(8)+(11)</u> # 0.0000	(13) Payroll (\$M) <u>(12)/(13)</u> \$ 1.3453	(14) Frequency <u>(12)/(13)</u> -	(15) Statewide Average Weekly Wage 690	(16) Adjustment Factor 1.089	(17) Estimated Miner Years 34.4	(18) Frequency Per 100 Miner Years -
2004	1.0000	0.3819	2.6185	917	1.089	7.4	13.5135
2005	-	0.2588	-	932	1.089	4.9	-
2006	-	0.2543	-	951	1.089	4.7	-
2007	-	0.1638	-	978	1.089	3.0	-
2008	-	0.2524	-	995	1.089	4.5	-
2009	-	0.1833	-	1,025	1.089	3.2	-
2010	-	0.1794	-	1,049	1.089	3.0	-
2011	-	0.2997	-	1,081	1.089	4.9	-
2012	-	0.2325	-	1,130	1.089	3.6	-
2013	-	0.0734	-	1,205	1.089	1.1	-
2014	-	0.2325	-	1,130	1.089	3.6	-
2015	-	0.0734	-	1,205	1.089	1.1	-
2016	-	0.2325	-	1,130	1.089	3.6	-
2017	-	0.0734	-	1,205	1.089	1.1	-
2018	-	0.2325	-	1,130	1.089	3.6	-
2019	-	0.0734	-	1,205	1.089	1.1	-
2020	-	0.2325	-	1,130	1.089	3.6	-
2021	-	0.0734	-	1,205	1.089	1.1	-
2022	-	0.2325	-	1,130	1.089	3.6	-
2023	0.0065	0.2529	0.0258	1,273	1.089	3.5	0.1861
Total	1.0065	15.4597	0.0651			333.7	0.3016

Sources: Cols.(1) to (4): CMCRB Claims Database
 Col.(6): (0.05)xCol(4)
 Col.(7): (1.00)xCol(6)
 Col.(10): 40% of Exh. VII-C
 Col.(13): Exh. X-A, Page 3

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: 0.4062

BITUMINOUS UNDERGROUND(0158)

Year	Counts				(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
	(1) Reported # 1	(2) Awarded # 0	(3) Pending # 0	(4) Denied # 1							
2004	2	1	-	1	-	0.05	0.05	1.05	0.95	-	-
2005	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-
2007	2	1	-	1	-	0.05	0.05	1.05	0.95	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	1	1	-	-	-	-	-	1.00	-	-	-
2010	2	2	-	-	-	-	-	2.00	-	-	-
2011	3	1	-	2	-	0.10	0.10	1.10	1.90	-	-
2012	5	3	-	2	-	0.10	0.10	3.10	1.90	-	-
2013	5	2	1	2	0.30	0.10	0.10	2.40	2.60	-	-
2014	6	2	1	3	0.30	0.15	0.15	2.45	3.55	-	-
2015	4	-	-	4	-	0.20	0.20	0.20	3.80	-	-
2016	-	-	-	-	-	-	-	-	-	0.0193	0.0079
2017	4	1	1	2	0.30	0.10	0.10	1.40	2.60	0.1546	0.0628
2018	1	-	-	1	-	0.05	0.05	0.05	0.95	0.3009	0.1222
2019	1	-	1	-	0.30	-	-	0.30	0.70	0.3526	0.1432
2020	2	1	-	1	-	0.05	0.05	1.05	0.95	0.4775	0.1939
2021	-	-	-	-	-	-	-	-	-	0.6733	0.2735
2022	-	-	-	-	-	-	-	-	-	1.0530	0.4277
2023	-	-	-	-	-	-	-	-	-	-	-
Total	39	15	4	20	1.20	1.00	1.00	17.20	21.80	3.0311	1.2312

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
2004	0.0500	46.0739	0.0011	690	1.550	828.5	0.0060
2005	1.0500	66.2758	0.0158	716	1.550	1,148.4	0.0914
2006	-	70.4659	-	745	1.550	1,173.5	-
2007	-	79.9043	-	779	1.550	1,272.6	-
2008	1.0500	101.3540	0.0104	807	1.550	1,558.2	0.0674
2009	-	101.3481	-	836	1.550	1,504.1	-
2010	1.0000	125.3936	0.0080	845	1.550	1,841.1	0.0543
2011	2.0000	148.4857	0.0135	858	1.550	2,147.1	0.0931
2012	1.1000	153.6189	0.0072	888	1.550	2,146.3	0.0513
2013	3.1000	145.1463	0.0214	917	1.550	1,963.8	0.1579
2014	2.4000	183.4320	0.0131	932	1.550	2,441.9	0.0983
2015	2.4500	140.5703	0.0174	951	1.550	1,833.9	0.1336
2016	0.2000	118.5455	0.0017	978	1.550	1,503.9	0.0133
2017	0.0079	172.7088	0.0000	995	1.550	2,153.6	0.0004
2018	1.4628	180.5998	0.0081	1,025	1.550	2,186.0	0.0669
2019	0.1722	178.0190	0.0010	1,049	1.550	2,105.5	0.0082
2020	0.4432	139.2175	0.0032	1,081	1.550	1,597.8	0.0277
2021	1.2439	129.3266	0.0096	1,130	1.550	1,420.0	0.0876
2022	0.2735	136.8570	0.0020	1,205	1.550	1,409.1	0.0194
2023	0.4277	145.9209	0.0029	1,273	1.550	1,422.2	0.0301
Total	18.4312	2,563.2639	0.0072			33,657.5	0.0548

Sources: Cols.(1) to (4): CMCRB Claims Database
 Col.(6): (0.05)xCol(4)
 Col.(7): (1.00)xCol(6)
 Col.(10): 40% of Exh. VII-C
 Col.(13): Exh. X-A, Page 3

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: 0.4062

ANTHRACITE SURFACE(0153)

Year	Counts				(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
	(1) Reported # 1	(2) Awarded # 1	(3) Pending # 0	(4) Denied # 0							
2004	1	-	-	-	0.00	-	-	1.00	0.00	0.0000	0.0000
2005	-	-	-	-	-	-	-	-	-	-	-
2006	1	-	-	1	-	0.05	0.05	0.05	0.95	-	-
2007	2	-	-	2	-	0.10	0.10	0.10	1.90	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-
2011	1	1	-	-	-	-	-	1.00	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	1	-	-	1	-	0.05	0.05	0.05	0.95	-	-
2015	-	-	-	-	-	-	-	-	-	-	-
2016	1	-	1	-	0.30	-	-	0.30	0.70	-	-
2017	-	-	-	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-	-	-	-
2021	1	-	1	-	0.30	-	-	0.30	0.70	-	-
2022	-	-	-	-	-	-	-	-	-	0.0411	0.0167
2023	1	-	1	-	0.30	-	-	0.30	0.70	0.1007	0.0409
Total	9	2	3	4	0.90	0.20	0.20	3.10	5.90	0.1417	0.0576

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
2004	1.0000	12.3597	0.0809	690	1.089	316.3	0.3162
2005	-	12.1409	-	716	1.089	299.4	-
2006	0.0500	12.0653	0.0041	745	1.089	286.0	0.0175
2007	0.1000	14.8666	0.0067	779	1.089	337.0	0.0297
2008	-	16.2202	-	807	1.089	354.9	-
2009	-	15.8935	-	836	1.089	335.7	-
2010	-	13.3192	-	845	1.089	278.3	-
2011	1.0000	19.5074	0.0513	858	1.089	401.5	0.2491
2012	-	24.7347	-	888	1.089	491.9	-
2013	-	20.7200	-	917	1.089	399.0	-
2014	0.0500	18.9113	0.0026	932	1.089	358.3	0.0140
2015	-	22.2344	-	951	1.089	412.9	-
2016	0.3000	19.2571	0.0156	978	1.089	347.7	0.0863
2017	-	19.0946	-	995	1.089	338.9	-
2018	-	18.3035	-	1,025	1.089	315.3	-
2019	-	20.1652	-	1,049	1.089	339.5	-
2020	-	19.3438	-	1,081	1.089	316.0	-
2021	0.3000	21.0484	0.0143	1,130	1.089	328.9	0.0912
2022	0.0167	26.6402	0.0006	1,205	1.089	390.4	0.0043
2023	0.3409	35.6542	0.0096	1,273	1.089	494.6	0.0689
Total	3.1576	382.4802	0.0083			7,142.5	0.0442

Sources: Cols.(1) to (4): CMCRB Claims Database
 Col.(6): (0.05)xCol(4)
 Col.(7): (1.00)xCol(6)
 Col.(10): 40% of Exh. VII-C
 Col.(13): Exh. X-A, Page 3

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: 0.4062

BITUMINOUS SURFACE(0156)

Year	Counts				(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
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied							
2004	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
2005	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-
2012	2	-	-	2	-	0.10	0.10	0.10	1.90	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	2	1	-	1	-	0.05	0.05	1.05	0.95	-	-
2015	4	-	1	3	0.30	0.15	0.15	0.45	3.55	-	-
2016	-	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-	-	0.0142	0.0058
2019	-	-	-	-	-	-	-	-	-	0.0344	0.0140
2020	-	-	-	-	-	-	-	-	-	0.0470	0.0191
2021	-	-	-	-	-	-	-	-	-	0.0784	0.0318
2022	-	-	-	-	-	-	-	-	-	0.1257	0.0511
2023	-	-	-	-	-	-	-	-	-	0.1768	0.0718
Total	8	1	1	6	0.30	0.30	0.30	1.60	6.40	0.4765	0.1935

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
2004	# 0.0000	\$ 56.2173	-	690	1.089	1,438.8	-
2005	-	64.8716	-	716	1.089	1,600.0	-
2006	-	63.7985	-	745	1.089	1,512.2	-
2007	-	64.8081	-	779	1.089	1,469.1	-
2008	-	74.6012	-	807	1.089	1,632.5	-
2009	-	63.3067	-	836	1.089	1,337.2	-
2010	-	74.2552	-	845	1.089	1,551.8	-
2011	-	87.7305	-	858	1.089	1,805.6	-
2012	0.1000	77.8905	0.0013	888	1.089	1,549.0	0.0065
2013	-	62.7181	-	917	1.089	1,207.8	-
2014	1.0500	55.3686	0.0190	932	1.089	1,049.1	0.1001
2015	0.4500	42.0001	0.0107	951	1.089	779.9	0.0577
2016	-	30.1312	-	978	1.089	544.1	-
2017	-	34.2490	-	995	1.089	607.8	-
2018	0.0058	36.3052	0.0002	1,025	1.089	625.5	0.0009
2019	0.0140	36.5036	0.0004	1,049	1.089	614.5	0.0023
2020	0.0191	27.9895	0.0007	1,081	1.089	457.2	0.0042
2021	0.0318	29.8722	0.0011	1,130	1.089	466.8	0.0068
2022	0.0511	33.6910	0.0015	1,205	1.089	493.7	0.0103
2023	0.0718	34.0016	0.0021	1,273	1.089	471.7	0.0152
Total	1.7935	1,050.3097	0.0017			21,214.3	0.0085

Sources: Cols.(1) to (4): CMCRB Claims Database
 Col.(6): (0.05)xCol(4)
 Col.(7): (1.00)xCol(6)
 Col.(10): 40% of Exh. VII-C
 Col.(13): Exh. X-A, Page 3

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: 0.4062

FOUR STANDARD CLASSES

Year	Counts				(5) Pending Awarded <u>(3) * 30%</u>	(6) Denied Reopened	(7) Denied Awarded	(8) Ultimate Awarded <u>(2)+(5)+(7)</u>	(9) Ultimate Denied <u>(1)-(8)</u>	(10) IBNR	(11) IBNR Awarded <u>(10)xAwd Ratio</u>
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied							
2004	# 2	# 1	# 0	# 1	# 0.00	# 0.05	# 0.05	# 1.05	# 0.95	# 0.0000	# 0.0000
2005	2	1	-	1	-	0.05	0.05	1.05	0.95	-	-
2006	1	-	-	1	-	0.05	0.05	0.05	0.95	-	-
2007	2	-	-	2	-	0.10	0.10	0.10	1.90	-	-
2008	2	1	-	1	-	0.05	0.05	1.05	0.95	-	-
2009	-	-	-	-	-	-	-	-	-	-	-
2010	1	1	-	-	-	-	-	1.00	-	-	-
2011	3	3	-	-	-	-	-	3.00	-	-	-
2012	5	1	-	4	-	0.20	0.20	1.20	3.80	-	-
2013	6	4	-	2	-	0.10	0.10	4.10	1.90	-	-
2014	8	3	1	4	0.30	0.20	0.20	3.50	4.50	-	-
2015	10	2	2	6	0.60	0.30	0.30	2.90	7.10	-	-
2016	5	-	1	4	0.30	0.20	0.20	0.50	4.50	-	-
2017	-	-	-	-	-	-	-	-	-	0.0193	0.0079
2018	4	1	1	2	0.30	0.10	0.10	1.40	2.60	0.1688	0.0686
2019	1	-	-	1	-	0.05	0.05	0.05	0.95	0.3353	0.1362
2020	1	-	1	-	0.30	-	-	0.30	0.70	0.3996	0.1623
2021	3	1	1	1	0.30	0.05	0.05	1.35	1.65	0.5559	0.2258
2022	-	-	-	-	-	-	-	-	-	0.8401	0.3412
2023	1	-	1	-	0.30	-	-	0.30	0.70	1.3464	0.5469
Total	57	19	8	30	2.40	1.50	1.50	22.90	34.10	3.6654	1.4889

Year	(12) Total Awarded <u>(8)+(11)</u>	(13) Payroll (\$M) <u>(12)/(13)</u>	(14) Frequency <u>(12)/(13)</u>	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Per 100 Miner Years
	2004	# 1.0500	\$ 115.9962	0.0091	690		2,618.0
2005	1.0500	144.7059	0.0073	716		3,082.8	0.0341
2006	0.0500	147.7722	0.0003	745		3,005.9	0.0017
2007	0.1000	161.2415	0.0006	779		3,116.4	0.0032
2008	1.0500	194.3121	0.0054	807		3,592.4	0.0292
2009	-	181.8842	-	836		3,205.2	-
2010	1.0000	214.2676	0.0047	845		3,698.4	0.0270
2011	3.0000	256.9815	0.0117	858		4,380.1	0.0685
2012	1.2000	257.2734	0.0047	888		4,207.7	0.0285
2013	4.1000	228.9663	0.0179	917		3,578.0	0.1146
2014	3.5000	257.9707	0.0136	932		3,854.2	0.0908
2015	2.9000	205.0591	0.0141	951		3,031.4	0.0957
2016	0.5000	168.0976	0.0030	978		2,398.7	0.0208
2017	0.0079	226.3048	0.0000	995		3,104.8	0.0003
2018	1.4686	235.3918	0.0062	1,025		3,130.0	0.0469
2019	0.1862	234.8672	0.0008	1,049		3,062.5	0.0061
2020	0.4623	186.8505	0.0025	1,081		2,375.9	0.0195
2021	1.5758	180.4797	0.0087	1,130		2,219.3	0.0710
2022	0.3412	197.2616	0.0017	1,205		2,294.3	0.0149
2023	0.8469	215.8296	0.0039	1,273		2,392.0	0.0354
Total	24.3889	4,011.5135	0.0061			62,348.0	0.0391

Sources: Cols.(1) to (4): CMCRB Claims Database
 Col.(6): (0.05)xCol(4)
 Col.(7): (1.00)xCol(6)
 Col.(10): 40% of Exh. VII-C
 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

IBNR Award Ratio: 0.4062

COKE(0154)

Year	Counts				(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
	(1)	(2)	(3)	(4)							
	Reported	Awarded	Pending	Denied							
2004	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
2005	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	0.0001	0.0000
2018	-	-	-	-	-	-	-	-	-	0.0012	0.0005
2019	-	-	-	-	-	-	-	-	-	0.0023	0.0009
2020	-	-	-	-	-	-	-	-	-	0.0002	0.0001
2021	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	0.0039	0.0016

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
2004	# 0.0000	\$ 12.0491	-	690	1.089	308.4	-
2005	-	12.8610	-	716	1.089	317.2	-
2006	-	12.7374	-	745	1.089	301.9	-
2007	-	13.6699	-	779	1.089	309.9	-
2008	-	9.7611	-	807	1.089	213.6	-
2009	-	5.1736	-	836	1.089	109.3	-
2010	-	5.4357	-	845	1.089	113.6	-
2011	-	3.5991	-	858	1.089	74.1	-
2012	-	5.7381	-	888	1.089	114.1	-
2013	-	4.7919	-	917	1.089	92.3	-
2014	-	4.4644	-	932	1.089	84.6	-
2015	-	4.3404	-	951	1.089	80.6	-
2016	-	4.4351	-	978	1.089	80.1	-
2017	0.0000	4.5661	0.0000	995	1.089	81.0	0.0001
2018	0.0005	4.4847	0.0001	1,025	1.089	77.3	0.0006
2019	0.0009	4.5199	0.0002	1,049	1.089	76.1	0.0012
2020	0.0001	0.3136	0.0003	1,081	1.089	5.1	0.0019
2021	-	-	-	1,130	1.089	-	-
2022	-	-	-	1,205	1.089	-	-
2023	-	-	-	1,273	1.089	-	-
Total	0.0016	112.9411	0.0000			2,439.2	0.0001

Sources: Cols.(1) to (4): CMCRB Claims Database
 Col.(6): (0.05)xCol(4)
 Col.(7): (1.00)xCol(6)
 Col.(10): 40% of Exh. VII-C
 Col.(13): Exh. X-A, Page 3

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: 0.4062

Coal Mine Compensation Rating Bureau
Federal Excess Occupational Disease After Administration / Law Change Frequencies by Classification

AUGER(0157)

Year	Counts				(5) Pending Awarded <u>(3) * 30%</u> # 0.00	(6) Denied Reopened # 0.00	(7) Denied Awarded # 0.00	(8) Ultimate Awarded <u>(2)+(5)+(7)</u> # 0.00	(9) Ultimate Denied <u>(1)-(8)</u> # 0.00	(10) IBNR # 0.0000	(11) IBNR Awarded <u>(10)xAwd Ratio</u> # 0.0000
	(1) Reported # 0	(2) Awarded # 0	(3) Pending # 0	(4) Denied # 0							
2004	-	-	-	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-	-	0.0002	0.0001
2019	-	-	-	-	-	-	-	-	-	0.0003	0.0001
2020	-	-	-	-	-	-	-	-	-	0.0003	0.0001
2021	-	-	-	-	-	-	-	-	-	0.0002	0.0001
2022	-	-	-	-	-	-	-	-	-	0.0004	0.0001
2023	-	-	-	-	-	-	-	-	-	0.0006	0.0002
Total	-	-	-	-	-	-	-	-	-	0.0019	0.0008

Year	(12) Total Awarded <u>(8)+(11)</u> # 0.0000	(13) Payroll (\$M) <u>(12)/(13)</u> \$ 1.0588	(14) Frequency <u>(12)/(13)</u> -	(15) Statewide Average Weekly Wage 690	(16) Adjustment Factor 1.089	(17) Estimated Miner Years 27.1	(18) Frequency Per 100 Miner Years -
2004	-	1.0265	-	716	1.089	25.3	-
2005	-	1.0668	-	745	1.089	25.3	-
2006	-	1.1212	-	779	1.089	25.4	-
2007	-	2.5068	-	807	1.089	54.9	-
2008	-	0.9470	-	836	1.089	20.0	-
2009	-	0.8275	-	845	1.089	17.3	-
2010	-	1.1763	-	858	1.089	24.2	-
2011	-	0.8082	-	888	1.089	16.1	-
2012	-	1.0469	-	917	1.089	20.2	-
2013	-	0.8616	-	932	1.089	16.3	-
2014	-	0.6548	-	951	1.089	12.2	-
2015	-	0.3928	-	978	1.089	7.1	-
2016	-	0.5663	-	995	1.089	10.1	-
2017	0.0001	0.6001	0.0001	1,025	1.089	10.3	0.0006
2018	0.0001	0.5932	0.0002	1,049	1.089	10.0	0.0011
2019	0.0001	0.3952	0.0003	1,081	1.089	6.5	0.0020
2020	0.0001	0.2276	0.0004	1,130	1.089	3.6	0.0027
2021	0.0001	0.2236	0.0007	1,205	1.089	3.3	0.0044
2022	0.0002	0.2523	0.0009	1,273	1.089	3.5	0.0065
2023	0.0008	16.3535	0.0000			338.7	0.0002
Total							

Sources: Cols.(1) to (4): CMCRB Claims Database
Col.(6): (0.05)xCol(4)
Col.(7): (1.00)xCol(6)
Col.(10): 40% of Exh. VII-C
Col.(13): Exh. X-A, Page 3

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: 0.4062

ANTHRACITE CO-GEN(0181)

Year	Counts				(5) Pending Awarded <u>(3) * 30%</u>	(6) Denied Reopened	(7) Denied Awarded	(8) Ultimate Awarded <u>(2)+(5)+(7)</u>	(9) Ultimate Denied <u>(1)-(8)</u>	(10) IBNR	(11) IBNR Awarded <u>(10)xAwd Ratio</u>
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied							
2004	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
2005	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	0.0002	0.0001
2018	-	-	-	-	-	-	-	-	-	0.0031	0.0013
2019	1	-	-	1	-	0.05	0.05	0.05	0.95	0.0042	0.0017
2020	-	-	-	-	-	-	-	-	-	0.0062	0.0025
2021	-	-	-	-	-	-	-	-	-	0.0104	0.0042
2022	-	-	-	-	-	-	-	-	-	0.0152	0.0062
<u>2023</u>	-	-	-	-	-	-	-	-	-	<u>0.0216</u>	<u>0.0088</u>
Total	1	-	-	1	-	0.05	0.05	0.05	0.95	0.0610	0.0248

Year	(12) Total Awarded <u>(8)+(11)</u>	(13) Payroll (\$M)	(14) Frequency <u>(12)/(13)</u>	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Per 100 Miner Years
2004	# 0.0000	\$ 7.3515	-	690	1.089	188.1	-
2005	-	7.8553	-	716	1.089	193.7	-
2006	-	8.4125	-	745	1.089	199.4	-
2007	-	9.1867	-	779	1.089	208.3	-
2008	-	7.5214	-	807	1.089	164.6	-
2009	-	7.5347	-	836	1.089	159.2	-
2010	-	7.9580	-	845	1.089	166.3	-
2011	-	10.9816	-	858	1.089	226.0	-
2012	-	9.3118	-	888	1.089	185.2	-
2013	-	7.6308	-	917	1.089	146.9	-
2014	-	8.3609	-	932	1.089	158.4	-
2015	-	9.5548	-	951	1.089	177.4	-
2016	-	7.9533	-	978	1.089	143.6	-
2017	0.0001	7.7936	0.0000	995	1.089	138.3	0.0001
2018	0.0013	10.0538	0.0001	1,025	1.089	173.2	0.0007
2019	0.0517	6.8075	0.0076	1,049	1.089	114.6	0.0451
2020	0.0025	6.9033	0.0004	1,081	1.089	112.8	0.0022
2021	0.0042	7.7863	0.0005	1,130	1.089	121.7	0.0035
2022	0.0062	8.0515	0.0008	1,205	1.089	118.0	0.0052
<u>2023</u>	<u>0.0088</u>	<u>9.7396</u>	<u>0.0009</u>	<u>1,273</u>	<u>1.089</u>	<u>135.1</u>	<u>0.0065</u>
Total	0.0748	166.7489	0.0004			3,230.8	0.0023

Sources: Cols.(1) to (4): CMCRB Claims Database
 Col.(6): (0.05)xCol(4)
 Col.(7): (1.00)xCol(6)
 Col.(10): 40% of Exh. VII-C
 Col.(13): Exh. X-A, Page 3

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: 0.4062

BITUMINOUS CO-GEN(0182)

Year	Counts				(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
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied							
2004	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
2005	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-
2007	1	-	-	1	-	0.05	0.05	0.05	0.95	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	0.0003	0.0001
2018	-	-	-	-	-	-	-	-	-	0.0032	0.0013
2019	-	-	-	-	-	-	-	-	-	0.0062	0.0025
2020	-	-	-	-	-	-	-	-	-	0.0086	0.0035
2021	-	-	-	-	-	-	-	-	-	0.0153	0.0062
2022	-	-	-	-	-	-	-	-	-	0.0295	0.0120
2023	-	-	-	-	-	-	-	-	-	0.0538	0.0219
Total	1	-	-	1	-	0.05	0.05	0.05	0.95	0.1170	0.0475

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
	2004	# 0.0000	\$ 6.3745	-	690	1.089	163.1
2005	-	8.5248	-	716	1.089	210.3	-
2006	-	9.4236	-	745	1.089	223.4	-
2007	0.0500	10.8291	0.0046	779	1.089	245.5	0.0204
2008	-	8.4819	-	807	1.089	185.6	-
2009	-	7.8664	-	836	1.089	166.2	-
2010	-	8.7327	-	845	1.089	182.5	-
2011	-	9.1024	-	858	1.089	187.3	-
2012	-	9.0477	-	888	1.089	179.9	-
2013	-	10.3559	-	917	1.089	199.4	-
2014	-	11.7212	-	932	1.089	222.1	-
2015	-	11.7482	-	951	1.089	218.2	-
2016	-	11.3276	-	978	1.089	204.5	-
2017	0.0001	11.4351	0.0000	995	1.089	202.9	0.0001
2018	0.0013	12.0433	0.0001	1,025	1.089	207.5	0.0006
2019	0.0025	11.8189	0.0002	1,049	1.089	199.0	0.0013
2020	0.0035	10.6785	0.0003	1,081	1.089	174.4	0.0020
2021	0.0062	12.2828	0.0005	1,130	1.089	191.9	0.0032
2022	0.0120	17.3829	0.0007	1,205	1.089	254.7	0.0047
2023	0.0219	24.1932	0.0009	1,273	1.089	335.6	0.0065
Total	0.0975	223.3707	0.0004			4,154.0	0.0023

Sources: Cols.(1) to (4): CMCRB Claims Database
 Col.(6): (0.05)xCol(4)
 Col.(7): (1.00)xCol(6)
 Col.(10): 40% of Exh. VII-C
 Col.(13): Exh. X-A, Page 3

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: 0.4062

ANTHRACITE PREP PLANT(0183)

Year	Counts				(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
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied							
2004	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
2005	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-
2007	1	-	-	1	-	0.05	0.05	0.05	0.95	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-
2010	1	1	-	-	-	-	-	1.00	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	1	-	1	-	0.30	-	-	0.30	0.70	-	-
2015	1	1	-	-	-	-	-	1.00	-	-	-
2016	-	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	0.0006	0.0002
2018	-	-	-	-	-	-	-	-	-	0.0065	0.0026
2019	-	-	-	-	-	-	-	-	-	0.0167	0.0068
2020	2	1	-	1	-	0.05	0.05	1.05	0.95	0.0253	0.0103
2021	-	-	-	-	-	-	-	-	-	0.0400	0.0162
2022	-	-	-	-	-	-	-	-	-	0.0627	0.0255
2023	-	-	-	-	-	-	-	-	-	0.0930	0.0378
Total	6	3	1	2	0.30	0.10	0.10	3.40	2.60	0.2448	0.0994

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
2004	# 0.0000	\$ 4.4067	-	690	1.089	112.8	-
2005	-	5.1701	-	716	1.089	127.5	-
2006	-	4.8859	-	745	1.089	115.8	-
2007	0.0500	5.8173	0.0086	779	1.089	131.9	0.0379
2008	-	5.7335	-	807	1.089	125.5	-
2009	-	6.2646	-	836	1.089	132.3	-
2010	1.0000	4.8769	0.2050	845	1.089	101.9	0.9814
2011	-	6.1233	-	858	1.089	126.0	-
2012	-	7.5690	-	888	1.089	150.5	-
2013	-	7.0749	-	917	1.089	136.2	-
2014	0.3000	6.5215	0.0460	932	1.089	123.6	0.2427
2015	1.0000	6.1966	0.1614	951	1.089	115.1	0.8688
2016	-	5.5430	-	978	1.089	100.1	-
2017	0.0002	6.0568	0.0000	995	1.089	107.5	0.0002
2018	0.0026	6.9168	0.0004	1,025	1.089	119.2	0.0022
2019	0.0068	10.8292	0.0006	1,049	1.089	182.3	0.0037
2020	1.0603	10.6713	0.0994	1,081	1.089	174.3	0.6083
2021	0.0162	11.3591	0.0014	1,130	1.089	177.5	0.0092
2022	0.0255	13.3191	0.0019	1,205	1.089	195.2	0.0130
2023	0.0378	16.8858	0.0022	1,273	1.089	234.2	0.0161
Total	3.4994	152.2214	0.0230			2,789.4	0.1255

Sources: Cols.(1) to (4): CMCRB Claims Database
 Col.(6): (0.05)xCol(4)
 Col.(7): (1.00)xCol(6)
 Col.(10): 40% of Exh. VII-C
 Col.(13): Exh. X-A, Page 3

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: 0.4062

BITUMINOUS PREP PLANT(0184)

Year	Counts				(5) Pending Awarded (3) * 30%	(6) Denied Reopened # 0.00	(7) Denied Awarded # 0.00	(8) Ultimate Awarded (2)+(5)+(7) # 0.00	(9) Ultimate Denied (1)-(8) # 0.00	(10) IBNR # 0.0000	(11) IBNR Awarded (10)xAwd Ratio # 0.0000
	(1) Reported # 0	(2) Awarded # 0	(3) Pending # 0	(4) Denied # 0							
2004	-	-	-	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	0.0008	0.0003
2018	-	-	-	-	-	-	-	-	-	0.0086	0.0035
2019	-	-	-	-	-	-	-	-	-	0.0188	0.0076
2020	-	-	-	-	-	-	-	-	-	0.0271	0.0110
2021	-	-	-	-	-	-	-	-	-	0.0444	0.0180
2022	-	-	-	-	-	-	-	-	-	0.0691	0.0281
2023	-	-	-	-	-	-	-	-	-	0.0927	0.0377
Total	-	-	-	-	-	-	-	-	-	0.2615	0.1062

Year	(12) Total Awarded (8)+(11) # 0.0000	(13) Payroll (\$M) 33.6400	(14) Frequency (12)/(13) 0.0002	(15) Statewide Average Weekly Wage 1,273	(16) Adjustment Factor 1.550	(17) Estimated Miner Years 406.3	(18) Frequency Per 100 Miner Years 0.0093
2004	-	\$ 13.4602	-	690	1.550	242.0	-
2005	-	16.5483	-	716	1.550	286.8	-
2006	-	17.0510	-	745	1.550	284.0	-
2007	-	18.8952	-	779	1.550	300.9	-
2008	-	21.2503	-	807	1.550	326.7	-
2009	-	19.8280	-	836	1.550	294.3	-
2010	-	26.3131	-	845	1.550	386.3	-
2011	-	35.1551	-	858	1.550	508.4	-
2012	-	34.2117	-	888	1.550	478.0	-
2013	-	33.6400	-	917	1.550	455.1	-
2014	-	31.8544	-	932	1.550	424.1	-
2015	-	24.3206	-	951	1.550	317.3	-
2016	-	20.0794	-	978	1.550	254.7	-
2017	0.0003	28.8035	0.0000	995	1.550	359.2	0.0001
2018	0.0035	32.1999	0.0001	1,025	1.550	389.8	0.0009
2019	0.0076	36.1173	0.0002	1,049	1.550	427.2	0.0018
2020	0.0110	33.5622	0.0003	1,081	1.550	385.2	0.0029
2021	0.0180	35.6842	0.0005	1,130	1.550	391.8	0.0046
2022	0.0281	40.6670	0.0007	1,205	1.550	418.7	0.0067
2023	0.0377	41.6877	0.0009	1,273	1.550	406.3	0.0093
Total	0.1062	561.3291	0.0002			7,336.8	0.0014

Sources: Cols.(1) to (4): CMCRB Claims Database
 Col.(6): (0.05)xCol(4)
 Col.(7): (1.00)xCol(6)
 Col.(10): 40% of Exh. VII-C
 Col.(13): Exh. X-A, Page 3

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: 0.4062

TOTAL OTHER CLASSES

Year	Counts				(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
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied							
2004	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00	# 0.00	# 0.00	# 0.0000	# 0.0000
2005	-	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-	-
2007	2	-	-	2	-	0.10	0.10	0.10	1.90	-	-
2008	-	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-	-
2010	1	1	-	-	-	-	-	1.00	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	1	-	1	-	0.30	-	-	0.30	0.70	-	-
2015	1	1	-	-	-	-	-	1.00	-	-	-
2016	-	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	0.0021	0.0008
2018	-	-	-	-	-	-	-	-	-	0.0228	0.0093
2019	1	-	-	1	-	0.05	0.05	0.05	0.95	0.0485	0.0197
2020	2	1	-	1	-	0.05	0.05	1.05	0.95	0.0678	0.0276
2021	-	-	-	-	-	-	-	-	-	0.1103	0.0448
2022	-	-	-	-	-	-	-	-	-	0.1768	0.0718
2023	-	-	-	-	-	-	-	-	-	0.2617	0.1063
Total	8	3	1	4	0.30	0.20	0.20	3.50	4.50	0.6900	0.2803

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
2004	# 0.0000	\$ 44.7008	-	690		1,041.5	-
2005	-	51.9860	-	716		1,160.8	-
2006	-	53.5772	-	745		1,149.8	-
2007	0.1000	59.5194	0.0017	779		1,221.9	0.0082
2008	-	55.2550	-	807		1,070.9	-
2009	-	47.6143	-	836		881.3	-
2010	1.0000	54.1439	0.0185	845		967.9	0.1033
2011	-	66.1378	-	858		1,146.0	-
2012	-	66.6865	-	888		1,123.8	-
2013	-	64.5404	-	917		1,050.1	-
2014	0.3000	63.7840	0.0047	932		1,029.1	0.0292
2015	1.0000	56.8154	0.0176	951		920.8	0.1086
2016	-	49.7312	-	978		790.1	-
2017	0.0008	59.2214	0.0000	995		899.0	0.0001
2018	0.0093	66.2986	0.0001	1,025		977.3	0.0009
2019	0.0697	70.6860	0.0010	1,049		1,009.2	0.0069
2020	1.0776	62.5241	0.0172	1,081		858.3	0.1255
2021	0.0448	67.3400	0.0007	1,130		886.5	0.0051
2022	0.0718	79.6441	0.0009	1,205		989.9	0.0073
2023	0.1063	92.7586	0.0011	1,273		1,114.7	0.0095
Total	3.7803	1,232.9647	0.0031			20,288.9	0.0186

Sources: Cols.(1) to (4): CMCRB Claims Database
 Col.(6): (0.05)xCol(4)
 Col.(7): (1.00)xCol(6)
 Col.(10): 40% of Exh. VII-C
 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: 0.4062

GRAND TOTAL

Year	Counts				(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
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied							
2004	# 2	# 1	# 0	# 1	# 0.00	# 0.05	# 0.05	# 1.05	# 0.95	# 0.0000	# 0.0000
2005	2	1	-	1	-	0.05	0.05	1.05	0.95	-	-
2006	1	-	-	1	-	0.05	0.05	0.05	0.95	-	-
2007	4	-	-	4	-	0.20	0.20	0.20	3.80	-	-
2008	2	1	-	1	-	0.05	0.05	1.05	0.95	-	-
2009	-	-	-	-	-	-	-	-	-	-	-
2010	2	2	-	-	-	-	-	2.00	-	-	-
2011	3	3	-	-	-	-	-	3.00	-	-	-
2012	5	1	-	4	-	0.20	0.20	1.20	3.80	-	-
2013	6	4	-	2	-	0.10	0.10	4.10	1.90	-	-
2014	9	3	2	4	0.60	0.20	0.20	3.80	5.20	-	-
2015	11	3	2	6	0.60	0.30	0.30	3.90	7.10	-	-
2016	5	-	1	4	0.30	0.20	0.20	0.50	4.50	-	-
2017	-	-	-	-	-	-	-	-	-	0.0214	0.0087
2018	4	1	1	2	0.30	0.10	0.10	1.40	2.60	0.1916	0.0778
2019	2	-	-	2	-	0.10	0.10	0.10	1.90	0.3837	0.1559
2020	3	1	1	1	0.30	0.05	0.05	1.35	1.65	0.4674	0.1899
2021	3	1	1	1	0.30	0.05	0.05	1.35	1.65	0.6661	0.2706
2022	-	-	-	-	-	-	-	-	-	1.0169	0.4131
2023	1	-	1	-	0.30	-	-	0.30	0.70	1.6081	0.6532
Total	65	22	9	34	2.70	1.70	1.70	26.40	38.60	4.3554	1.7692

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
	2004	# 1.0500	\$ 160.6970	0.0065	690		3,659.5
2005	1.0500	196.6919	0.0053	716		4,243.6	0.0247
2006	0.0500	201.3494	0.0002	745		4,155.7	0.0012
2007	0.2000	220.7609	0.0009	779		4,338.3	0.0046
2008	1.0500	249.5671	0.0042	807		4,663.3	0.0225
2009	-	229.4985	-	836		4,086.5	-
2010	2.0000	268.4115	0.0075	845		4,666.3	0.0429
2011	3.0000	323.1193	0.0093	858		5,526.1	0.0543
2012	1.2000	323.9599	0.0037	888		5,331.5	0.0225
2013	4.1000	293.5067	0.0140	917		4,628.1	0.0886
2014	3.8000	321.7547	0.0118	932		4,883.3	0.0778
2015	3.9000	261.8745	0.0149	951		3,952.2	0.0987
2016	0.5000	217.8288	0.0023	978		3,188.8	0.0157
2017	0.0087	285.5262	0.0000	995		4,003.8	0.0002
2018	1.4778	301.6904	0.0049	1,025		4,107.3	0.0360
2019	0.2559	305.5532	0.0008	1,049		4,071.7	0.0063
2020	1.5399	249.3746	0.0062	1,081		3,234.2	0.0476
2021	1.6206	247.8197	0.0065	1,130		3,105.8	0.0522
2022	0.4131	276.9057	0.0015	1,205		3,284.2	0.0126
2023	0.9532	308.5882	0.0031	1,273		3,506.7	0.0272
Total	28.1692	5,244.4782	0.0054			82,636.9	0.0341

Sources: Cols.(1) to (4): CMCRB Claims Database
 Col.(6): (0.05)xCol(4)
 Col.(7): (1.00)xCol(6)
 Col.(10): 40% of Exh. VII-C
 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

IBNR Award Ratio: 0.4062

**Coal Mine Compensation Rating Bureau
Summary of Individual Claim Detail for Federal Basic
Claims from Exposure Years 1990 to 2023**

Federal Basic Severities

	Indemnity	Medical	Total
Underground Anthracite Class 160			
Total	12,698,983	3,294,303	15,993,286
Number of Claims	27	27	27
Average	470,333	122,011	592,344
Underground Bituminous Class 158			
Total	46,490,784	11,635,365	58,126,149
Number of Claims	123	123	123
Average	377,974	94,596	472,570
Surface Anthracite Class 153			
Total	17,509,911	4,210,407	21,720,318
Number of Claims	51	51	51
Average	343,332	82,557	425,889
Surface Bituminous Class 156			
Total	27,530,795	6,621,784	34,152,579
Number of Claims	78	78	78
Average	352,959	84,895	437,854
Four Standard Classes Combined			
Total	104,230,473	25,761,859	129,992,332
Number of Claims	279	279	279
Average	373,586	92,336	465,922
Other Classes			
Total	8,376,671	2,318,200	10,694,871
Number of Claims	24	24	24
Average	349,028	96,592	445,620
All Classes Combined			
Total	112,607,144	28,080,059	140,687,203
Number of Claims	303	303	303
Average	371,641	92,673	464,314

Source: Exhibit IX-B

PAB

Effective Date - April 01, 2025

COAL MINE COMPENSATION RATING BUREAU
Federal Basic Occupational Disease Classification Frequency

Classification	Class Code	(1)	(2)	(3)	(4)	(5) (6) Credibility		(7)	(8)	(9)	(10)
		Estimated Miner Years 2014-2023	Claim Frequency Per 100 Miner Years			Expected Awarded Claims	Factor	Claim Frequency Indicated w/ Credibility	Change in Indication After Cred.	Payroll 2014-2023	Frequency Per \$1M Payroll
Underground:	Anthracite 0160	36.4	2.637561	2.637561	8.351396	0.960	0.135	3.408929	29.2%	2,150,558	0.576990
	Bituminous 0158	18,073.9	0.176383	0.176383	0.174600	31.879	0.781	0.174990	-0.8%	1,525,197,266	0.020737
Surface:	Anthracite 0153	3,642.5	0.216269	0.216269	0.169735	7.878	0.388	0.198214	-8.3%	220,652,751	0.032721
	Bituminous 0156	6,110.3	0.106618	0.106618	0.130277	6.515	0.353	0.114970	7.8%	360,112,097	0.019508
Four Standard Classifications		27,863.1	0.169513	0.169513	0.174926	47.232		0.169089		2,108,112,672	0.022349
	Coke 0154	484.8	0.011343	0.011343	0.012224	0.055	0.032	0.011371	0.2%	27,124,147	0.002032
	Auger 0157	82.9	0.053522	0.053522	0.037880	0.044	0.029	0.053068	-0.8%	4,767,569	0.009228
Co-Gen:	Anthracite 0181	1,393.1	0.049278	0.049278	0.136150	0.686	0.115	0.059268	20.3%	83,004,477	0.009947
	Bituminous 0182	2,210.9	0.032127	0.032127	0.033260	0.710	0.117	0.032260	0.4%	134,631,635	0.005298
Prep Plants:	Anthracite 0183	1,529.0	0.092837	0.092837	0.075739	1.419	0.165	0.090016	-3.0%	94,299,019	0.014596
	Bituminous 0184	3,774.3	0.056868	0.056868	0.078375	2.146	0.203	0.061234	7.7%	324,976,167	0.007112
Other Classes		9,475.0	0.053425	0.053425	0.072178	5.060		0.056206		668,803,014	0.007963
Total		37,338.1	0.140054	0.140054	0.148853	52.292		0.140443		2,776,915,686	0.018884

Source: (1) Exhibit VIII-B-2
(2) Exhibit VIII-B-1, Page 4
(3) = (2) trended to 4/1/2025 @ 0.0%
(4) Exhibit VIII-B-1, Page 3
(5) = (1) x (3) / 100
(6) = [(5) / 52.292]^(0.5)
(7) = (4)*(6)+[(3)*(1)-(6))
(8) = (7)/(2)-1
(9) Exhibit X-A, Page 3
(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

Classification	Class Code	(1)	(2)	(3)	(4)	(5) (6) Credibility		(7)	(8)	(9)	(10)
		Estimated Miner Years 2014-2023	Claim Frequency Per 100 Miner Years			Expected Awarded Claims	Factor	Claim Frequency Indicated w/ Credibility	Change in Indication After Cred.	Payroll 2014-2023	Frequency Per \$1M Payroll
Underground:	Anthracite 0160	36.4	0.477161	0.477161	0.113892	0.174	0.097	0.441924	-7.4%	2,150,558	0.074799
	Bituminous 0158	18,073.9	0.069697	0.069697	0.060562	12.597	0.827	0.062142	-10.8%	1,525,197,266	0.007364
Surface:	Anthracite 0153	3,642.5	0.039358	0.039358	0.035099	1.434	0.279	0.038170	-3.0%	220,652,751	0.006301
	Bituminous 0156	6,110.3	0.026346	0.026346	0.030490	1.610	0.296	0.027573	4.7%	360,112,097	0.004679
Four Standard Classifications		27,863.1	0.056756	0.056756	0.050708	15.815		0.051923		2,108,112,672	0.006863
	Coke 0154	484.8	0.004474	0.004474	0.000927	0.022	0.035	0.004350	-2.8%	27,124,147	0.000777
	Auger 0157	82.9	0.009628	0.009628	0.003022	0.008	0.021	0.009489	-1.4%	4,767,569	0.001650
Co-Gen:	Anthracite 0181	1,393.1	0.014706	0.014706	0.025381	0.205	0.105	0.015827	7.6%	83,004,477	0.002656
	Bituminous 0182	2,210.9	0.008617	0.008617	0.003634	0.191	0.102	0.008109	-5.9%	134,631,635	0.001332
Prep Plants:	Anthracite 0183	1,529.0	0.110939	0.110939	0.130558	1.696	0.303	0.116884	5.4%	94,299,019	0.018952
	Bituminous 0184	3,774.3	0.012775	0.012775	0.014682	0.482	0.162	0.013084	2.4%	324,976,167	0.001520
Other Classes		9,475.0	0.027477	0.027477	0.031570	2.604		0.028599		668,803,014	0.004052
Total		37,338.1	0.049326	0.049326	0.045852	18.419		0.046005		2,776,915,686	0.006186

Source: (1) Exhibit VIII-B-2
 (2) Exhibit VIII-B-1, Page 6
 (3) = (2) trended to 4/1/2025 @ 0.0%
 (4) Exhibit VIII-B-1, Page 5
 (5) = (1) x (3) / 100
 (6) = [(5) / 18.419]^(0.5)
 (7) = (4)*(6)+((3)*(1-(6)))
 (8) = (7)/(2)-1
 (9) Exhibit X-A, Page 3
 (10) = (7) X (1) / [(9) * 10,000]

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

File: C:\OneDrive\Clients\Coal Mine\2024 Rate Filing\XL\2024-08-B-1.xlsx]B-2
 Run Date: 10/15/24 03:58

PAB
 Effective Date - April 01, 2025
 8,330,904,881.034110

Coal Mine Compensation Rating Bureau

Federal Basic Occupational Disease Classification Frequency

<u>Classification</u>	<u>Class Code</u>	(1) Estimated Miner Years <u>2023</u>	(2) Approved Frequency Equivalent Per 100 Miner Years <u>4/1/2024</u>	(3) Modeled Indication	(4) Experience Indication	(5) Weighted Average of Cols. (3) & (4)	(6) Percent Change
Underground: Anthracite	0160	3.5	2.637561	4.345190	9.686798	8.351396	216.63%
Bituminous	0158	1,422.2	0.176383	0.296502	0.133966	0.174600	-1.01%
Surface: Anthracite	0153	494.6	0.216269	0.184776	0.164721	0.169735	-21.52%
Bituminous	0156	<u>471.7</u>	<u>0.106618</u>	<u>0.139782</u>	<u>0.127108</u>	<u>0.130277</u>	22.19%
Four Standard Classifications		2,392.0	0.174474	0.248419	0.152951	0.176818	1.34%
Coke	0154	0.0	0.011343	0.015614	0.011094	0.012224	7.77%
Auger	0157	3.5	0.053522	0.045049	0.035490	0.037880	-29.23%
Co-Gen: Anthracite	0181	135.1	0.049278	0.149008	0.131864	0.136150	176.29%
Bituminous	0182	335.6	0.032127	0.047623	0.028473	0.033260	3.53%
Prep Plants: Anthracite	0183	234.2	0.092837	0.115217	0.062579	0.075739	-18.42%
Bituminous	0184	<u>406.3</u>	<u>0.056868</u>	<u>0.105625</u>	<u>0.069292</u>	<u>0.078375</u>	37.82%
Other Classes		1,114.7	0.056046	0.095246	0.063070	0.071114	26.89%
Total		3,506.7	0.136828	0.199729	0.124380	0.143217	4.67%

Source: (1) Exhibit VIII-B-2
(2) Exhibit VIII-B-1, Page 4
(3) Exhibit VIII-F
(4) Exhibit VIII-B-2
(5) = (0.25)*Col.(3)+ (0.75)*Col.(4)
(6) = (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. 4/1/2024	(2) Payroll 2013-2022	(3) Estimated Awarded Claims 2013-2022 (1) x (2)	(4) Estimated Miner Years 2014-2023	(5) Estimated Miner Years 2023	(6) Adjustment Factor	(7) Average Weekly Wage 2013	(8) Payroll 2013	(9) Estimated Miner Years 2013-2022	(10) Approved Frequency Equivalent Per 100 Miner Years
Underground:	Anthracite	0160	0.466299	2,279,519	1.062937	36.4	3.5	1.089	917	381,876	40.3	2.637561
	Bituminous	0158	0.021539	1,524,422,612	32.834539	18,073.9	1,422.2	1.550	917	145,146,253	18,615.5	0.176383
Surface:	Anthracite	0153	0.037288	205,718,563	7.670834	3,642.5	494.6	1.089	917	20,720,014	3,546.9	0.216269
	Bituminous	0156	0.018773	388,828,514	7.299478	6,110.3	471.7	1.089	917	62,718,061	6,846.4	0.106618
Four Standard Classifications				2,121,249,208		27,863.1	2,392.0			228,966,204	29,049	
	Coke	0154	0.002051	31,916,057	0.065460	484.8	-	1.089	917	4,791,910	577.1	0.011343
	Auger	0157	0.009584	5,562,167	0.053308	82.9	3.5	1.089	917	1,046,947	99.6	0.053522
Co-Gen:	Anthracite	0181	0.008558	80,895,683	0.692305	1,393.1	135.1	1.089	917	7,630,762	1,404.9	0.049278
	Bituminous	0182	0.005518	120,794,271	0.666543	2,210.9	335.6	1.089	917	10,355,884	2,074.7	0.032127
Prep Plants:	Anthracite	0183	0.015724	84,488,148	1.328492	1,529.0	234.2	1.089	917	7,074,886	1,431.0	0.092837
	Bituminous	0184	0.006860	316,928,475	2.174129	3,774.3	406.3	1.550	917	33,639,969	3,823.1	0.056868
Other Classes				640,584,801		9,475.0	1,114.7			64,540,358	9,410.4	
Total				2,761,834,009		37,338.1	3,506.7			293,506,562	38,459.5	

Source: (1) Exhibit X-F (Federal Basic Frequency)
 (2) Exhibit X-A, Page 3
 (3) = (1)x(2) / 1,000,000
 (4) Exhibit VIII-B-2
 (5) Exhibit VIII-B-2
 (6) Exhibit X-G
 (7) Exhibit XII-D
 (8) Exhibit X-A, Page 3
 (9) = (4)-(5)+(8)/((6)x(7)x52)
 (10) = (3)/(9)x100

Coal Mine Compensation Rating Bureau

Federal Excess Occupational Disease Classification Frequency

<u>Classification</u>	<u>Class Code</u>	(1) Estimated Miner Years <u>2023</u>	(2) Approved Frequency Equivalent Per 100 Miner Years <u>4/1/2024</u>	(3) Modeled Indication	(4) Experience Indication	(5) Weighted Average of Col. (3) & (4)	(6) Percent Change
Underground: Anthracite	0160	3.5	0.477161	0.301622	0.051315	0.113892	-76.13%
Bituminous	0158	1,422.2	0.069697	0.054761	0.062495	0.060562	-13.11%
Surface: Anthracite	0153	494.6	0.039358	0.044208	0.032062	0.035099	-10.82%
Bituminous	0156	<u>471.7</u>	<u>0.026346</u>	<u>0.008454</u>	<u>0.037835</u>	<u>0.030490</u>	15.73%
Four Standard Classifications		2,392.0	0.055471	0.043809	0.051323	0.049445	-10.86%
Coke	0154	0.0	0.004474	0.000065	0.001215	0.000927	-79.28%
Auger	0157	3.5	0.009628	0.000230	0.003953	0.003022	-68.61%
Co-Gen: Anthracite	0181	135.1	0.014706	0.002315	0.033070	0.025381	72.59%
Bituminous	0182	335.6	0.008617	0.002347	0.004063	0.003634	-57.83%
Prep Plants: Anthracite	0183	234.2	0.110939	0.125454	0.132259	0.130558	17.68%
Bituminous	0184	<u>406.3</u>	<u>0.012775</u>	<u>0.001448</u>	<u>0.019093</u>	<u>0.014682</u>	14.93%
Other Classes		1,114.7	0.032372	0.027874	0.039991	0.036962	14.18%
Total		3,506.7	0.048128	0.038744	0.047721	0.045477	-5.51%

Source: (1) Exhibit VIII-B-2
(2) Exhibit VIII-B-1, Page 6
(3) Exhibit VII-L
(4) Exhibit VII-B-2 (Federal Excess Frequency)
(5) = (0.25)*Col.(3)+ (0.75)*Col.(4)
(6) = (5)/(2) -1

Totals and subtotals are weighted with Miner Years

COAL MINE COMPENSATION RATING BUREAU
Federal Excess Occupational Disease Classification Frequency

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
		Approved Claim Freq. 4/1/2024	Payroll 2013-2022	Estimated Awarded Claims 2013-2022 (1) x (2)	Estimated Miner Years 2014-2023	Estimated Miner Years 2023	Adjustment Factor	Average Weekly Wage 2013	Payroll 2013	Estimated Miner Years 2013-2022	Approved Frequency Equivalent Per 100 Miner Years	
Classification	Class Code											
Underground:	Anthracite	0160	0.084358	2,279,519	0.192296	36.4	3.5	1.089	917	381,876	40.3	0.477161
	Bituminous	0158	0.008511	1,524,422,612	12.974361	18,073.9	1,422.2	1.550	917	145,146,253	18,615.5	0.069697
Surface:	Anthracite	0153	0.006786	205,718,563	1.396006	3,642.5	494.6	1.089	917	20,720,014	3,546.9	0.039358
	Bituminous	0156	0.004639	388,828,514	1.803775	6,110.3	471.7	1.089	917	62,718,061	6,846.4	0.026346
Four Standard Classifications				2,121,249,208		27,863.1	2,392.0			228,966,204	29,049	
	Coke	0154	0.000809	31,916,057	0.025820	484.8	-	1.089	917	4,791,910	577.1	0.004474
	Auger	0157	0.001724	5,562,167	0.009589	82.9	3.5	1.089	917	1,046,947	99.6	0.009628
Co-Gen:	Anthracite	0181	0.002554	80,895,683	0.206608	1,393.1	135.1	1.089	917	7,630,762	1,404.9	0.014706
	Bituminous	0182	0.001480	120,794,271	0.178776	2,210.9	335.6	1.089	917	10,355,884	2,074.7	0.008617
Prep Plants:	Anthracite	0183	0.018790	84,488,148	1.587532	1,529.0	234.2	1.089	917	7,074,886	1,431.0	0.110939
	Bituminous	0184	0.001541	316,928,475	0.488387	3,774.3	406.3	1.550	917	33,639,969	3,823.1	0.012775
Other Classes				640,584,801		9,475.0	1,114.7			64,540,358	9,410.4	
Total				2,761,834,009		37,338.1	3,506.7			293,506,562	38,459.5	

Source: (1) Exhibit X-F (Federal Excess Frequency)
 (2) Exhibit X-A, Page 3
 (3) = (1)x(2) / 1,000,000
 (4) Exhibit VIII-B-2
 (5) Exhibit VIII-B-2
 (6) Exhibit X-G
 (7) Exhibit XII-D
 (8) Exhibit X-A, Page 3
 (9) = (4)-(5)+(8)/((6)x(7)x52)
 (10) = (3)/(9)x100

COAL MINE COMPENSATION RATING BUREAU

FEDERAL BASIC OCCUPATIONAL DISEASE

ANTHRACITE UNDERGROUND (0160)

Award Ratio = 1 / (1 + 0) = 1.000

Year	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	A.R. times IBNR + Pending	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Weighted Frequency
2014	0	0	0	0	0.0144	0.0144	0.014360	258,809	0.014360	932	1.089	4.9	0.293061	
2015	1	0	1	0	0.0285	1.0285	1.028540	254,336	1.028540	951	1.089	4.7	21.883830	
2016	0	0	0	0	0.0284	0.0284	0.028390	163,760	0.028390	978	1.089	3.0	0.946333	
2017	0	0	0	0	0.0685	0.0685	0.068460	252,383	0.068460	995	1.089	4.5	1.521333	
2018	1	1	0	0	0.0760	0.0760	0.075990	183,346	1.075990	1,025	1.089	3.2	33.624688	
2019	0	0	0	0	0.1044	0.1044	0.104420	179,379	0.104420	1,049	1.089	3.0	3.480667	
2020	0	0	0	0	0.2348	0.2348	0.234820	299,700	0.234820	1,081	1.089	4.9	4.792245	
2021	0	0	0	0	0.2374	0.2374	0.237400	232,531	0.237400	1,130	1.089	3.6	6.594444	
2022	0	0	0	0	0.1016	0.1016	0.101630	73,399	0.101630	1,205	1.089	1.1	9.239091	
2023	0	0	0	0	0.5072	0.5072	0.507230	252,915	0.507230	1,273	1.089	3.5	14.492286	
TOTAL	2	1	1	0	1.4012	2.4012	2.401240	2,150,558	3.401240			36.4	96.867978	
AVERAGE													9.686798	

BITUMINOUS UNDERGROUND (0158)

Award Ratio = 7 / (7 + 77) = 0.083

Year	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	A.R. times IBNR + Pending	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Weighted Frequency
2014	23	1	4	18	11.0279	15.0279	1.247318	183,431,952	2.247318	932	1.550	2,441.9	0.092032	
2015	21	1	3	17	9.8202	12.8202	1.064080	140,570,275	2.064080	951	1.550	1,833.9	0.112551	
2016	12	1	2	9	9.5761	11.5761	0.960816	118,545,477	1.960816	978	1.550	1,503.9	0.130382	
2017	7	1	1	5	15.9773	16.9773	1.409115	172,708,778	2.409115	995	1.550	2,153.6	0.111865	
2018	16	2	0	14	19.3332	19.3332	1.604656	180,599,760	3.604656	1,025	1.550	2,186.0	0.164897	
2019	8	1	3	4	21.6881	24.6881	2.049108	178,019,000	3.049108	1,049	1.550	2,105.5	0.144816	
2020	6	0	1	5	19.3109	20.3109	1.685801	139,217,518	1.685801	1,081	1.550	1,597.8	0.105508	
2021	5	0	3	2	20.1750	23.1750	1.923521	129,326,591	1.923521	1,130	1.550	1,420.0	0.135459	
2022	4	0	2	2	24.3852	26.3852	2.189970	136,857,008	2.189970	1,205	1.550	1,409.1	0.155416	
2023	3	0	2	1	29.9970	31.9970	2.655748	145,920,907	2.655748	1,273	1.550	1,422.2	0.186735	
TOTAL	105	7	21	77	181.2908	202.2908	16.790133	1,525,197,266	23.790133			18,073.9	1.339661	0.133966
AVERAGE														

ANTHRACITE SURFACE (0153)

Award Ratio = 2 / (2 + 7) = 0.222

Year	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	A.R. times IBNR + Pending	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Weighted Frequency
2014	1	0	0	1	0.2542	0.2542	0.056426	18,911,339	0.056426	932	1.089	358.3	0.015748	
2015	3	1	1	1	0.4371	1.4371	0.319043	22,234,350	1.319043	951	1.089	412.9	0.319458	
2016	4	1	0	3	0.5028	0.5028	0.111622	19,257,107	1.111622	978	1.089	347.7	0.319707	
2017	2	0	1	1	0.6355	1.6355	0.363074	19,094,634	0.363074	995	1.089	338.9	0.107133	
2018	2	0	2	0	0.7446	2.7446	0.609299	18,303,511	0.609299	1,025	1.089	315.3	0.193244	
2019	0	0	0	0	0.9806	0.9806	0.217700	20,165,184	0.217700	1,049	1.089	339.5	0.064124	
2020	2	0	1	1	1.1835	2.1835	0.484726	19,343,807	0.484726	1,081	1.089	316.0	0.153394	
2021	0	0	0	0	1.6089	1.6089	0.357185	21,048,411	0.357185	1,130	1.089	328.9	0.108600	
2022	0	0	0	0	2.4688	2.4688	0.548063	26,640,206	0.548063	1,205	1.089	390.4	0.140385	
2023	1	0	1	0	4.0222	5.0222	1.114917	35,654,202	1.114917	1,273	1.089	494.6	0.225418	
TOTAL	15	2	6	7	12.8381	18.8381	4.182054	220,652,751	6.182054			3,642.5	1.647211	0.164721
AVERAGE														

BITUMINOUS SURFACE (0156)

Award Ratio = 4 / (4 + 13) = 0.235

Year	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	A.R. times IBNR + Pending	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Weighted Frequency
2014	4	2	0	2	1.4955	1.4955	0.351445	55,368,615	2.351445	932	1.089	1,049.1	0.224139	
2015	9	2	0	7	1.3650	1.3650	0.320775	42,000,092	2.320775	951	1.089	779.9	0.297573	
2016	0	0	0	0	1.1447	1.1447	0.269002	30,131,218	0.269002	978	1.089	544.1	0.049440	
2017	1	0	0	1	1.4929	1.4929	0.350834	34,248,962	0.350834	995	1.089	607.8	0.057722	
2018	0	0	0	0	1.8047	1.8047	0.424112	36,305,197	0.424112	1,025	1.089	625.5	0.067804	
2019	1	0	0	1	2.0855	2.0855	0.490081	36,503,594	0.490081	1,049	1.089	614.5	0.079753	
2020	1	0	0	1	1.8210	1.8210	0.427935	27,989,489	0.427935	1,081	1.089	457.2	0.093599	
2021	0	0	0	0	2.1875	2.1875	0.514072	29,872,239	0.514072	1,130	1.089	466.8	0.110127	
2022	0	0	0	0	2.7478	2.7478	0.645742	33,691,047	0.645742	1,205	1.089	493.7	0.130797	
2023	1	0	0	1	3.2142	3.2142	0.755332	34,001,644	0.755332	1,273	1.089	471.7	0.160130	
TOTAL	17	4	0	13	19.3589	19.3589	4.549330	360,112,097	8.549330			6,110.3	1.271084	0.127108
AVERAGE														

FOUR STANDARD CLASSES

Award Ratio = 14 / (14 + 97) = 0.126

YEAR	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	A.R. times IBNR + Pending	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Weighted Frequency
2014	28	3	4	21	12.7920	16.7920	2.115788	257,970,715	4.669549	932	1.089	3,854.2	0.121155	
2015	34	4	5	25	11.6509	16.6509	2.098015	205,059,053	6.732438	951	1.089	3,031.4	0.222090	
2016	16	2	2	12	11.2520	13.2520	1.669749	168,097,562	3.369830	978	1.089	2,398.7	0.140486	
2017	10	1	2	7	18.1741	20.1741	2.541940	226,304,757	3.191483	995	1.089	3,104.8	0.102792	
2018	19	3	2	14	21.9585	23.9585	3.018772	235,391,814	5.714056	1,025	1.089	3,130.0	0.182558	
2019	9	1	3	5	24.8586	27.8586	3.510177	234,867,157	3.861309	1,049	1.089	3,062.5	0.126084	
2020	9	0	2	7	22.5501	24.5501	3.093316	186,850,514	2.833282	1,081	1.089	2,375.9	0.119251	
2021	5	0	3	2	24.2088	27.2088	3.428313	180,479,772	3.032177	1,130	1.089	2,219.3	0.136628	
2022	4	0	2	2	29.7034	31.7034	3.994628	197,261,660	3.485405	1,205	1.089	2,294.3	0.151916	
2023	5	0	3	2	37.7405	40.7405	5.133306	215,829,668	5.033227	1,273	1.089	2,392.0	0.210419	
TOTAL	139	14	28	97	214.8889	242.8889	27.922757	2,108,112,672	41.922757			27,863.1	1.513379	0.148962
AVERAGE														

Source: Claim counts - CMCRB OD Database as of 4/30/2024

IBNR: Exhibit VIII-C

Payroll- Exhibit X-A, Page 3

The Award Ratio is equal to Awarded ÷ (Awarded plus Denied). Other Classes use the Total Award Ratio: 0.132=16 / (16 + 105)

The Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G

Estimated Miner Years = Payroll / (SAWW x Adj. Factor x 52)

Frequency per 100 Miner Years = (Expected Ult. Awarded / Est. Miner Years) x 100 or N/A if Payroll=0

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Run Date: October 14, 2024 - 12:50:22 PM

FEDERAL BASIC OCCUPATIONAL DISEASE

COKE (0154)

Award Ratio = 16 / (16 + 105) = 0.132

Year	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	Award Ratio	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Weighted Frequency
2014	0	0	0	0	0.0442	0.0442	0.005834	4,464,398	0.005834	932	1.089	84.6	0.006896	
2015	0	0	0	0	0.0493	0.0493	0.006508	4,340,376	0.006508	951	1.089	80.6	0.008074	
2016	0	0	0	0	0.0572	0.0572	0.007550	4,435,066	0.007550	978	1.089	80.1	0.009426	
2017	0	0	0	0	0.0663	0.0663	0.008752	4,566,113	0.008752	995	1.089	81.0	0.010804	
2018	0	0	0	0	0.0726	0.0726	0.009583	4,484,744	0.009583	1,025	1.089	77.3	0.012397	
2019	0	0	0	0	0.0808	0.0808	0.010666	4,519,863	0.010666	1,049	1.089	76.1	0.014015	
2020	0	0	0	0	0.0062	0.0062	0.000818	313,587	0.000818	1,081	1.089	5.1	0.016047	
2021	0	0	0	0	0.0000	0.0000	0.000000	-	0.000000	1,130	1.089	0.0	N/A	
2022	0	0	0	0	0.0000	0.0000	0.000000	-	0.000000	1,205	1.089	0.0	N/A	
2023	0	0	0	0	0.0000	0.0000	0.000000	-	0.000000	1,273	1.089	0.0	N/A	
TOTAL	0	0	0	0	0.3766	0.3766	0.049711	27,124,147	0.049711			484.8	0.077659	
AVERAGE													0.011094	

AUGER (0157)

Award Ratio = 16 / (16 + 105) = 0.132

Year	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	Award Ratio	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Weighted Frequency
2014	0	0	0	0	0.0213	0.0213	0.002812	861,590	0.002812	932	1.089	16.3	0.017249	
2015	0	0	0	0	0.0186	0.0186	0.002455	654,766	0.002455	951	1.089	12.2	0.020125	
2016	0	0	0	0	0.0127	0.0127	0.001676	392,776	0.001676	978	1.089	7.1	0.023611	
2017	0	0	0	0	0.0206	0.0206	0.002719	566,324	0.002719	995	1.089	10.1	0.026923	
2018	0	0	0	0	0.0243	0.0243	0.003208	600,138	0.003208	1,025	1.089	10.3	0.031142	
2019	0	0	0	0	0.0265	0.0265	0.003498	593,214	0.003498	1,049	1.089	10.0	0.034980	
2020	0	0	0	0	0.0195	0.0195	0.002574	395,231	0.002574	1,081	1.089	6.5	0.039600	
2021	0	0	0	0	0.0124	0.0124	0.001637	227,558	0.001637	1,130	1.089	3.6	0.045467	
2022	0	0	0	0	0.0133	0.0133	0.001756	223,623	0.001756	1,205	1.089	3.3	0.053200	
2023	0	0	0	0	0.0166	0.0166	0.002191	252,349	0.002191	1,273	1.089	3.5	0.062606	
TOTAL	0	0	0	0	0.1858	0.1858	0.024526	4,767,569	0.024526			82.9	0.354903	
AVERAGE													0.035490	

ANTHRACITE CO-GEN (0181)

Award Ratio = 16 / (16 + 105) = 0.132

Year	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	Award Ratio	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Weighted Frequency
2014	0	0	0	0	0.2068	0.2068	0.027298	8,360,898	0.027298	932	1.089	158.4	0.017233	
2015	0	0	0	0	0.2714	0.2714	0.035825	9,554,806	0.035825	951	1.089	177.4	0.020194	
2016	0	0	0	0	0.2564	0.2564	0.033845	7,953,309	0.033845	978	1.089	143.6	0.023569	
2017	0	0	0	0	0.2829	0.2829	0.037343	7,793,558	0.037343	995	1.089	138.3	0.027001	
2018	2	0	1	1	0.4068	1.4068	0.185698	10,053,839	0.185698	1,025	1.089	173.2	0.107216	
2019	0	0	0	0	0.3042	0.3042	0.040154	6,807,496	0.040154	1,049	1.089	114.6	0.035039	
2020	1	1	0	0	0.3406	0.3406	0.044959	6,903,273	0.044959	1,081	1.089	112.8	0.032682	
2021	0	0	0	0	0.4235	0.4235	0.055902	7,786,285	0.055902	1,130	1.089	121.7	0.045934	
2022	0	0	0	0	0.4792	0.4792	0.063254	8,051,457	0.063254	1,205	1.089	118.0	0.053605	
2023	0	0	0	0	0.6393	0.6393	0.084388	9,739,556	0.084388	1,273	1.089	135.1	0.062463	
TOTAL	3	1	1	1	3.6111	4.6111	0.608665	83,004,477	1.608665			1,393.1	1.318636	
AVERAGE													0.131864	

BITUMINOUS CO-GEN (0182)

Award Ratio = 16 / (16 + 105) = 0.132

Year	Reported	Awarded	Pending	Denied	IBNR	IBNR + Pending	Award Ratio	Payroll	Expected Ultimate Awarded	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years	Weighted Frequency
2014	0	0	0	0	0.2319	0.2319	0.030611	11,721,184	0.030611	932	1.089	222.1	0.013782	
2015	0	0	0	0	0.2669	0.2669	0.035231	11,748,205	0.035231	951	1.089	218.2	0.016146	
2016	1	0	0	1	0.2922	0.2922	0.038570	11,327,552	0.038570	978	1.089	204.5	0.018861	
2017	0	0	0	0	0.3321	0.3321	0.043837	11,435,057	0.043837	995	1.089	202.9	0.021605	
2018	0	0	0	0	0.3899	0.3899	0.051467	12,043,297	0.051467	1,025	1.089	207.5	0.024803	
2019	0	0	0	0	0.4225	0.4225	0.055770	11,818,883	0.055770	1,049	1.089	199.0	0.028025	
2020	0	0	0	0	0.4215	0.4215	0.055638	10,678,482	0.055638	1,081	1.089	174.4	0.031903	
2021	0	0	0	0	0.5345	0.5345	0.070554	12,282,842	0.070554	1,130	1.089	192.0	0.036747	
2022	0	0	0	0	0.8277	0.8277	0.109256	17,382,885	0.109256	1,205	1.089	254.7	0.042896	
2023	0	0	0	0	1.2703	1.2703	0.167680	24,193,248	0.167680	1,273	1.089	335.6	0.049964	
TOTAL	1	0	0	1	4.9895	4.9895	0.658614	134,631,635	0.658614			2,210.9	0.284732	
AVERAGE													0.028473	

Source: Claim counts - CMCRB OD Database as of 4/30/2024

IBNR: Exhibit VIII-C

Payroll: Exhibit X-A, Page 3

The Award Ratio is equal to Awarded ÷ (Awarded plus Denied). Other Classes use the Total Award Ratio: 0.132=16 / [16 + 105]

The Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G

Estimated Miner Years = Payroll / (SAWW x Adj. Factor x 52)

Frequency per 100 Miner Years = (Expected Ult. Awarded / Est. Miner Years) x 100 or N/A if Payroll=0

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Run Date: October 14, 2024 - 12:50:22 PM

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Effective Date - April 01, 2025

499,187,325.784845

FEDERAL BASIC OCCUPATIONAL DISEASE

ANTHRACITE PREP PLANT (0183)

Award Ratio = 16 / (16 + 105) = 0.132					IBNR +	Award	Expected Ultimate	Statewide Average	Adjustment	Estimated Miner	Frequency	Weighted		
Year	Reported	Awarded	Pending	Denied	IBNR	Pending	Ratio	Payroll	Awarded	Weekly Wage	Factor	Years	Claims per 100 Miner Years	Frequency
IBNR Factor adjusted by 0.8000														
2014	0	0	0	0	0.2581	0.2581	0.034069	6,521,541	0.034069	932	1.089	123.6	0.027564	
2015	0	0	0	0	0.2816	0.2816	0.037171	6,196,596	0.037171	951	1.089	115.1	0.032295	
2016	0	0	0	0	0.2859	0.2859	0.037739	5,542,968	0.037739	978	1.089	100.1	0.037701	
2017	0	0	0	0	0.3518	0.3518	0.046438	6,056,810	0.046438	995	1.089	107.5	0.043198	
2018	0	0	0	0	0.4478	0.4478	0.059110	6,916,759	0.059110	1,025	1.089	119.2	0.049589	
2019	0	0	0	0	0.7742	0.7742	0.102194	10,829,165	0.102194	1,049	1.089	182.3	0.056058	
2020	0	0	0	0	0.8424	0.8424	0.111197	10,671,271	0.111197	1,081	1.089	174.3	0.063796	
2021	0	0	0	0	0.9885	0.9885	0.130482	11,359,096	0.130482	1,130	1.089	177.5	0.073511	
2022	0	0	0	0	1.2684	1.2684	0.167429	13,319,056	0.167429	1,205	1.089	195.2	0.085773	
2023	1	0	1	0	2.7733	2.7733	0.366076	16,885,757	0.366076	1,273	1.089	234.2	0.156309	
TOTAL	1	0	1	0	7.2720	8.2720	1.091904	94,299,019	1.091904			1,529.0	0.625794	
Average													0.062579	

BITUMINOUS PREP PLANT (0184)

Award Ratio = 16 / (16 + 105) = 0.132					IBNR +	Award	Expected Ultimate	Statewide Average	Adjustment	Estimated Miner	Frequency	Weighted		
Year	Reported	Awarded	Pending	Denied	IBNR	Pending	Ratio	Payroll	Awarded	Weekly Wage	Factor	Years	Claims per 100 Miner Years	Frequency
IBNR Factor adjusted by 0.4000														
2014	3	0	1	2	0.6303	1.6303	0.215200	31,854,431	0.215200	932	1.550	424.1	0.050743	
2015	1	0	0	1	0.5526	0.5526	0.072943	24,320,608	0.072943	951	1.550	317.3	0.022989	
2016	0	0	0	0	0.5179	0.5179	0.068363	20,079,401	0.068363	978	1.550	254.7	0.026841	
2017	0	0	0	0	0.8366	0.8366	0.110431	28,803,457	0.110431	995	1.550	359.2	0.030744	
2018	1	1	0	0	1.0424	1.0424	0.137597	32,199,872	0.137597	1,025	1.550	389.8	0.029184	
2019	1	0	0	1	1.2911	1.2911	0.170425	36,117,344	0.170425	1,049	1.550	427.2	0.039894	
2020	1	0	0	1	1.3248	1.3248	0.174874	33,562,164	0.174874	1,081	1.550	385.2	0.045398	
2021	0	0	0	0	1.5527	1.5527	0.204956	35,684,224	0.204956	1,130	1.550	391.8	0.052311	
2022	1	0	0	1	1.9364	1.9364	0.255605	40,667,005	0.255605	1,205	1.550	418.7	0.061047	
2023	0	0	0	0	2.1889	2.1889	0.288935	41,687,661	0.288935	1,273	1.550	406.3	0.071114	
TOTAL	8	1	1	6	11.8737	12.8737	1.699328	324,976,167	1.699328			3,774.3	0.692922	
Average													0.069292	

TOTAL OTHER CLASSES

Award Ratio = 16 / (16 + 105) = 0.132					IBNR +	Award	Expected Ultimate	Statewide Average	Adjustment	Estimated Miner	Frequency	Weighted		
Year	Reported	Awarded	Pending	Denied	IBNR	Pending	Ratio	Payroll	Awarded	Weekly Wage	Factor	Years	Claims per 100 Miner Years	Frequency
2014	3	0	1	2	1.3926	2.3926	0.315823	63,784,042	0.315823	932	1.029	1,029.1	0.030689	
2015	1	0	0	1	1.4404	1.4404	0.190133	56,815,357	0.190133	951	1.029	920.8	0.020649	
2016	1	0	0	1	1.4223	1.4223	0.187744	49,731,072	0.187744	978	1.029	790.1	0.023762	
2017	0	0	0	0	1.8903	1.8903	0.249520	59,221,319	0.249520	995	1.029	899.0	0.027755	
2018	3	1	1	1	2.3838	3.3838	0.446662	66,298,649	0.446662	1,025	1.029	977.3	0.0148026	
2019	1	0	0	1	2.8993	2.8993	0.382708	70,685,965	0.382708	1,049	1.029	1,009.2	0.037922	
2020	2	1	0	1	2.9550	2.9550	0.390060	62,524,008	0.390060	1,081	1.029	858.3	0.0161955	
2021	0	0	0	0	3.5116	3.5116	0.463531	67,340,005	0.463531	1,130	1.029	886.6	0.052282	
2022	1	0	0	1	4.5250	4.5250	0.597300	79,644,026	0.597300	1,205	1.029	989.9	0.060339	
2023	1	0	1	0	5.8884	6.8884	0.909269	92,758,571	0.909269	1,273	1.029	1,114.7	0.081571	
TOTAL	13	2	3	8	28.3087	31.3087	4.132748	668,803,014	4.132748			9,475.0	0.644950	
Average													0.064495	0.064610

GRAND TOTAL

Award Ratio = 16 / (16 + 105) = 0.132					IBNR +	Award	Expected Ultimate	Statewide Average	Adjustment	Estimated Miner	Frequency	Weighted		
Year	Reported	Awarded	Pending	Denied	IBNR	Pending	Ratio	Payroll	Awarded	Weekly Wage	Factor	Years	Claims per 100 Miner Years	Frequency
2014	31	3	5	23	14.1846	19.1846	2.532363	321,754,757	4.985372	932	1.550	4,883.3	0.102090	
2015	35	4	5	26	13.0913	18.0913	2.388053	261,874,410	6.922571	951	1.550	3,952.2	0.175157	
2016	17	2	2	13	12.6743	14.6743	1.937005	217,828,634	3.557574	978	1.550	3,188.8	0.111565	
2017	10	1	2	7	20.0644	22.0644	2.912505	285,526,076	3.441003	995	1.550	4,003.8	0.085943	
2018	22	4	3	15	24.3423	27.3423	3.609185	301,690,463	7.160718	1,025	1.550	4,107.3	0.174341	
2019	10	1	3	6	27.7579	30.7579	4.060036	305,553,122	4.244016	1,049	1.550	4,071.7	0.104232	
2020	11	1	2	8	25.5051	27.5051	3.630677	249,374,522	4.223342	1,081	1.550	3,234.2	0.130584	
2021	5	0	3	2	27.7204	30.7204	4.055097	247,819,777	3.495709	1,130	1.550	3,105.9	0.112551	
2022	5	0	2	3	34.2284	36.2284	4.782149	276,905,686	4.082705	1,205	1.550	3,284.2	0.124314	
2023	6	0	4	2	43.6289	47.6289	6.287017	308,588,239	5.942496	1,273	1.550	3,506.7	0.169461	
TOTAL	152	16	31	105	243.1976	274.1976	36.194087	2,776,915,686	48.055505			37,338.1	1.290238	
Average													0.129024	0.127557

Source: Claim counts - CMCRB OD Database as of 4/30/2024

IBNR: Exhibit VIII-C

Payroll- Exhibit X-A, Page 3

The Award Ratio is equal to Awarded ÷ (Awarded plus Denied). Other Classes use the Total Award Ratio: 0.132=16 / (16 + 105)

The Wage Adjustment Factor was derived from CMCRB data. See Exhibit X-G

Estimated Miner Years = Payroll / (SAWW x Adj. Factor x 52)

Frequency per 100 Miner Years = (Expected Ult. Awarded / Est. Miner Years) x 100 or N/A if Payroll=0

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Run Date: October 14, 2024 - 12:50:22 PM

COAL MINE COMPENSATION RATING BUREAU
FEDERAL OCCUPATIONAL DISEASE
ANTHRACITE UNDERGROUND (0160)

Claims with File Dates on or before 12-31-2023. Valued as of 4-30-2024

Reported Claims	Incremental Frequency and IBNR																										
	Year																										
Months	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
12	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
24	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
36	0	0	0	1	2	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0
48	0	0	0	1	2	0	0	0	0	1	0	0	1	0	2	0	1	0	1	0	0	0	0	0	0	0	0
60	0	0	1	1	2	0	0	0	0	1	0	0	1	0	2	0	2	0	1	0	0	0	1	0	0	0	0
72	0	0	1	1	3	0	0	0	0	1	0	1	1	0	2	0	3	0	1	0	0	1	0	0	0	0	0
84	0	0	1	1	4	0	0	0	0	1	0	1	1	0	2	0	3	0	1	0	0	1	0	0	0	0	0
96	0	0	1	1	4	0	1	0	0	1	0	1	1	0	2	0	4	0	1	0	0	1	0	0	0	0	0
108	0	0	1	1	4	0	1	0	0	1	0	1	1	0	2	0	4	0	1	0	0	1	0	0	0	0	0
120	0	0	1	1	4	0	1	0	0	1	0	1	1	0	2	0	4	0	1	0	0	1	0	0	0	0	0
132	0	0	1	1	4	0	1	0	0	1	0	1	1	0	2	0	4	0	2	0	0	1	0	0	0	0	0
144	0	0	1	1	4	0	1	0	0	1	0	1	1	0	2	0	4	0	2	0	0	1	0	0	0	0	0
156	0	0	2	1	4	1	1	0	0	1	0	1	1	0	2	0	4	0	1	0	0	1	0	0	0	0	0
168	0	0	2	1	4	2	1	0	0	1	0	1	1	0	2	0	4	0	1	0	0	1	0	0	0	0	0
180	0	1	3	1	4	2	1	1	0	1	0	1	1	0	2	0	4	0	1	0	0	1	0	0	0	0	0
192	0	1	3	1	4	2	1	1	0	1	0	1	1	0	2	0	4	0	1	0	0	1	0	0	0	0	0
204	0	1	3	1	4	2	1	1	0	1	0	1	1	0	2	0	4	0	1	0	0	1	0	0	0	0	0
216	0	2	3	1	4	2	1	1	0	1	0	1	1	0	2	0	4	0	1	0	0	1	0	0	0	0	0
228	0	2	3	1	4	2	1	1	0	1	0	1	1	0	2	0	4	0	1	0	0	1	0	0	0	0	0
240	0	2	3	2	5	2	1	1	0	1	0	1	1	0	2	0	4	0	1	0	0	1	0	0	0	0	0

Incremental Changes	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
12-24													0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-36														0	0	1	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																											
60-72											0	0	0	0	0	0	1	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	0	0	0	0
84-96																											
96-108																											
108-120																											
120-132																											
132-144																											
144-156			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
156-168	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
168-180	0	1	1	0	0	0	0	0	1	0	0	0	0	0	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	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204-216	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
216-228	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
228-240	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Payroll (\$Millions)	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Average	Smoothed			
12-24	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	0.38188	0.25881	0.25434	0.16376	0.25238	0.18335	0.17938	0.29970	0.23253	0.07340	0.25292	0.00000	0.62097			
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	0.00000	0.06115	0.36359		
36-48																														0.23743	0.16761	
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	0.00000	0.00000	0.00000	0.00000	0.23743	0.16761	
60-72																														0.00000	0.14323	
72-84																														0.20143	0.09788	
84-96																														0.00000	0.06115	
96-108																														0.00000	0.05674	
108-120																														0.00000	0.05548	
120-132																														0.00000	0.00000	
132-144																														0.00000	0.00000	
144-156																														0.00000	0.00000	
156-168																														0.00000	0.00000	
168-180	0.00000	0.56744	0.55122	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	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	0.00000	0.00000	0.00000	0.00000	0.00000	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	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	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	0.56744	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	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	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	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	0.72984	0.61105	0.00000	0.00000	0.00000																					0.16761	0.00000		
Total=				</																												

COAL MINE COMPENSATION RATING BUREAU
FEDERAL OCCUPATIONAL DISEASE
BITUMINOUS UNDERGROUND (0158)

Claims with File Dates on or before 12-31-2023. Valued as of 4-30-2024

Reported Claims	Incremental Frequency and IBNR																										
	Year																										
Months	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
12	0	1	2	2	1	1	0	0	0	1	0	0	0	0	2	1	2	3	5	3	3	4	1	3	2	1	3
24	1	2	4	4	1	2	0	0	0	1	0	1	1	2	2	3	6	7	4	4	8	2	5	3	3	4	4
36	4	5	6	4	2	4	0	1	0	1	2	1	1	2	2	5	4	10	11	6	6	10	5	5	5	4	5
48	5	5	7	4	2	5	0	2	0	1	2	1	4	2	2	5	4	12	15	9	6	11	5	6	6	6	
60	6	5	7	4	3	6	0	2	0	1	3	1	4	2	4	5	4	14	15	9	6	15	8				
72	7	5	7	4	4	6	0	2	0	1	3	1	5	3	4	5	5	15	19	10	7	16					
84	7	5	7	5	4	6	0	2	1	1	3	1	5	4	6	6	5	15	19	12	7						
96	7	5	8	5	4	7	0	2	1	1	4	1	5	4	6	7	5	16	19	12							
108	7	5	9	5	6	7	1	2	1	1	4	1	5	5	6	7	5	21	21								
120	7	5	10	5	6	11	1	2	1	1	4	1	5	5	6	7	5	23									
132	8	5	11	8	7	11	1	2	1	1	4	1	5	5	6	7	6										
144	9	5	15	11	7	13	1	2	1	1	4	1	5	6	6	8											
156	9	5	16	11	7	15	1	3	1	1	4	1	6	6	6												
168	9	6	16	15	7	16	1	3	1	1	4	1	6	6													
180	9	6	17	22	7	17	1	4	1	2	4	1	6														
192	9	7	18	35	7	17	1	5	1	2	4	1	6														
204	9	7	19	37	7	20	2	5	1	2	4	1	6														
216	10	10	19	40	8	20	2	6	1	2																	
228	11	10	20	48	8	20	2	6	1																		
240	11	10	22	52	8	20	2	6																			

Incremental Changes	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
12-24													1	2	0	2	1	3	2	1	1	4	1	2	1	3	
24-36												0	0	0	0	2	1	4	4	2	2	2	3	0	2		
36-48											0	0	3	0	0	0	0	2	4	3	0	1	0	1			
48-60										0	1	0	0	0	2	0	0	2	0	0	0	4	3				
60-72									0	0	0	0	1	1	0	1	1	4	1	4	1	1	1				
72-84								0	1	0	0	0	0	1	2	1	0	0	0	2	0						
84-96								0	0	0	1	0	0	0	0	1	0	1	0	0							
96-108						0	0	0	0	0	0	0	0	0	1	0	0	0	5	2							
108-120						4	0	0	0	0	0	0	0	0	0	0	0	0	0	2							
120-132				3	1	0	0	0	0	0	0	0	0	0	0	0	0	1									
132-144			4	3	0	2	0	0	0	0	0	0	0	1	0	0	1										
144-156		0	1	0	0	2	0	1	0	0	0	0	0	1	0	0	0										
156-168	0	1	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0										
168-180	0	0	1	7	0	1	0	1	0	1	0	0	0	0	0	0	0										
180-192	0	1	1	13	0	0	0	1	0	0	0	0	0	0	0	0	0										
192-204	0	0	1	2	0	3	1	0	0	0	0	0	0	0	0	0	0										
204-216	1	3	0	3	1	0	0	1	0	0	0	0	0	0	0	0	0										
216-228	1	0	1	8	0	0	0	0	0	0	0	0	0	0	0	0	0										
228-240	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0										

Payroll (\$Millions)	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Average	Smoothed
12-24	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	153.61891	145.14625	183.43195	140.57028	118.54548	172.70878	180.59976	178.01900	139.21752	129.32659	136.85701	145.92091	0.01173	0.02739
24-36														0.00000	0.00000	0.01302	0.00689	0.01635	0.01423	0.00844	0.00579	0.02215	0.00562	0.01437	0.00773	0.02192	0.01092	0.02218	
36-48														0.00000	0.00000	0.00000	0.00000	0.01090	0.02846	0.02531	0.00000	0.00554	0.00000	0.00718			0.00823	0.01729	
48-60											0.01251	0.00000	0.00000	0.00000	0.01347	0.00000	0.00000	0.01090	0.00000	0.00000	0.00000	0.00215	0.01685				0.00584	0.01688	
60-72											0.00000	0.00000	0.00000	0.00987	0.00797	0.00000	0.00689	0.00545	0.02846	0.00844	0.00579	0.00554					0.00603	0.01478	
72-84									0.01509	0.00000	0.00000	0.00000	0.00000	0.00797	0.01347	0.00651	0.00000	0.00000	0.00000	0.01687	0.00000						0.00461	0.01454	
84-96								0.00000	0.00000	0.00000	0.01251	0.00000	0.00000	0.00000	0.00000	0.00651	0.00000	0.00545	0.00000	0.00000							0.00188	0.01173	
96-108							0.02740	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00797	0.00000	0.00000	0.00000	0.00545	0.00000	0.01423							0.00591	0.01092	
108-120						0.09795	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01090									0.00837	0.00974	
120-132					0.02061	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00689									0.00212	0.00962	
132-144			0.06313	0.00000	0.04897	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00797	0.00000	0.00651											0.00974	0.00837	
144-156		0.01704	0.00000	0.08417	0.00000	0.02449	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00987	0.00000	0.00000	0.00000	0.00000	0.00987	0.00000							0.00751	0.00823	
156-168		0.01637	0.00000	0.08417	0.00000	0.02449	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000							0.00962	0.00751	
168-180	0.00000	0.00000	0.01704	0.14730	0.00000	0.02449	0.00000	0.02170	0.00000	0.00000	0.01419	0.00000	0.00000	0.02170	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000							0.01729	0.00603	
180-192	0.00000	0.01637	0.01704	0.27357	0.00000	0.00000	0.00000	0.02170	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000							0.02739	0.00591	
192-204	0.00000	0.00000	0.01704	0.04209	0.00000	0.07346	0.00000	0.02740	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000							0.01454	0.00584	
204-216	0.01421	0.04911	0.00000	0.06313	0.02061	0.00000	0.00000	0.02170	0.00000	0.00000																		0.01688	0.00461
216-228	0.01421	0.00000	0.01704	0.16835	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000																		0.02218	0.00212
228-240	0.00000	0.00000	0.03408	0.08417	0.00000	0.00000	0.00000	0.00000																				0.01478	0.00188
Total=																												0.20557	0.20557

IBNR Claims	Cumulative Factor	times Payroll
	0.00188	0.00400
	0.00861	0.014

**COAL MINE COMPENSATION RATING BUREAU
FEDERAL OCCUPATIONAL DISEASE
ANTHRACITE SURFACE (0153)**

Claims with File Dates on or before 12-31-2023. Valued as of 4-30-2024

Reported Claims	Months	Incremental Frequency and IBNR																									
		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
12	4	4	0	1	2	3	0	2	1	0	2	0	0	0	0	0	1	1	0	1	1	1	0	0	0	0	0
24	7	6	0	4	2	3	1	3	2	0	2	2	0	0	1	0	1	1	1	1	1	1	1	0	0	0	1
36	7	6	0	4	2	4	3	3	2	0	2	2	1	0	1	1	1	1	1	1	1	1	1	0	0	0	
48	8	7	0	5	4	5	3	3	2	1	2	2	1	0	1	1	1	1	1	3	1	2	0	2	0	0	
60	8	7	0	5	5	5	3	4	2	1	2	2	1	0	1	1	2	1	2	3	1	2	0	0	0	0	
72	8	8	0	5	5	6	3	4	2	1	2	2	2	0	1	1	3	1	2	4	1	2	0	0	0	0	
84	8	8	0	5	5	6	4	5	2	1	2	2	2	0	1	1	3	1	2	4	2	2	0	0	0	0	
96	8	8	0	5	5	6	4	5	2	1	2	2	2	2	1	1	4	1	2	4	4	2	0	0	0	0	
108	8	8	0	5	6	6	4	5	2	1	2	2	2	2	1	1	4	1	3	4	1	3	0	0	0	0	
120	8	8	1	7	6	6	4	5	2	1	2	2	2	2	1	1	4	1	3	4	1	2	0	0	0	0	
132	8	8	1	7	7	6	4	5	2	1	2	2	2	2	1	1	4	1	3	4	2	2	0	0	0	0	
144	8	9	1	7	7	6	4	5	2	1	2	2	2	2	1	1	4	1	3	4	1	2	0	0	0	0	
156	9	9	1	7	7	6	5	5	2	1	2	2	2	2	1	1	4	1	3	4	2	2	0	0	0	0	
168	9	9	1	7	7	6	5	6	2	1	2	2	2	2	2	1	4	1	3	4	1	2	0	0	0	0	
180	9	9	1	7	7	6	5	6	2	1	2	2	2	2	1	1	4	1	3	4	2	2	0	0	0	0	
192	9	9	1	7	7	6	5	6	2	1	2	2	2	2	1	1	4	1	3	4	1	2	0	0	0	0	
204	9	9	1	10	7	6	5	6	2	1	2	2	2	2	1	1	4	1	3	4	2	2	0	0	0	0	
216	9	9	1	10	7	6	5	6	2	1	2	2	2	2	1	1	4	1	3	4	2	2	0	0	0	0	
228	9	9	1	10	7	6	5	6	2	1	2	2	2	2	1	1	4	1	3	4	2	2	0	0	0	0	
240	9	9	1	10	7	6	5	6	2	1	2	2	2	2	1	1	4	1	3	4	2	2	0	0	0	0	

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

Payroll	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
12-24	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	20.72001	18.91134	22.23435	19.25711	19.09463	18.30351	20.16518	19.34381	21.04841	26.64021	35.65420
24-36																											
36-48																											
48-60																											
60-72																											
72-84																											
84-96																											
96-108																											
108-120																											
120-132																											
132-144																											
144-156																											
156-168																											
168-180																											
180-192																											
192-204																											
204-216																											
216-228																											
228-240																											

IBNR Claims	Cumulative Factor	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	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
0.00346	0.00749	0.01344	0.01946	0.02611	0.03328	0.04068	0.04863	0.06118	0.07644	0.09267	0.11281																
0.08558	0.15519	0.25417	0.43713	0.50280	0.63547	0.74459	0.98063	1.18345	1.60894	2.46875	4.02215																

Source: Coal Mine Compensation Rating Bureau Database as of 4-30-2024
Payrolls: Exhibit X-A, Page 3
File: C:\OneDrive\Clients\Coal Mine\2024 Rate Filing\XL\2024-08-C.xlsx\VIII-C-3
Run Date: October 11, 2024 - 10:48:05 AM

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

Claims with File Dates on or before 12-31-2023. Valued as of 4-30-2024

Reported Claims	Incremental Frequency and IBNR																										
	Year																										
Months	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
12	1	1	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1
24	2	2	1	0	0	1	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2	0	0	
36	4	2	3	1	0	1	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	2	1	2	0	1	
48	4	2	3	1	0	1	0	1	1	0	0	0	0	0	1	1	2	0	0	0	0	2	1	2			
60	5	2	4	1	0	1	0	1	1	0	0	0	0	0	1	1	2	2	0	1	0	3	1				
72	6	2	4	1	0	2	0	1	1	0	0	0	1	0	1	2	2	2	0	1	0	3					
84	6	3	4	1	0	2	1	1	1	0	0	0	1	0	1	2	2	2	1	1	0						
96	6	3	4	1	0	2	1	1	2	0	0	0	1	0	1	2	2	3	1	1							
108	6	3	4	1	0	2	1	1	2	0	1	1	1	0	1	2	2	3	1								
120	6	3	4	1	0	2	1	1	3	1	1	1	1	0	1	2	2	3									
132	6	3	4	1	0	2	1	1	3	1	1	1	1	0	1	2	2	3									
144	6	3	5	1	0	2	1	1	3	2	1	1	1	0	1	2	2	3									
156	6	3	5	1	0	2	2	1	3	2	1	2	1	0	2	1	0	1									
168	6	3	5	1	0	2	2	1	3	2	1	2	1	0													
180	7	3	5	1	0	2	2	1	3	2	1	3	1														
192	7	3	5	1	0	2	2	2	3	2	1	3															
204	7	3	5	2	0	2	2	2	3	2	1																
216	7	3	5	3	0	2	2	2	3																		
228	7	3	5	3	0	2	3	2	3																		
240	8	3	5	3	0	2	3	2																			

Payroll	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
(\$Millions)	73.62183	31.35678	30.45185	29.53686	30.95943	32.09811	36.30165	44.70078	51.98593	53.57718	59.51941	55.25499	47.61428	54.14396	66.13772	66.68662	64.54036	63.78404	56.81536	49.73107	59.22132	66.29865	70.68597	62.52401	67.34001	79.64403	92.75857

**COAL MINE COMPENSATION RATING BUREAU
FEDERAL OCCUPATIONAL DISEASE
ALL CLASSIFICATIONS**

Claims with File Dates on or before 12-31-2023. Valued as of 4-30-2024

Reported Claims Months	Incremental Frequency and IBNR																										
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
12	7	6	2	6	3	6	0	4	2	1	4	0	1	1	2	4	6	4	6	4	5	5	1	6	2	1	6
24	13	12	6	12	4	8	1	5	3	3	4	4	2	3	4	11	8	8	11	5	6	10	3	8	3	5	
36	18	15	10	13	7	11	4	6	4	3	6	4	3	3	6	14	9	12	18	7	8	13	7	8	5		
48	22	16	11	16	9	13	4	7	4	4	7	4	6	3	8	15	11	14	24	12	8	15	7		11		
60	24	16	13	16	11	14	4	8	4	4	8	4	6	3	11	15	13	20	26	13	8	21	10				
72	26	18	14	17	13	16	4	8	4	4	9	8	9	5	11	16	17	22	30	15	9	22					
84	28	19	14	18	15	16	6	9	5	6	10	9	9	6	14	18	17	22	32	17	10						
96	28	20	15	18	15	17	7	9	6	6	11	9	9	8	14	19	20	24	32	17							
108	28	21	16	18	18	17	9	9	6	6	12	10	10	9	15	19	20	29	35								
120	29	21	18	20	18	22	10	10	7	7	13	10	10	9	15	19	20	31									
132	30	21	19	23	21	23	10	10	7	7	13	11	10	9	16	19	21										
144	31	23	24	26	21	25	11	10	7	8	13	12	10	10	16	20											
156	32	23	26	26	21	28	14	11	7	8	13	13	11	10	16												
168	32	24	26	30	22	30	14	12	8	8	13	13	12	10													
180	33	25	28	37	23	31	14	14	8	9	13	14	12														
192	34	26	29	51	25	31	14	16	8	9	14	15															
204	35	27	30	57	25	34	15	16	8	10	14																
216	36	32	31	63	26	34	15	17	8	10																	
228	37	33	33	71	26	34	17	17	8																		
240	38	33	35	76	27	34	17	17																			

Incremental Changes	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
12-24														1	2	2	7	2	4	5	1	1	5	2	2	1	4
24-36												0	1	0	2	3	1	4	7	2	2	3	4	0			
36-48											1	0	3	0	2	1	2	2	6	5	0	2	0		3		
48-60										0	0	1	0	0	3	0	2	6	2	1	0	6	3				
60-72										0	1	4	3	2	0	1	4	2	4	2	1	1					
72-84								1	1	2	1	1	0	1	3	2	0	0	2	2	1						
84-96									0	1	0	1	0	2	0	1	3	2	0	0							
96-108						0	2	0	0	0	1	1	1	1	1	0	0	5	3								
108-120					0	5	1	1	1	1	1	1	0	0	0	0	0	2									
120-132				3	3	1	0	0	0	0	0	1	0	0	1	0	1										
132-144			5	3	0	2	1	0	0	1	0	1	0	1	0	1											
144-156		0	2	0	3	3	1	0	0	0	0	1	1	0	0												
156-168	0	1	0	4	1	2	0	1	1	0	0	0	1	0													
168-180	1	1	2	7	1	1	0	2	0	1	0	1	0	1													
180-192	1	1	1	14	2	0	0	2	0	0	1	1	0														
192-204	1	1	1	6	0	3	1	0	0	1	0																
204-216	1	5	1	6	1	0	0	1	0	0																	
216-228	1	1	2	8	0	0	2	0	0																		
228-240	1	0	2	5	1	0	0	0																			

Payroll (\$Millions)	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
12-24	231.27906	175.23425	163.55466	145.17101	152.19366	138.87132	133.95628	160.69703	196.69173	201.34946	220.76087	249.56714	229.49852	268.41150	323.11931	323.96000	293.50656	321.75476	261.87442	217.82864	285.52607	301.69047	305.55312	249.37453	247.81978	276.90570	308.58824	
24-36														0.00745	0.00619	0.02161	0.00681	0.01243	0.01909	0.00459	0.00350	0.01657	0.00655	0.00802	0.00404	0.01445	Average	Smoothed
36-48														0.00436	0.00000	0.00619	0.00926	0.00341	0.01243	0.02673	0.00918	0.00700	0.00994	0.01309	0.00000	0.00807	0.01010	0.01223
48-60											0.00453	0.00000	0.01307	0.00000	0.00619	0.00309	0.00681	0.00622	0.02291	0.02295	0.00000	0.00663	0.00000	0.01203		0.00768	0.01010	
60-72										0.00000	0.00453	0.01603	0.01307	0.00745	0.00000	0.00309	0.01363	0.00622	0.01527	0.00918	0.00350	0.00331				0.00733	0.00844	
72-84								0.00508	0.00000	0.00453	0.00401	0.00000	0.00373	0.00928	0.00617	0.00000	0.00000	0.00764	0.00918	0.00350						0.00485	0.00832	
84-96					0.00000	0.00508	0.00000	0.00453	0.00000	0.00000	0.00745	0.00000	0.00309	0.01022	0.00622	0.00000	0.00000									0.00281	0.00813	
96-108						0.01493	0.00000	0.00453	0.00401	0.00436	0.00373	0.00309	0.00000	0.00000	0.01554	0.01146										0.00474	0.00768	
108-120					0.03600	0.00747	0.00622	0.00508	0.00497	0.00453	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00622									0.00542	0.00733	
120-132					0.01971	0.00720	0.00000	0.00000	0.00000	0.00401	0.00000	0.00000	0.00000	0.00309	0.00000	0.00341										0.00288	0.00720	
132-144				0.02067	0.00000	0.01440	0.00747	0.00000	0.00000	0.00497	0.00000	0.00401	0.00000	0.00373	0.00000	0.00309										0.00449	0.00625	
144-156			0.01223	0.00000	0.00000	0.02160	0.02240	0.00622	0.00000	0.00000	0.00401	0.00436	0.00000	0.00000	0.00000											0.00545	0.00545	
156-168		0.00571	0.00000	0.02755	0.00657	0.01440	0.00000	0.00622	0.00508	0.00000	0.00000	0.00000	0.00436	0.00000												0.00538	0.00542	
168-180	0.00432	0.00571	0.01223	0.04822	0.00657	0.00720	0.00000	0.01245	0.00000	0.00497	0.00000	0.00401	0.00000													0.00813	0.00538	
180-192	0.00432	0.00571	0.00611	0.09644	0.01314	0.00000	0.00000	0.01245	0.00000	0.00000	0.00453	0.00401														0.01223	0.00485	
192-204	0.00432	0.00571	0.00611	0.04133	0.00000	0.02160	0.00747	0.00000	0.00000	0.00497	0.00000															0.00832	0.00474	
204-216	0.00432	0.02853	0.00611	0.04133	0.00657	0.00000	0.00000	0.00622	0.00000	0.00000																0.00931	0.00449	
216-228	0.00432	0.00571	0.01223	0.05511	0.00000	0.01493	0.00000	0.00000	0.00000	0.00000																0.01026	0.00288	
228-240	0.00432	0.00000	0.01223	0.03444	0.00657	0.00000	0.00000	0.00000																		0.00720	0.00281	
Total=																											0.13127	0.13127

IBNR Claims	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
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**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
Year		0154	0157	0181	0182	0183	0184
2014		0.0495	0.0495	0.0495	0.0495	0.0495	0.0495
2015		0.0568	0.0568	0.0568	0.0568	0.0568	0.0568
2016		0.0645	0.0645	0.0645	0.0645	0.0645	0.0645
2017		0.0726	0.0726	0.0726	0.0726	0.0726	0.0726
2018		0.0809	0.0809	0.0809	0.0809	0.0809	0.0809
2019		0.0894	0.0894	0.0894	0.0894	0.0894	0.0894
2020		0.0987	0.0987	0.0987	0.0987	0.0987	0.0987
2021		0.1088	0.1088	0.1088	0.1088	0.1088	0.1088
2022		0.1190	0.1190	0.1190	0.1190	0.1190	0.1190
2023		0.1313	0.1313	0.1313	0.1313	0.1313	0.1313
B. Adjustment Factor		0.2000	0.5000	0.5000	0.4000	0.8000	0.4000
C. Payroll Per \$1M							
2014		4.46440	0.86159	8.36090	11.72118	6.52154	31.85443
2015		4.34038	0.65477	9.55481	11.74821	6.19660	24.32061
2016		4.43507	0.39278	7.95331	11.32755	5.54297	20.07940
2017		4.56611	0.56632	7.79356	11.43506	6.05681	28.80346
2018		4.48474	0.60014	10.05384	12.04330	6.91676	32.19987
2019		4.51986	0.59321	6.80750	11.81888	10.82917	36.11734
2020		0.31359	0.39523	6.90327	10.67848	10.67127	33.56216
2021		0.00000	0.22756	7.78629	12.28284	11.35910	35.68422
2022		0.00000	0.22362	8.05146	17.38289	13.31906	40.66701
2023		0.00000	0.25235	9.73956	24.19325	16.88576	41.68766
D. IBNR							
2014		0.0442	0.0213	0.2068	0.2319	0.2581	0.6303
2015		0.0493	0.0186	0.2714	0.2669	0.2816	0.5526
2016		0.0572	0.0127	0.2564	0.2922	0.2859	0.5179
2017		0.0663	0.0206	0.2829	0.3321	0.3518	0.8366
2018		0.0726	0.0243	0.4068	0.3899	0.4478	1.0424
2019		0.0808	0.0265	0.3042	0.4225	0.7742	1.2911
2020		0.0062	0.0195	0.3406	0.4215	0.8424	1.3248
2021		0.0000	0.0124	0.4235	0.5345	0.9885	1.5527
2022		0.0000	0.0133	0.4792	0.8277	1.2684	1.9364
2023		0.0000	0.0166	0.6393	1.2703	1.7733	2.1889

Source: IBNR Factor - Exhibit VIII-C, Page 6
 Adjustment Factor - Judgement
 Payrolls: Exhibit X-A, Page 3
 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		
	Year	0154	0157	0181	0182	0183	0184		
	2004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
	2005	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028		
	2006	0.0057	0.0057	0.0057	0.0057	0.0057	0.0057		
	2007	0.0102	0.0102	0.0102	0.0102	0.0102	0.0102		
	2008	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149		
	2009	0.0198	0.0198	0.0198	0.0198	0.0198	0.0198		
	2010	0.0252	0.0252	0.0252	0.0252	0.0252	0.0252		
	2011	0.0306	0.0306	0.0306	0.0306	0.0306	0.0306		
	2012	0.0360	0.0360	0.0360	0.0360	0.0360	0.0360		
	2013	0.0423	0.0423	0.0423	0.0423	0.0423	0.0423		
B. Adjustment Factor		0.2000	0.5000	0.5000	0.4000	0.8000	0.4000		
C. Payroll Per \$1M									
	2004	12.04913	1.05880	7.35151	6.37448	4.40665	13.46020		
	2005	12.86098	1.02654	7.85529	8.52475	5.17007	16.54831		
	2006	12.73739	1.06683	8.41253	9.42358	4.88588	17.05097		
	2007	13.66993	1.12116	9.18671	10.82914	5.81729	18.89519		
	2008	9.76115	2.50676	7.52140	8.48189	5.73354	21.25026		
	2009	5.17355	0.94696	7.53474	7.86641	6.26461	19.82801		
	2010	5.43566	0.82750	7.95805	8.73270	4.87693	26.31313		
	2011	3.59909	1.17626	10.98164	9.10241	6.12326	35.15507		
	2012	5.73811	0.80821	9.31181	9.04775	7.56902	34.21173		
	2013	4.79191	1.04695	7.63076	10.35588	7.07489	33.63997		
D. IBNR									
	2004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
	2005	0.0072	0.0014	0.0110	0.0096	0.0116	0.0186		
	2006	0.0145	0.0030	0.0239	0.0214	0.0222	0.0388		
	2007	0.0278	0.0057	0.0468	0.0441	0.0474	0.0769		
	2008	0.0291	0.0187	0.0561	0.0506	0.0684	0.1268		
	2009	0.0205	0.0094	0.0745	0.0622	0.0991	0.1568		
	2010	0.0273	0.0104	0.1001	0.0879	0.0981	0.2647		
	2011	0.0220	0.0180	0.1679	0.1113	0.1498	0.4299		
	2012	0.0413	0.0146	0.1677	0.1304	0.2181	0.4929		
	2013	0.0405	0.0221	0.1613	0.1751	0.2392	0.5688		

Source: IBNR Factor - Exhibit VIII-C, Page 6
 Adjustment Factor - Judgement
 Payrolls: Exhibit X-A, Page 3
 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%
1/1/2015	to 12/31/2015	638.10	319.10	1.0%
1/1/2016	to 12/31/2016	644.50	322.30	1.0%
1/1/2017	to 12/31/2017	651.00	325.40	1.0%
1/1/2018	to 12/31/2018	660.10	330.00	1.4%
1/1/2019	to 12/31/2019	669.30	334.70	1.4%
1/1/2020	to 12/31/2020	686.70	343.40	2.6%
1/1/2021	to 12/31/2021	693.60	346.80	1.0%
1/1/2022	to 12/31/2022	708.90	354.40	2.2%
1/1/2023	to 12/31/2023	737.90	369.00	4.1%
1/1/2024	to 12/31/2024	772.60	386.30	4.7%

All Years	Average	2.3%
Last 10 Yrs	Average	2.0%
Last 5 Yrs	Average	2.9%
Last 3 Yrs	Average	3.7%

Selected Benefit Change from 2024 to 2025	2.50%
Selected Benefit Change from 2025 to 2026	2.50%
Selected Benefit Change from 2026 to 2027	2.50%

Selected Benefit Change for Severity Model **2.50%**

		Projected Benefit-Claimant	Dependant	Weight
1/1/2025	to 12/31/2025	791.90 a	396.00	28.125%
1/1/2026	to 12/31/2026	811.70 a	405.90	68.750%
1/1/2027	to 12/31/2027	832.00 a	416.00	3.125%
Average Monthly Benefit During the Policy Period Beginning 04/01/2025		806.80 b	403.40	
Average Weekly Benefit During the Policy Period Beginning 04/01/2025		186.20 c	93.10	
Annual (Weekly X 52)		9,682.40	4,841.20	
Annual Miner and Spouse			14,523.60	

- a Previous year's benefit times selected benefit change
- b Weighted average of projected benefit levels from 01-01-25 to 12-31-27
- 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				(5) Pending Awarded <u>(3) * 30%</u>	(6) Denied Reopened	(7) Denied Awarded
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied			
2014	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00
2015	1	-	1	-	0.30	-	-
2016	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-
2018	1	1	-	-	-	-	-
2019	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-
<u>2023</u>	-	-	-	-	-	-	-
Total	2	1	1	-	0.30	-	-

Year	(8) Ultimate Awarded <u>(2)+(5)+(7)</u>	(9) Ultimate Denied <u>(1)-(8)</u>	(10) IBNR <u>(3)</u>	(11) IBNR Awarded <u>(10)xAward Ratio</u>	(12) Total Awarded <u>(8)+(11)</u>	(13) Payroll	(14) Frequency <u>(12)/(13) x 1000000</u>
	2014	# 0.00	# 0.00	# 0.0144	# 0.0029	# 0.0029	\$ 258,809
2015	0.30	0.70	0.0285	0.0057	0.3057	254,336	1.2021
2016	-	-	0.0284	0.0057	0.0057	163,760	0.0348
2017	-	-	0.0685	0.0138	0.0138	252,383	0.0545
2018	1.00	-	0.0760	0.0153	1.0153	183,346	5.5375
2019	-	-	0.1044	0.0210	0.0210	179,379	0.1170
2020	-	-	0.2348	0.0472	0.0472	299,700	0.1575
2021	-	-	0.2374	0.0477	0.0477	232,531	0.2052
2022	-	-	0.1016	0.0204	0.0204	73,399	0.2783
<u>2023</u>	-	-	<u>0.5072</u>	<u>0.1020</u>	<u>0.1020</u>	<u>252,915</u>	<u>0.4031</u>
Total	1.30	0.70	1.4012	0.2816	1.5816	\$ 2,150,558	0.7355

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
	2014	932	1.0890	4.9
2015	951	1.0890	4.7	6.5050
2016	978	1.0890	3.0	0.1902
2017	995	1.0890	4.5	0.3058
2018	1,025	1.0890	3.2	31.7273
2019	1,049	1.0890	3.0	0.6996
2020	1,081	1.0890	4.9	0.9632
2021	1,130	1.0890	3.6	1.3255
2022	1,205	1.0890	1.1	1.8571
<u>2023</u>	<u>1,273</u>	<u>1.0890</u>	<u>3.5</u>	<u>2.9129</u>
Total			36.4	4.3452

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-A, Page 3

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: 0.2010

Bituminous Underground (0158)

Year	Counts				(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied			
2014	# 23	# 1	# 4	# 18	# 1.20	# 0.90	# 0.90
2015	21	1	3	17	0.90	0.85	0.85
2016	12	1	2	9	0.60	0.45	0.45
2017	7	1	1	5	0.30	0.25	0.25
2018	16	2	-	14	-	0.70	0.70
2019	8	1	3	4	0.90	0.20	0.20
2020	6	-	1	5	0.30	0.25	0.25
2021	5	-	3	2	0.90	0.10	0.10
2022	4	-	2	2	0.60	0.10	0.10
<u>2023</u>	<u>3</u>	<u>-</u>	<u>2</u>	<u>1</u>	<u>0.60</u>	<u>0.05</u>	<u>0.05</u>
Total	105	7	21	77	6.30	3.85	3.85

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
2014	# 3.10	# 19.90	# 11.0279	# 2.2166	# 5.3166	\$ 183,431,952	0.0290
2015	2.75	18.25	9.8202	1.9739	4.7239	140,570,275	0.0336
2016	2.05	9.95	9.5761	1.9248	3.9748	118,545,477	0.0335
2017	1.55	5.45	15.9773	3.2114	4.7614	172,708,778	0.0276
2018	2.70	13.30	19.3332	3.8860	6.5860	180,599,760	0.0365
2019	2.10	5.90	21.6881	4.3593	6.4593	178,019,000	0.0363
2020	0.55	5.45	19.3109	3.8815	4.4315	139,217,518	0.0318
2021	1.00	4.00	20.1750	4.0552	5.0552	129,326,591	0.0391
2022	0.70	3.30	24.3852	4.9014	5.6014	136,857,008	0.0409
<u>2023</u>	<u>0.65</u>	<u>2.35</u>	<u>29.9970</u>	<u>6.0294</u>	<u>6.6794</u>	<u>145,920,907</u>	<u>0.0458</u>
Total	17.15	87.85	181.2908	36.4394	53.5894	\$ 1,525,197,266	0.0351

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
2014	932	1.5500	2,441.9	0.2177
2015	951	1.5500	1,833.9	0.2576
2016	978	1.5500	1,503.9	0.2643
2017	995	1.5500	2,153.6	0.2211
2018	1,025	1.5500	2,186.0	0.3013
2019	1,049	1.5500	2,105.5	0.3068
2020	1,081	1.5500	1,597.8	0.2773
2021	1,130	1.5500	1,420.0	0.3560
2022	1,205	1.5500	1,409.1	0.3975
<u>2023</u>	<u>1,273</u>	<u>1.5500</u>	<u>1,422.2</u>	<u>0.4697</u>
Total			18,073.9	0.2965

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-A, Page 3

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: 0.2010

Anthracite Surface (0153)

Year	Counts				(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied			
2014	# 1	# 0	# 0	# 1	# 0.00	# 0.05	# 0.05
2015	3	1	1	1	0.30	0.05	0.05
2016	4	1	-	3	-	0.15	0.15
2017	2	-	1	1	0.30	0.05	0.05
2018	2	-	2	-	0.60	-	-
2019	-	-	-	-	-	-	-
2020	2	-	1	1	0.30	0.05	0.05
2021	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-
<u>2023</u>	<u>1</u>	<u>-</u>	<u>1</u>	<u>-</u>	<u>0.30</u>	<u>-</u>	<u>-</u>
Total	15	2	6	7	1.80	0.35	0.35

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
2014	# 0.05	# 0.95	# 0.2542	# 0.0511	# 0.1011	\$ 18,911,339	0.0053
2015	1.35	1.65	0.4371	0.0879	1.4379	22,234,350	0.0647
2016	1.15	2.85	0.5028	0.1011	1.2511	19,257,107	0.0650
2017	0.35	1.65	0.6355	0.1277	0.4777	19,094,634	0.0250
2018	0.60	1.40	0.7446	0.1497	0.7497	18,303,511	0.0410
2019	-	-	0.9806	0.1971	0.1971	20,165,184	0.0098
2020	0.35	1.65	1.1835	0.2379	0.5879	19,343,807	0.0304
2021	-	-	1.6089	0.3234	0.3234	21,048,411	0.0154
2022	-	-	2.4688	0.4962	0.4962	26,640,206	0.0186
<u>2023</u>	<u>0.30</u>	<u>0.70</u>	<u>4.0222</u>	<u>0.8085</u>	<u>1.1085</u>	<u>35,654,202</u>	<u>0.0311</u>
Total	4.15	10.85	12.8381	2.5805	6.7305	\$ 220,652,751	0.0305

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
2014	932	1.0890	358.3	0.0282
2015	951	1.0890	412.9	0.3482
2016	978	1.0890	347.7	0.3598
2017	995	1.0890	338.9	0.1410
2018	1,025	1.0890	315.3	0.2378
2019	1,049	1.0890	339.5	0.0581
2020	1,081	1.0890	316.0	0.1860
2021	1,130	1.0890	328.9	0.0983
2022	1,205	1.0890	390.4	0.1271
<u>2023</u>	<u>1,273</u>	<u>1.0890</u>	<u>494.6</u>	<u>0.2241</u>
Total			3,642.5	0.1848

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-A, Page 3

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: 0.2010

Bituminous Surface (0156)

Year	Counts				(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied			
2014	# 4	# 2	# 0	# 2	# 0.00	# 0.10	# 0.10
2015	9	2	-	7	-	0.35	0.35
2016	-	-	-	-	-	-	-
2017	1	-	-	1	-	0.05	0.05
2018	-	-	-	-	-	-	-
2019	1	-	-	1	-	0.05	0.05
2020	1	-	-	1	-	0.05	0.05
2021	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-
<u>2023</u>	<u>1</u>	<u>-</u>	<u>-</u>	<u>1</u>	<u>-</u>	<u>0.05</u>	<u>0.05</u>
Total	17	4	-	13	-	0.65	0.65

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
2014	# 2.10	# 1.90	# 1.4955	# 0.3006	# 2.4006	\$ 55,368,615	0.0434
2015	2.35	6.65	1.3650	0.2744	2.6244	42,000,092	0.0625
2016	-	-	1.1447	0.2301	0.2301	30,131,218	0.0076
2017	0.05	0.95	1.4929	0.3001	0.3501	34,248,962	0.0102
2018	-	-	1.8047	0.3628	0.3628	36,305,197	0.0100
2019	0.05	0.95	2.0855	0.4192	0.4692	36,503,594	0.0129
2020	0.05	0.95	1.8210	0.3660	0.4160	27,989,489	0.0149
2021	-	-	2.1875	0.4397	0.4397	29,872,239	0.0147
2022	-	-	2.7478	0.5523	0.5523	33,691,047	0.0164
<u>2023</u>	<u>0.05</u>	<u>0.95</u>	<u>3.2142</u>	<u>0.6461</u>	<u>0.6961</u>	<u>34,001,644</u>	<u>0.0205</u>
Total	4.65	12.35	19.3589	3.8911	8.5411	\$ 360,112,097	0.0237

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
2014	932	1.0890	1,049.1	0.2288
2015	951	1.0890	779.9	0.3365
2016	978	1.0890	544.1	0.0423
2017	995	1.0890	607.8	0.0576
2018	1,025	1.0890	625.5	0.0580
2019	1,049	1.0890	614.5	0.0764
2020	1,081	1.0890	457.2	0.0910
2021	1,130	1.0890	466.8	0.0942
2022	1,205	1.0890	493.7	0.1119
<u>2023</u>	<u>1,273</u>	<u>1.0890</u>	<u>471.7</u>	<u>0.1476</u>
Total			6,110.3	0.1398

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-A, Page 3

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: 0.2010

Four Standard Classes

Year	Counts				(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied			
2014	# 28	# 3	# 4	# 21	# 1.20	# 1.05	# 1.05
2015	34	4	5	25	1.50	1.25	1.25
2016	16	2	2	12	0.60	0.60	0.60
2017	10	1	2	7	0.60	0.35	0.35
2018	19	3	2	14	0.60	0.70	0.70
2019	9	1	3	5	0.90	0.25	0.25
2020	9	-	2	7	0.60	0.35	0.35
2021	5	-	3	2	0.90	0.10	0.10
2022	4	-	2	2	0.60	0.10	0.10
<u>2023</u>	<u>5</u>	<u>-</u>	<u>3</u>	<u>2</u>	<u>0.90</u>	<u>0.10</u>	<u>0.10</u>
Total	139	14	28	97	8.40	4.85	4.85

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
	2014	# 5.25	# 22.75	# 12.7920	# 2.5712	# 7.8212	\$ 257,970,715
2015	6.75	27.25	11.6509	2.3418	9.0918	205,059,053	0.0443
2016	3.20	12.80	11.2520	2.2616	5.4616	168,097,562	0.0325
2017	1.95	8.05	18.1741	3.6530	5.6030	226,304,757	0.0248
2018	4.30	14.70	21.9585	4.4137	8.7137	235,391,814	0.0370
2019	2.15	6.85	24.8586	4.9966	7.1466	234,867,157	0.0304
2020	0.95	8.05	22.5501	4.5326	5.4826	186,850,514	0.0293
2021	1.00	4.00	24.2088	4.8660	5.8660	180,479,772	0.0325
2022	0.70	3.30	29.7034	5.9704	6.6704	197,261,660	0.0338
<u>2023</u>	<u>1.00</u>	<u>4.00</u>	<u>37.7405</u>	<u>7.5858</u>	<u>8.5858</u>	<u>215,829,668</u>	<u>0.0398</u>
Total	27.25	111.75	214.8889	43.1927	70.4427	\$ 2,108,112,672	0.0334

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
	2014	932		3,854.2
2015	951		3,031.4	0.2999
2016	978		2,398.7	0.2277
2017	995		3,104.8	0.1805
2018	1,025		3,130.0	0.2784
2019	1,049		3,062.5	0.2334
2020	1,081		2,375.9	0.2308
2021	1,130		2,219.3	0.2643
2022	1,205		2,294.3	0.2907
<u>2023</u>	<u>1,273</u>		<u>2,392.0</u>	<u>0.3589</u>
Total			27,863.1	0.2528

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: 0.2010

Coke (0154)

Year	Counts				(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded
	(1)	(2)	(3)	(4)			
	Reported	Awarded	Pending	Denied			
2014	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00
2015	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-

Year	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Ultimate Awarded	Ultimate Denied	IBNR	IBNR Awarded	Total Awarded	Payroll	Frequency
	(2)+(5)+(7)	(1)-(8)		(10)xAward Ratio	(8)+(11)		(12)/(13) x 1000000
2014	# 0.00	# 0.00	# 0.0442	# 0.0089	# 0.0089	\$ 4,464,398	0.0020
2015	-	-	0.0493	0.0099	0.0099	4,340,376	0.0023
2016	-	-	0.0572	0.0115	0.0115	4,435,066	0.0026
2017	-	-	0.0663	0.0133	0.0133	4,566,113	0.0029
2018	-	-	0.0726	0.0146	0.0146	4,484,744	0.0033
2019	-	-	0.0808	0.0162	0.0162	4,519,863	0.0036
2020	-	-	0.0062	0.0012	0.0012	313,587	0.0040
2021	-	-	-	-	-	0	N/A
2022	-	-	-	-	-	0	N/A
2023	-	-	-	-	-	-	N/A
Total	-	-	0.3766	0.0757	0.0757	\$ 27,124,147	0.0028

Year	(15)	(16)	(17)	(18)
	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years
2014	932	1.0890	84.6	0.0105
2015	951	1.0890	80.6	0.0123
2016	978	1.0890	80.1	0.0144
2017	995	1.0890	81.0	0.0165
2018	1,025	1.0890	77.3	0.0189
2019	1,049	1.0890	76.1	0.0213
2020	1,081	1.0890	5.1	0.0244
2021	1,130	1.0890	-	N/A
2022	1,205	1.0890	-	N/A
2023	1,273	1.0890	-	N/A
Total			484.8	0.0156

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-A, Page 3

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: 0.2010

Auger (0157)

Year	Counts				(5) Pending Awarded <u>(3) * 30%</u>	(6) Denied Reopened	(7) Denied Awarded
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied			
2014	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00
2015	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-
<u>2023</u>	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-

Year	(8) Ultimate Awarded <u>(2)+(5)+(7)</u>	(9) Ultimate Denied <u>(1)-(8)</u>	(10) IBNR <u>IBNR</u>	(11) IBNR Awarded <u>(10)xAward Ratio</u>	(12) Total Awarded <u>(8)+(11)</u>	(13) Payroll	(14) Frequency <u>(12)/(13) x 1000000</u>
	2014	# 0.00	# 0.00	# 0.0213	# 0.0043	# 0.0043	\$ 861,590
2015	-	-	0.0186	0.0037	0.0037	654,766	0.0057
2016	-	-	0.0127	0.0026	0.0026	392,776	0.0065
2017	-	-	0.0206	0.0041	0.0041	566,324	0.0073
2018	-	-	0.0243	0.0049	0.0049	600,138	0.0081
2019	-	-	0.0265	0.0053	0.0053	593,214	0.0090
2020	-	-	0.0195	0.0039	0.0039	395,231	0.0099
2021	-	-	0.0124	0.0025	0.0025	227,558	0.0110
2022	-	-	0.0133	0.0027	0.0027	223,623	0.0120
<u>2023</u>	-	-	<u>0.0166</u>	<u>0.0033</u>	<u>0.0033</u>	<u>252,349</u>	<u>0.0132</u>
Total	-	-	0.1858	0.0373	0.0373	\$ 4,767,569	0.0078

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
	2014	932	1.0890	16.3
2015	951	1.0890	12.2	0.0306
2016	978	1.0890	7.1	0.0360
2017	995	1.0890	10.1	0.0410
2018	1,025	1.0890	10.3	0.0474
2019	1,049	1.0890	10.0	0.0533
2020	1,081	1.0890	6.5	0.0603
2021	1,130	1.0890	3.6	0.0692
2022	1,205	1.0890	3.3	0.0810
<u>2023</u>	<u>1,273</u>	<u>1.0890</u>	<u>3.5</u>	<u>0.0953</u>
Total			82.9	0.0450

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-A, Page 3

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: 0.2010

Anthracite Co-Gen (0181)

Year	Counts				(5) Pending Awarded <u>(3) * 30%</u>	(6) Denied Reopened	(7) Denied Awarded
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied			
2014	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00
2015	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-
2018	2	-	1	1	0.30	0.05	0.05
2019	-	-	-	-	-	-	-
2020	1	1	-	-	-	-	-
2021	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-
<u>2023</u>	-	-	-	-	-	-	-
Total	3	1	1	1	0.30	0.05	0.05

Year	(8) Ultimate Awarded <u>(2)+(5)+(7)</u>	(9) Ultimate Denied <u>(1)-(8)</u>	(10) IBNR <u>IBNR</u>	(11) IBNR Awarded <u>(10)xAward Ratio</u>	(12) Total Awarded <u>(8)+(11)</u>	(13) Payroll	(14) Frequency <u>(12)/(13) x 1000000</u>
	2014	# 0.00	# 0.00	# 0.2068	# 0.0416	# 0.0416	\$ 8,360,898
2015	-	-	0.2714	0.0546	0.0546	9,554,806	0.0057
2016	-	-	0.2564	0.0515	0.0515	7,953,309	0.0065
2017	-	-	0.2829	0.0569	0.0569	7,793,558	0.0073
2018	0.35	1.65	0.4068	0.0818	0.4318	10,053,839	0.0429
2019	-	-	0.3042	0.0611	0.0611	6,807,496	0.0090
2020	1.00	-	0.3406	0.0685	1.0685	6,903,273	0.1548
2021	-	-	0.4235	0.0851	0.0851	7,786,285	0.0109
2022	-	-	0.4792	0.0963	0.0963	8,051,457	0.0120
<u>2023</u>	-	-	<u>0.6393</u>	<u>0.1285</u>	<u>0.1285</u>	<u>9,739,556</u>	<u>0.0132</u>
Total	1.35	1.65	3.6111	0.7258	2.0758	\$ 83,004,477	0.0250

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
	2014	932	1.0890	158.4
2015	951	1.0890	177.4	0.0308
2016	978	1.0890	143.6	0.0359
2017	995	1.0890	138.3	0.0411
2018	1,025	1.0890	173.2	0.2493
2019	1,049	1.0890	114.6	0.0534
2020	1,081	1.0890	112.8	0.9472
2021	1,130	1.0890	121.7	0.0699
2022	1,205	1.0890	118.0	0.0816
<u>2023</u>	<u>1,273</u>	<u>1.0890</u>	<u>135.1</u>	<u>0.0951</u>
Total			1,393.1	0.1490

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-A, Page 3

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: 0.2010

Bituminous Co-Gen (0182)

Year	Counts				(5) Pending Awarded <u>(3) * 30%</u>	(6) Denied Reopened	(7) Denied Awarded
	(1)	(2)	(3)	(4)			
	Reported	Awarded	Pending	Denied			
2014	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00
2015	-	-	-	-	-	-	-
2016	1	-	-	1	-	0.05	0.05
2017	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-
<u>2023</u>	-	-	-	-	-	-	-
Total	1	-	-	1	-	0.05	0.05

Year	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Ultimate Awarded	Ultimate Denied	IBNR	IBNR Awarded	Total Awarded	Payroll	Frequency
	<u>(2)+(5)+(7)</u>	<u>(1)-(8)</u>		<u>(10)xAward Ratio</u>	<u>(8)+(11)</u>		<u>(12)/(13) x 1000000</u>
2014	# 0.00	# 0.00	# 0.2319	# 0.0466	# 0.0466	\$ 11,721,184	0.0040
2015	-	-	0.2669	0.0536	0.0536	11,748,205	0.0046
2016	0.05	0.95	0.2922	0.0587	0.1087	11,327,552	0.0096
2017	-	-	0.3321	0.0668	0.0668	11,435,057	0.0058
2018	-	-	0.3899	0.0784	0.0784	12,043,297	0.0065
2019	-	-	0.4225	0.0849	0.0849	11,818,883	0.0072
2020	-	-	0.4215	0.0847	0.0847	10,678,482	0.0079
2021	-	-	0.5345	0.1074	0.1074	12,282,842	0.0087
2022	-	-	0.8277	0.1664	0.1664	17,382,885	0.0096
<u>2023</u>	-	-	<u>1.2703</u>	<u>0.2553</u>	<u>0.2553</u>	<u>24,193,248</u>	<u>0.0106</u>
Total	0.05	0.95	4.9895	1.0029	1.0529	\$ 134,631,635	0.0078

Year	(15)	(16)	(17)	(18)
	Statewide Average Weekly Wage	Adjustment Factor	Estimated Miner Years	Frequency Claims per 100 Miner Years
2014	932	1.0890	222.1	0.0210
2015	951	1.0890	218.2	0.0246
2016	978	1.0890	204.5	0.0532
2017	995	1.0890	202.9	0.0329
2018	1,025	1.0890	207.5	0.0378
2019	1,049	1.0890	199.0	0.0427
2020	1,081	1.0890	174.4	0.0486
2021	1,130	1.0890	192.0	0.0560
2022	1,205	1.0890	254.7	0.0653
<u>2023</u>	<u>1,273</u>	<u>1.0890</u>	<u>335.6</u>	<u>0.0761</u>
Total			2,210.9	0.0476

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-A, Page 3

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: 0.2010

Anthracite Prep-Plant (0183)

Year	Counts				(5) Pending Awarded <u>(3) * 30%</u>	(6) Denied Reopened	(7) Denied Awarded
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied			
2014	# 0	# 0	# 0	# 0	# 0.00	# 0.00	# 0.00
2015	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-
<u>2023</u>	<u>1</u>	<u>-</u>	<u>1</u>	<u>-</u>	<u>0.30</u>	<u>-</u>	<u>-</u>
Total	1	-	1	-	0.30	-	-

Year	(8) Ultimate Awarded <u>(2)+(5)+(7)</u>	(9) Ultimate Denied <u>(1)-(8)</u>	(10) IBNR <u>IBNR</u>	(11) IBNR Awarded <u>(10)xAward Ratio</u>	(12) Total Awarded <u>(8)+(11)</u>	(13) Payroll	(14) Frequency <u>(12)/(13) x 1000000</u>
	2014	# 0.00	# 0.00	# 0.2581	# 0.0519	# 0.0519	\$ 6,521,541
2015	-	-	0.2816	0.0566	0.0566	6,196,596	0.0091
2016	-	-	0.2859	0.0575	0.0575	5,542,968	0.0104
2017	-	-	0.3518	0.0707	0.0707	6,056,810	0.0117
2018	-	-	0.4478	0.0900	0.0900	6,916,759	0.0130
2019	-	-	0.7742	0.1556	0.1556	10,829,165	0.0144
2020	-	-	0.8424	0.1693	0.1693	10,671,271	0.0159
2021	-	-	0.9885	0.1987	0.1987	11,359,096	0.0175
2022	-	-	1.2684	0.2549	0.2549	13,319,056	0.0191
<u>2023</u>	<u>0.30</u>	<u>0.70</u>	<u>1.7733</u>	<u>0.3564</u>	<u>0.6564</u>	<u>16,885,757</u>	<u>0.0389</u>
Total	0.30	0.70	7.2720	1.4617	1.7617	\$ 94,299,019	0.0187

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
	2014	932	1.0890	123.6
2015	951	1.0890	115.1	0.0492
2016	978	1.0890	100.1	0.0574
2017	995	1.0890	107.5	0.0658
2018	1,025	1.0890	119.2	0.0755
2019	1,049	1.0890	182.3	0.0854
2020	1,081	1.0890	174.3	0.0971
2021	1,130	1.0890	177.5	0.1119
2022	1,205	1.0890	195.2	0.1306
<u>2023</u>	<u>1,273</u>	<u>1.0890</u>	<u>234.2</u>	<u>0.2803</u>
Total			1,529.0	0.1152

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-A, Page 3

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: 0.2010

Bituminous Prep-Plant (0184)

Year	Counts				(5) Pending Awarded <u>(3) * 30%</u>	(6) Denied Reopened	(7) Denied Awarded
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied			
2014	# 3	# 0	# 1	# 2	# 0.30	# 0.10	# 0.10
2015	1	-	-	1	-	0.05	0.05
2016	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-
2018	1	1	-	-	-	-	-
2019	1	-	-	1	-	0.05	0.05
2020	1	-	-	1	-	0.05	0.05
2021	-	-	-	-	-	-	-
2022	1	-	-	1	-	0.05	0.05
<u>2023</u>	-	-	-	-	-	-	-
Total	8	1	1	6	0.30	0.30	0.30

Year	(8) Ultimate Awarded <u>(2)+(5)+(7)</u>	(9) Ultimate Denied <u>(1)-(8)</u>	(10) IBNR <u>IBNR</u>	(11) IBNR Awarded <u>(10)xAward Ratio</u>	(12) Total Awarded <u>(8)+(11)</u>	(13) Payroll	(14) Frequency <u>(12)/(13) x 1000000</u>
	2014	# 0.40	# 2.60	# 0.6303	# 0.1267	# 0.5267	\$ 31,854,431
2015	0.05	0.95	0.5526	0.1111	0.1611	24,320,608	0.0066
2016	-	-	0.5179	0.1041	0.1041	20,079,401	0.0052
2017	-	-	0.8366	0.1682	0.1682	28,803,457	0.0058
2018	1.00	-	1.0424	0.2095	1.2095	32,199,872	0.0376
2019	0.05	0.95	1.2911	0.2595	0.3095	36,117,344	0.0086
2020	0.05	0.95	1.3248	0.2663	0.3163	33,562,164	0.0094
2021	-	-	1.5527	0.3121	0.3121	35,684,224	0.0087
2022	0.05	0.95	1.9364	0.3892	0.4392	40,667,005	0.0108
<u>2023</u>	-	-	<u>2.1889</u>	<u>0.4400</u>	<u>0.4400</u>	<u>41,687,661</u>	<u>0.0106</u>
Total	1.60	6.40	11.8737	2.3866	3.9866	\$ 324,976,167	0.0123

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
	2014	932	1.5500	424.1
2015	951	1.5500	317.3	0.0508
2016	978	1.5500	254.7	0.0409
2017	995	1.5500	359.2	0.0468
2018	1,025	1.5500	389.8	0.3103
2019	1,049	1.5500	427.2	0.0725
2020	1,081	1.5500	385.2	0.0821
2021	1,130	1.5500	391.8	0.0797
2022	1,205	1.5500	418.7	0.1049
<u>2023</u>	<u>1,273</u>	<u>1.5500</u>	<u>406.3</u>	<u>0.1083</u>
Total			3,774.3	0.1056

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-A, Page 3

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: 0.2010

Total Other Classes

Year	Counts				(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied			
2014	# 3	# 0	# 1	# 2	# 0.30	# 0.10	# 0.10
2015	1	-	-	1	-	0.05	0.05
2016	1	-	-	1	-	0.05	0.05
2017	-	-	-	-	-	-	-
2018	3	1	1	1	0.30	0.05	0.05
2019	1	-	-	1	-	0.05	0.05
2020	2	1	-	1	-	0.05	0.05
2021	-	-	-	-	-	-	-
2022	1	-	-	1	-	0.05	0.05
<u>2023</u>	<u>1</u>	<u>-</u>	<u>1</u>	<u>-</u>	<u>0.30</u>	<u>-</u>	<u>-</u>
Total	13	2	3	8	0.90	0.40	0.40

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
	2014	# 0.40	# 2.60	# 1.3926	# 0.2799	# 0.6799	\$ 63,784,042
2015	0.05	0.95	1.4404	0.2895	0.3395	56,815,357	0.0060
2016	0.05	0.95	1.4223	0.2859	0.3359	49,731,072	0.0068
2017	-	-	1.8903	0.3800	0.3800	59,221,319	0.0064
2018	1.35	1.65	2.3838	0.4791	1.8291	66,298,649	0.0276
2019	0.05	0.95	2.8993	0.5828	0.6328	70,685,965	0.0090
2020	1.05	0.95	2.9550	0.5940	1.6440	62,524,008	0.0263
2021	-	-	3.5116	0.7058	0.7058	67,340,005	0.0105
2022	0.05	0.95	4.5250	0.9095	0.9595	79,644,026	0.0120
<u>2023</u>	<u>0.30</u>	<u>0.70</u>	<u>5.8884</u>	<u>1.1836</u>	<u>1.4836</u>	<u>92,758,571</u>	<u>0.0160</u>
Total	3.30	9.70	28.3087	5.6900	8.9900	\$ 668,803,014	0.0134

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
	2014	932		1,029.1
2015	951		920.8	0.0369
2016	978		790.1	0.0425
2017	995		899.0	0.0423
2018	1,025		977.3	0.1872
2019	1,049		1,009.2	0.0627
2020	1,081		858.3	0.1915
2021	1,130		886.6	0.0796
2022	1,205		989.9	0.0969
<u>2023</u>	<u>1,273</u>		<u>1,114.7</u>	<u>0.1331</u>
Total			9,475.0	0.0949

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: 0.2010

Grand Total

Year	Counts				(5) Pending Awarded (3) * 30%	(6) Denied Reopened	(7) Denied Awarded
	(1) Reported	(2) Awarded	(3) Pending	(4) Denied			
2014	# 31	# 3	# 5	# 23	# 1.50	# 1.15	# 1.15
2015	35	4	5	26	1.50	1.30	1.30
2016	17	2	2	13	0.60	0.65	0.65
2017	10	1	2	7	0.60	0.35	0.35
2018	22	4	3	15	0.90	0.75	0.75
2019	10	1	3	6	0.90	0.30	0.30
2020	11	1	2	8	0.60	0.40	0.40
2021	5	-	3	2	0.90	0.10	0.10
2022	5	-	2	3	0.60	0.15	0.15
<u>2023</u>	<u>6</u>	<u>-</u>	<u>4</u>	<u>2</u>	<u>1.20</u>	<u>0.10</u>	<u>0.10</u>
Total	152	16	31	105	9.30	5.25	5.25

Year	(8) Ultimate Awarded (2)+(5)+(7)	(9) Ultimate Denied (1)-(8)	(10) IBNR IBNR	(11) IBNR Awarded (10)xAward Ratio	(12) Total Awarded (8)+(11)	(13) Payroll	(14) Frequency (12)/(13) x 1000000
	2014	# 5.65	# 25.35	# 14.1846	# 2.8511	# 8.5011	\$ 321,754,757
2015	6.80	28.20	13.0913	2.6314	9.4314	261,874,410	0.0360
2016	3.25	13.75	12.6743	2.5475	5.7975	217,828,634	0.0266
2017	1.95	8.05	20.0644	4.0330	5.9830	285,526,076	0.0210
2018	5.65	16.35	24.3423	4.8928	10.5428	301,690,463	0.0349
2019	2.20	7.80	27.7579	5.5793	7.7793	305,553,122	0.0255
2020	2.00	9.00	25.5051	5.1265	7.1265	249,374,522	0.0286
2021	1.00	4.00	27.7204	5.5718	6.5718	247,819,777	0.0265
2022	0.75	4.25	34.2284	6.8799	7.6299	276,905,686	0.0276
<u>2023</u>	<u>1.30</u>	<u>4.70</u>	<u>43.6289</u>	<u>8.7694</u>	<u>10.0694</u>	<u>308,588,239</u>	<u>0.0326</u>
Total	30.55	121.45	243.1976	48.8827	79.4327	\$ 2,776,915,686	0.0286

Year	(15) Statewide Average Weekly Wage	(16) Adjustment Factor	(17) Estimated Miner Years	(18) Frequency Claims per 100 Miner Years
	2014	932		4,883.3
2015	951		3,952.2	0.2386
2016	978		3,188.8	0.1818
2017	995		4,003.8	0.1494
2018	1,025		4,107.3	0.2567
2019	1,049		4,071.7	0.1911
2020	1,081		3,234.2	0.2203
2021	1,130		3,105.9	0.2116
2022	1,205		3,284.2	0.2323
<u>2023</u>	<u>1,273</u>		<u>3,506.7</u>	<u>0.2871</u>
Total			37,338.1	0.2127

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: 0.2010

COAL MINE COMPENSATION RATING BUREAU
INDIVIDUAL CLAIM DETAIL FOR STATE AND FEDERAL EXCESS

"All Permanent Partial" Scenario (see note)

ID No.	Class	Awd (2) Pend (1) Type*	Exp. Yr.	Age of Miner at Comp Date	Federal Excess:										"All Permanent Partial" Scenario (see note)					
					State		Medical		Offsets for:		After Offsets:		State		Medical		Offsets for:		After Offsets:	
					Benefit	Medical	Plus State	Soc. Sec.	Pension	Base	SS	SS, PP	Benefit	Plus State	Soc. Sec.	Pension	Base	SS	SS, PP	
1717	1011	2	1993	61.3	794,073	53,754	847,827	-	194,815	4	4	2,307	418,647	472,401	-	106,400	205,924	205,924	206,940	
1721	1011	2	1990	66.8	1,076,291	39,872	1,116,164	-	238,782	-	-	0	648,702	688,575	-	190,992	135,267	135,267	136,254	
2053	1011	2	1992	47.4	2,220,707	94,014	2,314,721	407,349	248,234	-	29,282	199,617	802,094	896,108	-	-	496,276	496,276	496,276	
3070	1011	2	1993	61.2	603,605	53,754	657,359	-	193,154	-	-	71	369,841	423,595	-	105,493	97,017	97,017	98,025	
5551	1011	2	1993	64.8	749,542	44,222	793,764	-	209,948	0	0	903	418,319	462,542	-	139,053	174,348	174,348	175,295	
5717	1011	2	1992	50.0	1,817,420	84,811	1,902,232	366,990	214,316	1	48,045	219,101	661,411	746,223	-	-	498,730	498,730	498,730	
6627	1011	2	LS 1999	62.2	189,287	51,263	240,551	-	93,910	251,754	251,754	323,773	189,287	240,551	-	93,910	251,754	251,754	323,773	
10280	1011	2	LS 2011	49.9	712,087	84,811	796,898	-	-	530,957	530,957	530,957	712,087	796,898	-	-	530,957	530,957	530,957	
10536	1011	2	LS 2013	53.7	541,029	72,898	613,927	-	-	465,806	465,806	465,806	541,029	613,927	-	-	465,806	465,806	465,806	

Awarded - Lifetime	6	7,261,638	370,428	7,632,066	774,338	1,299,249	5	77,331	421,998	3,319,015	3,689,443	0	541,938	1,607,562	1,607,562	1,611,519
Awarded - Other	3	1,442,403	208,973	1,651,376	0	93,910	1,248,516	1,248,516	1,320,535	1,442,403	1,651,376	0	93,910	1,248,516	1,248,516	1,320,535
Pending	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Underground Anthracite	9	8,704,041	579,401	9,283,442	774,338	1,393,159	1,248,521	1,325,848	1,742,533	4,761,418	5,340,819	0	635,848	2,856,079	2,856,079	2,932,055
Average		967,116	64,378	1,031,494	86,038	154,795	138,725	147,316	193,615	529,046	593,424	0	70,650	317,342	317,342	325,784

* Type code is as follows: 500 is 500 Weeks, WO is Widow Only, LS is Lump Sum, otherwise claim is Lifetime.
For the "All Permanent Partial" Scenario, Permanent claims for a Miner or Miner and Spouse were re-run with 630 weeks of State Indemnity benefits.
Widow Only, Commuted/Compromised and Lump Sums were the same as in the Base Scenario.
Source: Individual claim data from CMCRB.

COAL MINE COMPENSATION RATING BUREAU
INDIVIDUAL CLAIM DETAIL FOR STATE AND FEDERAL EXCESS

ID No.	Class	Awd (Z) Pend (1)	Type*	Exp. Yr.	Age of Miner at Comp Date	State Benefit	Medical	Medical Plus State	Federal Excess:			"All Permanent Partial" Scenario (see note)			Federal Excess:					
									Offsets for:			State Benefit	Medical Plus State	Offsets for:			After Offsets:			
									Soc. Sec.	Pension	Base			After Offsets:	SS	SS, PP	Soc. Sec.	Pension	Base	SS
511	1002	2		1992	63.5	1,125,918	46,499	1,172,417	-	487,790	-	-	726,613	773,112	-	309,040	78,540	78,540	80,808	
517	1002	2	LS	1993	64.9	1,531,010	44,222	197,232	-	129,883	236,662	236,662	361,374	153,010	197,232	-	129,883	236,662	236,662	361,374
518	1002	2	LS	1992	63.6	239,200	46,499	285,699	-	192,680	245,967	245,967	366,687	239,200	285,699	-	192,680	245,967	245,967	366,687
1330	1002	2	500	1993	63.3	553,320	48,845	602,165	-	170,860	305,371	305,371	305,371	553,320	602,165	-	170,860	305,371	305,371	305,371
1892	1002	2	LS	1990	67.4	84,628	39,872	124,500	-	65,506	257,469	257,469	322,975	84,628	124,500	-	65,506	257,469	257,469	322,975
3222	1002	2	500	1992	62.8	2,050,090	48,845	253,935	-	63,330	262,722	262,722	271,977	205,090	253,935	-	63,330	262,722	262,722	271,977
3532	1002	2	LS	1995	58.1	415,601	61,630	477,231	78,936	30,847	319,202	335,545	360,651	415,601	477,231	78,936	30,847	319,202	335,545	360,651
3706	1002	2	LS	1992	65.1	160,207	44,222	204,430	-	128,026	234,311	234,311	355,743	160,207	204,430	-	128,026	234,311	234,311	355,743
5479	1002	2		1992	63.7	1,160,107	46,499	1,206,606	-	315,191	-	-	0	628,432	674,931	-	199,690	188,218	188,218	189,684
5918	1002	2		1990	66.7	1,484,089	39,872	1,523,962	-	480,726	-	-	6	829,933	869,806	-	377,289	149,919	149,919	151,946
5966	1002	2		1994	58.8	2,083,924	58,941	2,142,865	431,827	430,198	-	3,021	161,816	910,811	142,642	174,633	347,855	350,231	377,090	377,090
6415	1002	2	500	1992	62.4	615,527	51,263	666,791	-	199,896	278,121	278,121	278,121	615,527	666,791	-	199,896	278,121	278,121	278,121
6771	1002	2	500	1992	62.5	137,771	51,263	189,034	-	36,746	118,323	118,323	125,078	137,771	189,034	-	36,746	118,323	118,323	125,078
7004	1002	2		1992	60.7	1,567,782	53,754	1,621,536	-	395,328	-	-	0	807,448	861,202	-	233,668	217,800	217,800	219,751
7051	1002	2	LS	1997	56.5	204,541	67,171	271,712	19,108	-	339,833	355,518	355,518	204,541	271,712	19,108	-	339,833	355,518	355,518
7941	1002	2	LS	1994	66.3	24,930	42,014	66,943	-	18,943	279,784	298,727	298,727	24,930	66,943	-	18,943	279,784	279,784	298,727
8028	1002	2		1992	55.5	1,980,827	67,171	2,047,999	403,813	342,549	-	2,915	105,714	842,399	909,570	73,923	78,773	346,083	348,402	351,270
9826	1002	2	LS	1999	52.9	67,462	75,826	143,288	-	-	517,345	517,345	517,345	67,462	143,288	-	-	517,345	517,345	517,345
9829	1002	2	LS	2001	61.4	184,610	53,754	238,364	-	109,028	310,288	310,288	403,666	184,610	238,364	-	109,028	310,288	310,288	403,666
9835	1002	2	LS	1999	55.0	4,574	70,012	74,587	117	-	555,852	555,969	555,969	4,574	74,587	-	-	555,852	555,969	555,969
9841	1002	2	LS	2001	59.3	175,380	58,941	234,321	61,410	167	327,112	383,348	383,516	175,380	234,321	61,410	167	327,112	383,348	383,516
9886	1002	2	LS	2000	59.9	817,688	56,314	874,002	106,489	129,242	314,563	314,563	315,349	817,688	874,002	106,489	129,242	314,563	314,563	315,349
9901	1002	2	LS	2002	45.3	255,493	100,199	355,692	-	-	625,500	625,500	625,500	255,493	355,692	-	-	625,500	625,500	625,500
9996	1002	2	LS	2004	52.3	118,300	78,791	197,092	-	-	480,852	480,852	480,852	118,300	197,092	-	-	480,852	480,852	480,852
10016	1002	2	LS	2002	58.7	212,091	58,941	271,032	74,330	137	303,612	359,694	359,824	212,091	271,032	74,330	137	303,612	359,694	359,824
10021	1002	2	LS	2000	66.1	123,387	42,014	165,400	-	94,568	206,196	206,196	300,764	123,387	165,400	-	94,568	206,196	206,196	300,764
10022	1002	2	LS	2000	59.0	122,753	58,941	181,694	43,100	-	322,106	364,851	364,851	122,753	181,694	43,100	-	322,106	364,851	364,851
10025	1002	2	LS	2000	57.7	122,799	61,630	184,429	32,438	-	351,573	383,786	383,786	122,799	184,429	32,438	-	351,573	383,786	383,786
10026	1002	2	LS	2000	61.4	123,179	53,754	176,932	-	74,438	274,874	274,874	348,623	123,179	176,932	-	74,438	274,874	274,874	348,623
10038	1002	2	LS	2000	44.4	100,601	103,281	203,882	-	-	806,752	806,752	806,752	100,601	203,882	-	-	806,752	806,752	806,752
10048	1002	2	LS	2005	54.6	120,874	70,012	190,886	3,100	-	413,682	416,782	416,782	120,874	190,886	3,100	-	413,682	416,782	416,782
10088	1002	2	LS	2005	60.5	267,253	56,314	323,567	-	134,374	278,427	278,427	350,003	267,253	323,567	-	134,374	278,427	278,427	350,003
10164	1002	2	LS	2001	53.4	116,920	75,826	192,746	-	-	623,709	623,709	623,709	116,920	192,746	-	-	623,709	623,709	623,709
10208	1002	2	LS	2005	61.6	306,600	51,263	357,863	-	183,407	245,078	245,078	324,679	306,600	357,863	-	183,407	245,078	245,078	324,679
10286	1002	2	LS	2008	58.0	151,470	61,630	213,100	40,012	-	415,600	455,186	455,186	151,470	213,100	40,012	-	415,600	455,186	455,186
10330	1002	2	LS	2012	63.3	259,013	48,845	307,858	-	179,571	306,400	306,400	350,515	259,013	307,858	-	179,571	306,400	306,400	350,515
10345	1002	2	LS	2008	49.6	686,299	84,811	771,110	-	-	561,573	561,573	561,573	686,299	771,110	-	-	561,573	561,573	561,573
10347	1002	2	LS	2011	65.3	314,019	44,222	358,241	-	208,647	201,017	201,017	287,916	314,019	358,241	-	208,647	201,017	201,017	287,916
10357	1002	2	LS	2012	62.4	127,956	51,263	179,219	-	79,233	284,167	284,167	362,585	127,956	179,219	-	79,233	284,167	284,167	362,585
10360	1002	2	LS	2013	59.7	141,118	56,314	197,432	61,979	-	137,346	184,794	184,794	141,118	197,432	61,979	-	137,346	184,794	184,794
10433	1002	2	LS	2012	68.0	115,895	37,800	153,694	-	89,568	245,590	245,590	335,158	115,895	153,694	-	89,568	245,590	245,590	335,158
10434	1002	2	LS	2013	62.7	98,165	48,845	147,011	-	69,842	301,869	301,869	371,707	98,165	147,011	-	69,842	301,869	301,869	371,707
10435	1002	2	LS	2013	58.5	281,142	61,630	342,772	66,114	8,151	341,721	376,996	385,055	281,142	342,772	66,114	8,151	341,721	376,996	385,055
10465	1002	2	LS	2011	65.8	21,717	42,014	63,730	-	-	155,714	155,714	155,714	21,717	63,730	-	-	155,714	155,714	155,714
10516	1002	2	LS	2014	75.8	98,163	23,860	122,023	-	58,125	118,628	118,628	176,753	98,163	122,023	-	58,125	118,628	118,628	176,753
10561	1002	2	LS	2014	60.6	172,087	48,845	220,932	-	116,480	109,369	109,369	182,917	172,087	220,932	-	116,480	109,369	109,369	182,917
10601	1002	2	LS	2015	61.6	367,601	51,263	418,865	-	149,886	287,574	287,574	299,071	367,601	418,865	-	149,886	287,574	287,574	299,071
10652	1002	2	LS	2016	57.5	199,566	61,630	261,196	52,717	-	154,255	183,437	183,437	199,566	261,196	52,717	-	154,255	183,437	183,437
10671	1002	2	LS	2013	57.4	273,333	64,376	337,708	40,517	-	338,955	360,639	368,696	273,333	337,708	40,517	-	338,955	360,639	368,696
10698	1002	2	LS	2014	65.1	74,540	44,222	118,763	-	60,124	318,647	318,647	378,771	74,540	118,763	-	60,124	318,647	318,647	378,771
10699	1002	2	LS	2014	55.3	120,816	70,012	190,828	3,098	-	413,733	416,831	416,831	120,816	190,828	3,098	-	413,733	416,831	416,831
10700	1002	2	LS	2014	73.8	90,612	26,937	117,549	-	-	46,426	46,426	46,426	90,612	117,549	-	-	46,426	46,426	46,426
10701	1002	2	LS	2014	65.0	83,061	44,222	127,283	-	-	112,149	112,149	112,149	83,061	127,283	-	-	112,149	112,149	112,149
10703	1002	2	LS	2016	62.4	7,766	51,263	59,029	-	4,809	387,925	387,925	392,734	7,766	59,029	-	4,809	387,925	387,925	392,734
10731	1002	2	LS	2018	62.8	79,206	48,845	128,051	-	56,353	339,322	339,322	395,675	79,206	128,051	-	56,353	339,322	339,322	395,675
10740	1002	2	LS	2016	64.0	177,660	46,499	224,159	-	62,557										

COAL MINE COMPENSATION RATING BUREAU
INDIVIDUAL CLAIM DETAIL FOR STATE AND FEDERAL EXCESS

ID No.	Class	Pend (1)	Type*	Exp. Yr.	Age of Miner at Comp Date	State Benefit	Medical	Medical Plus State	Federal Excess:			"All Permanent Partial" Scenario (see note)			Federal Excess:					
									Offsets for:		After Offsets:			Offsets for:		After Offsets:				
									Soc. Sec.	Pension	Base	SS	SS, PP	Benefit	Plus State	Soc. Sec.	Pension	Base	SS	SS, PP
408	1016	2		1994	69.0	1,088,152	35,800	1,123,952	-	236,475	-	-	708,763	744,563	-	199,823	102,163	102,163	103,050	
439	1016	2	LS	1999	73.6	29,329	26,937	56,266	-	-	91,826	91,826	91,826	29,329	56,266	-	-	91,826	91,826	91,826
566	1016	2		1990	63.6	1,169,881	46,499	1,216,380	-	214,760	7,682	7,682	11,043	431,534	478,033	-	136,061	503,520	503,520	504,518
636	1016	2		1994	62.3	761,708	51,263	812,971	-	192,100	-	3	2,404	406,807	458,071	-	104,917	195,083	195,083	196,085
778	1016	2	WO	1991	#N/A	392,766	-	392,766	-	-	-	-	-	392,766	392,766	-	-	-	-	-
924	1016	2	LS	1997	62.6	38,537	48,845	87,382	-	27,418	353,383	353,383	380,801	38,537	87,382	-	27,418	353,383	353,383	380,801
1719	1016	2		1996	63.1	914,880	48,845	963,725	-	311,421	-	-	-	575,286	624,132	-	184,073	87,370	87,370	88,907
2268	1016	2		1997	66.6	687,433	39,872	727,305	-	-	-	-	-	479,419	519,291	-	-	59,027	59,027	59,027
2287	1016	2	LS	1998	67.8	691,692	37,800	729,491	-	173,956	167,493	167,493	167,493	691,692	729,491	-	173,956	167,493	167,493	167,493
2479	1016	2		1990	63.9	1,029,884	46,499	1,076,382	-	294,057	-	-	1	584,048	630,547	-	186,300	162,635	162,635	164,002
2794	1016	2		1993	65.9	1,295,568	42,014	1,337,581	-	294,823	-	-	-	800,329	842,343	-	240,940	118,723	118,723	119,905
2827	1016	2		1992	66.1	1,022,962	42,014	1,064,975	-	225,908	-	-	0	625,690	667,703	-	182,415	126,792	126,792	127,715
3350	1016	2	WO	1993	#N/A	871,585	-	871,585	-	-	-	-	-	871,585	871,585	-	-	-	-	-
3814	1016	2		1993	71.8	81,628	30,261	111,889	-	-	45,404	45,404	45,404	64,385	94,646	-	-	62,647	62,647	62,647
3970	1016	2	LS	1991	43.1	426,655	106,346	533,000	-	-	315,448	315,448	315,448	426,655	533,000	-	315,448	315,448	315,448	315,448
5605	1016	2		1992	69.3	965,527	35,800	1,001,327	-	208,745	-	-	0	638,561	674,361	-	178,162	96,292	96,292	97,055
5805	1016	2		1992	67.2	774,447	39,872	814,319	-	-	-	-	-	540,103	579,975	-	-	58,635	58,635	58,635
6071	1016	2		1994	60.3	1,175,465	56,314	1,231,780	-	280,364	-	-	5	611,135	667,449	-	153,123	216,380	216,380	217,842
6322	1016	2	LS	1991	59.5	724,505	58,941	783,446	72,505	71,147	144,513	144,513	144,513	724,505	783,446	72,505	71,147	144,513	144,513	144,513
6481	1016	2		1990	65.7	868,170	42,014	910,184	-	193,467	-	-	80	482,728	524,741	-	146,941	176,830	176,830	177,669
6603	1016	2		1995	69.8	596,121	33,875	629,996	-	128,753	-	0	418	380,672	414,547	-	108,173	113,799	113,799	114,287
6765	1016	2	WO	1990	#N/A	683,182	-	683,182	-	-	-	-	-	683,182	683,182	-	-	-	-	-
7028	1016	2		1997	62.3	800,073	51,263	851,337	-	256,026	-	-	0	490,221	541,485	-	139,831	96,110	96,110	97,446
7473	1016	2		1995	67.0	1,746,189	39,872	1,786,062	-	442,424	-	-	0	838,577	878,449	-	330,421	220,193	220,193	222,127
7825	1016	2		1995	67.6	624,259	37,800	662,058	-	136,926	-	0	385	394,254	432,054	-	113,201	116,731	116,731	117,269
7857	1016	2		1993	59.7	959,395	56,314	1,015,710	339,045	269,969	-	3,480	75,531	558,306	614,621	128,128	122,652	112,876	114,705	118,385
9805	1016	2	LS	2000	74.6	25,296	25,368	50,664	-	17,247	271,502	271,502	288,748	25,296	50,664	-	17,247	271,502	271,502	288,748
9811	1016	2	LS	2001	48.1	697,737	90,930	788,666	-	-	535,204	535,204	535,204	697,737	788,666	-	-	535,204	535,204	535,204
9939	1016	2	LS	2003	61.4	268,913	53,754	322,666	-	108,360	318,742	318,742	363,047	268,913	322,666	-	108,360	318,742	318,742	363,047
9981	1016	2		2004	79.6	749,748	18,457	768,205	-	206,588	-	-	-	648,602	667,059	-	202,568	17,705	17,705	17,896
10030	1016	2		2005	60.2	867,953	56,314	924,267	-	203,566	-	4	1,797	444,242	500,556	-	111,179	228,101	228,101	229,162
10074	1016	2	LS	2003	61.5	129,078	53,754	182,832	-	78,004	119,882	119,882	184,960	129,078	182,832	-	78,004	119,882	119,882	184,960
10140	1016	2	LS	2007	68.8	135,925	35,800	171,724	-	101,933	196,575	196,575	298,508	135,925	171,724	-	101,933	196,575	196,575	298,508
10190	1016	2	LS	2007	60.6	105,116	53,754	158,870	-	71,149	115,627	115,627	186,098	105,116	158,870	-	71,149	115,627	115,627	186,098
10259	1016	2	LS	2007	72.9	57,527	28,566	86,093	-	37,927	180,682	180,682	218,609	57,527	86,093	-	37,927	180,682	180,682	218,609
10278	1016	2	LS	2011	76.7	129,628	22,416	152,043	-	59,773	115,647	115,647	175,420	129,628	152,043	-	59,773	115,647	115,647	175,420
10602	1016	2	LS	2016	63.7	198,154	46,499	244,653	-	159,617	268,444	268,444	389,981	198,154	244,653	-	159,617	268,444	268,444	389,981
10810	1016	2	LS	2016	51.6	256,469	78,791	335,260	-	-	396,216	396,216	396,216	256,469	335,260	-	-	396,216	396,216	396,216
11065	1016	2		2023	65.7	952,734	42,014	994,748	-	212,642	-	-	1	565,759	607,773	-	167,857	141,905	141,905	142,799
Awarded - Lifetime					24	21,079,710	892,976	21,972,687	339,045	4,309,014	53,093	56,574	137,069	13,216,954	14,109,931	128,128	3,008,638	3,013,519	3,015,347	3,036,429
Awarded - Other					15	3,914,558	768,499	4,683,057	72,505	906,531	3,591,184	3,591,184	4,136,872	3,914,558	4,683,057	72,505	906,531	3,591,184	3,591,184	4,136,872
Pending					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Surface Anthracite					39	24,994,269	1,661,475	26,655,744	411,550	5,215,545	3,644,277	3,647,757	4,273,941	17,131,513	18,792,988	200,633	3,915,169	6,604,703	6,606,531	7,173,301
Average						640,879	42,602	683,481	10,553	133,732	93,443	93,532	109,588	439,270	481,871	5,144	100,389	169,351	169,398	183,931

* Type code is as follows: 500 is 500 Weeks, WO is Widow Only, LS is Lump Sum, otherwise claim is Lifetime.
For the "All Permanent Partial" Scenario, Permanent claims for a Miner or Miner and Spouse were re-run with 630 weeks of State Indemnity benefits.
Widow Only, Commuted/Compromised and Lump Sums were the same as in the Base Scenario.
Source: Individual claim data from CMCRB.

COAL MINE COMPENSATION RATING BUREAU
INDIVIDUAL CLAIM DETAIL FOR STATE AND FEDERAL EXCESS

"All Permanent Partial" Scenario (see note)

ID No.	Class	Awd (2) Pend (1)	Type*	Exp. Yr.	Age of Miner at Comp Date	State Benefit	Medical	Medical Plus State	Federal Excess:					Federal Excess:										
									Offsets for:					After Offsets:			Offsets for:					After Offsets:		
									Soc. Sec.	Pension	Base	SS	SS, PP	State Benefit	Medical Plus State	Soc. Sec.	Pension	Base	SS	SS, PP	State Benefit	Medical Plus State	Soc. Sec.	Pension
513	1013	2		1993	64.4	1,735,641	46,499	1,782,140	-	510,709	-	-	0	840,532	887,031	-	323,560	226,708	226,708	229,083				
656	1013	2	LS	1999	53.5	762,516	72,898	835,414	-	-	424,826	424,826	424,826	762,516	835,414	-	-	424,826	424,826	424,826				
1135	1013	2	LS	1990	45.5	756,570	100,199	856,769	-	-	608,519	608,519	608,519	756,570	856,769	-	-	608,519	608,519	608,519				
2486	1013	2	LS	1996	64.2	101,490	46,499	147,989	-	81,752	106,559	106,559	186,376	101,490	147,989	-	81,752	106,559	106,559	186,376				
3386	1013	2	LS	1993	57.8	443,217	61,630	504,846	51,985	49,353	353,442	355,473	382,393	443,217	504,846	51,985	49,353	353,442	355,473	382,393				
3867	1013	2		1994	45.8	2,130,742	97,106	2,227,849	393,768	208,113	0	58,109	230,569	728,319	825,425	-	-	566,500	566,500	566,500				
3968	1013	2	500	1991	43.7	566,910	103,281	670,191	-	-	304,643	304,643	304,643	566,910	670,191	-	-	304,643	304,643	304,643				
5814	1013	2	LS	1997	61.0	14,348	53,754	68,102	-	8,671	357,109	357,109	365,780	14,348	68,102	-	8,671	357,109	357,109	365,780				
5816	1013	2	LS	1996	61.0	242,040	53,754	295,794	-	146,268	263,925	263,925	358,831	242,040	295,794	-	146,268	263,925	263,925	358,831				
5963	1013	2	LS	1994	59.1	85,434	58,941	144,375	29,997	-	398,812	428,809	428,809	85,434	144,375	29,997	-	398,812	428,809	428,809				
5968	1013	2	LS	1995	56.9	414,018	64,376	478,394	30,384	26,802	399,363	401,440	415,089	414,018	478,394	30,384	26,802	399,363	401,440	415,089				
7788	1013	2	LS	1991	69.2	251,653	35,800	287,453	-	168,255	110,835	110,835	214,726	251,653	287,453	-	168,255	110,835	110,835	214,726				
9770	1013	2	LS	1999	59.2	57,325	58,941	116,266	20,127	-	369,448	389,575	389,575	57,325	116,266	20,127	-	369,448	389,575	389,575				
9771	1013	2	LS	1998	62.5	149,685	48,845	198,531	-	106,498	110,072	110,072	183,710	149,685	198,531	-	106,498	110,072	110,072	183,710				
9999	1013	2	LS	2005	46.2	46,544	97,106	143,650	-	-	338,179	338,179	338,179	46,544	143,650	-	-	338,179	338,179	338,179				
10439	1013	2		2011	61.5	1,283,104	51,263	1,334,367	-	339,759	-	-	0	707,269	758,533	-	200,823	178,228	178,228	179,905				
10537	1013	2	LS	2012	64.5	145,809	46,499	192,308	-	117,452	210,854	210,854	325,033	145,809	192,308	-	117,452	210,854	210,854	325,033				
10582	1013	2	LS	2015	72.1	125,350	30,261	155,610	-	-	47,678	47,678	47,678	125,350	155,610	-	-	47,678	47,678	47,678				
10598	1013	2	LS	2012	61.7	32,402	51,263	83,665	-	22,473	363,256	363,256	385,728	32,402	83,665	-	22,473	363,256	363,256	385,728				
10659	1013	2	LS	2015	56.9	110,603	64,376	174,978	19,717	-	168,419	188,136	188,136	110,603	174,978	19,717	-	168,419	188,136	188,136				
10665	1013	2	LS	2014	55.8	365,969	67,171	433,140	18,335	15,853	394,649	400,226	408,748	365,969	433,140	18,335	15,853	394,649	400,226	408,748				
10826	1013	2	LS	2015	63.1	199,085	48,845	247,930	-	141,644	254,114	254,114	362,438	199,085	247,930	-	141,644	254,114	254,114	362,438				
10895	1013	2	LS	2014	63.0	137,577	48,845	186,422	-	97,883	110,631	110,631	184,315	137,577	186,422	-	97,883	110,631	110,631	184,315				
10899	1013	2	LS	2015	54.8	73,735	70,012	143,747	1,891	-	215,167	217,058	217,058	73,735	143,747	1,891	-	215,167	217,058	217,058				

Awarded - Lifetime	3	5,149,488	194,869	5,344,356	393,768	1,058,581	0	58,109	230,569	2,276,120	2,470,989	0	524,383	971,437	971,437	975,488
Awarded - Other	21	5,082,279	1,283,296	6,365,575	172,436	982,905	5,910,499	5,991,917	6,720,590	5,082,279	6,365,575	172,436	982,905	5,910,499	5,991,917	6,720,590
Pending	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Surface Bituminous	24	10,231,766	1,478,165	11,709,931	566,204	2,041,485	5,910,499	6,050,026	6,951,159	7,358,399	8,836,564	172,436	1,507,288	6,881,936	6,963,354	7,696,078
Average		426,324	61,590	487,914	23,592	85,062	246,271	252,084	289,632	306,600	368,190	7,185	62,804	286,747	290,140	320,670

* Type code is as follows: 500 is 500 Weeks, WO is Widow Only, LS is Lump Sum, otherwise claim is Lifetime.
For the "All Permanent Partial" Scenario, Permanent claims for a Miner or Miner and Spouse were re-run with 630 weeks of State Indemnity benefits.
Widow Only, Commuted/Compromised and Lump Sums were the same as in the Base Scenario.
Source: Individual claim data from CMCRB.

COAL MINE COMPENSATION RATING BUREAU
INDIVIDUAL CLAIM DETAIL FOR STATE AND FEDERAL EXCESS

"All Permanent Partial" Scenario (see note)

ID No.	Class	Awd (2) Pend (1)	Type*	Exp. Yr.	Age of Miner at Comp Date	State Benefit	Medical	Medical Plus State	Federal Excess:			Federal Excess:			State Benefit	Medical Plus State	Federal Excess:			
									Offsets for:		Base	After Offsets:		Offsets for:			Base	After Offsets:		
									Soc. Sec.	Pension		SS	SS, PP	Soc. Sec.				Pension	SS	SS, PP
3221	1017	2		1993	60.8	1,913,828	53,754	1,967,582	-	549,558	-	-	43	840,115	893,869	-	324,830	288,637	288,637	291,349
3224	1017	2	LS	1992	56.9	307,329	64,376	371,705	48,594	6,193	373,761	397,385	402,783	307,329	371,705	48,594	6,193	373,761	397,385	402,783
9944	1022	2	LS	2003	53.1	110,964	75,826	186,790	-	-	429,189	429,189	429,189	110,964	186,790	-	-	429,189	429,189	429,189
10817	1022	2	LS	2019	60.6	251,652	53,754	305,406	-	122,681	241,133	241,133	301,371	251,652	305,406	-	122,681	241,133	241,133	301,371
10124	1024	2	LS	2006	60.0	150,549	56,314	206,863	66,121	-	374,027	439,419	439,419	150,549	206,863	66,121	-	374,027	439,419	439,419
1126	1026	2		1997	55.4	644,903	70,012	714,915	234,748	123,713	6	57,100	168,246	331,283	401,295	31,227	23,688	162,858	164,220	178,320
9877	1026	2	LS	1997	54.7	51,382	70,012	121,394	1,318	-	235,304	236,622	236,622	51,382	121,394	1,318	-	235,304	236,622	236,622
9993	1026	2	LS	2004	78.1	96,541	-	96,541	-	-	171,790	171,790	171,790	96,541	96,541	-	-	171,790	171,790	171,790
10161	1026	2	LS	2007	43.2	38,224	106,346	144,570	-	-	854,282	854,282	854,282	38,224	144,570	-	-	854,282	854,282	854,282
10245	1026	2		2010	74.5	564,592	26,937	591,529	-	116,789	-	-	0	426,784	453,720	-	108,045	54,298	54,298	54,589
10600	1026	2	LS	2015	72.2	229,686	30,261	259,946	-	72,904	65,739	65,739	98,691	229,686	259,946	-	72,904	65,739	65,739	98,691
10650	1026	2	LS	2017	52.5	117,077	78,791	195,868	-	-	312,156	312,156	312,156	117,077	195,868	-	-	312,156	312,156	312,156
10718	1026	2	LS	2014	58.6	143,901	58,941	202,842	47,733	2,792	360,464	407,581	410,373	143,901	202,842	47,733	2,792	360,464	407,581	410,373
10904	1026	2	LS	2020	54.6	381,360	70,012	451,373	4,064	3,347	457,253	457,253	459,526	381,360	451,373	4,064	3,347	457,253	457,253	459,526
11062	1026	2	LS	2020	59.3	123,752	58,941	182,692	43,450	-	353,691	396,844	396,844	123,752	182,692	43,450	-	353,691	396,844	396,844
9784	1028	0	LS	2000	78.3	89,306	-	89,306	-	-	237,812	237,812	237,812	89,306	-	-	-	237,812	237,812	237,812
10741	1028	0	LS	2016	64.2	51,258	46,499	97,756	-	41,289	147,663	147,663	188,952	51,258	97,756	-	41,289	147,663	147,663	188,952

Awarded - Lifetime					3	3,123,324	150,703	3,274,027	234,748	790,060	6	57,100	168,289	1,598,182	1,748,885	31,227	456,563	505,793	507,156	524,258
Awarded - Other					14	2,142,979	770,073	2,913,052	211,279	249,207	4,614,263	4,794,868	4,939,810	2,142,979	2,913,052	211,279	249,207	4,614,263	4,794,868	4,939,810
Pending					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Surface Bituminous					17	5,266,303	920,776	6,187,079	446,027	1,039,267	4,614,269	4,851,968	5,108,100	3,741,161	4,661,937	242,506	705,770	5,120,056	5,302,024	5,464,069
Average						309,783	54,163	363,946	26,237	61,133	271,428	285,410	300,476	220,068	274,232	14,265	41,516	301,180	311,884	321,416

* Type code is as follows: 500 is 500 Weeks, WO is Widow Only, LS is Lump Sum, otherwise claim is Lifetime.
For the "All Permanent Partial" Scenario, Permanent claims for a Miner or Miner and Spouse were re-run with 630 weeks of State Indemnity benefits.
Widow Only, Commuted/Compromised and Lump Sums were the same as in the Base Scenario.
Source: Individual claim data from CMCRB.

**Coal Mine Compensation Rating Bureau
Individual Claim Detail for Federal Basic**

ID No.	Class	Awd (2) Pend (1)	Exp. Date	Type*	Age of Miner at Comp. Date	Federal Benefit	Medical
1117	160	1	6/22/1990	0	49.37	678,518	181,709
1335	160	2	4/4/1994	0	61.23	219,770	111,173
2051	160	2	12/6/1990	0	64.94	353,705	91,460
3089	160	2	12/6/1990	0	52.39	592,544	162,955
3156	160	2	6/22/1990	0	67.11	508,990	82,463
3720	160	2	10/1/1990	WO	N/A	285,878	-
4555	160	2	6/22/1990	0	67.34	350,491	82,463
4735	160	2	5/5/1992	WO	N/A	326,471	-
7258	160	2	12/2/1993	0	59.78	511,356	116,468
7489	160	2	6/22/1990	0	54.50	642,762	144,798
7863	160	2	12/6/1990	0	56.42	760,715	138,922
9876	160	2	6/13/2001	0	64.89	343,788	91,460
9929	160	2	5/7/2001	0	51.00	527,788	169,153
9960	160	2	4/1/1999	WO	N/A	161,598	-
10091	160	1	3/1/2001	0	48.03	719,458	188,059
10199	160	2	1/1/1990	0	60.50	484,038	116,468
10200	160	2	10/24/2006	0	53.47	675,989	156,822
10237	160	2	7/21/2003	0	65.28	334,262	91,460
10395	160	2	6/30/1999	0	59.24	239,696	121,901
10422	160	1	3/1/2011	0	53.44	303,244	156,822
10482	160	2	6/1/1991	0	61.87	496,625	106,022
10814	160	1	1/1/2015	0	54.84	281,593	144,798
10873	160	2	3/22/2013	0	55.43	281,593	144,798
10896	160	2	3/1/2013	0	56.00	270,925	138,922
10900	160	1	8/1/2001	0	41.03	942,234	232,471
10977	160	2	4/28/2018	0	58.78	443,063	121,901
10994	160	1	10/15/1996	0	45.62	961,886	200,834

Total Underground Anthracite		12,698,983	3,294,303
Average of 27 claims	56.77	470,333	122,011
Medical plus Indemnity		592,344	

*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. Date	Type*	Age of Miner at Comp. Date	Federal Benefit	Medical
275	158	2	9/25/1992	0	71.39	326,598	66,241
508	158	2	8/15/1991	0	75.55	100,990	49,348
917	158	2	4/1/1993	0	62.00	443,167	106,022
931	158	2	3/3/1995	0	68.32	344,114	78,177
3481	158	2	5/20/1990	0	57.28	521,562	133,141
5821	158	2	5/1/1992	0	69.52	291,638	70,060
6950	158	2	9/30/1990	0	57.91	474,896	127,462
7484	158	2	1/1/1990	WO	N/A	384,129	-
7689	158	2	9/19/1991	0	54.11	574,694	150,767
8381	158	2	12/31/1997	0	77.23	204,002	46,359
9758	158	2	6/28/2000	0	65.98	327,100	86,892
9839	158	2	11/1/2000	0	68.63	297,768	74,040
9857	158	2	7/14/1992	0	79.44	187,784	40,776
9863	158	2	5/1/1990	0	73.06	120,172	59,079
9870	158	2	6/1/1994	WO	N/A	354,885	-
10032	158	2	1/3/1999	0	74.23	289,963	55,710
10042	158	2	11/15/2001	0	55.61	557,575	138,922
10065	158	2	10/9/1992	WO	N/A	126,467	-
10086	158	2	2/9/2006	0	56.41	557,575	138,922
10090	158	2	5/1/2004	0	61.18	415,545	111,173
10123	158	2	3/1/1999	0	52.44	578,933	162,955
10129	158	2	7/1/1993	0	61.63	589,762	106,022
10134	158	2	5/1/2004	0	77.77	171,697	43,504
10182	158	2	9/1/2001	0	61.75	407,731	106,022
10189	158	2	7/11/2002	0	55.34	281,593	144,798
10194	158	2	10/10/2001	0	66.61	361,393	82,463
10215	158	1	6/6/2007	0	55.18	610,652	144,798
10218	158	2	1/1/1999	0	66.66	329,912	82,463
10235	158	2	4/15/1994	0	65.26	353,705	91,460
10254	158	2	5/1/1999	0	67.52	304,189	78,177
10255	158	2	12/1/1992	WO	N/A	202,209	-
10265	158	2	5/15/1999	0	63.36	519,079	101,021
10287	158	2	2/19/2007	0	67.35	329,912	82,463
10291	158	2	6/30/2002	0	67.37	165,491	82,463
10293	158	2	12/1/2003	0	67.01	372,724	82,463
10299	158	2	2/4/2001	0	65.28	316,373	91,460
10315	158	2	4/1/1993	0	66.37	336,716	86,892
10327	158	2	12/1/1991	0	68.11	304,189	78,177
10328	158	2	4/6/1994	0	72.51	239,683	59,079
10366	158	2	10/12/1991	0	71.12	267,671	66,241
10367	158	2	6/10/1997	0	64.04	455,015	96,168
10368	158	2	2/24/1996	0	70.14	391,841	70,060
10387	158	2	10/12/1991	0	61.09	394,355	111,173
10397	158	1	12/15/1996	0	75.22	199,456	52,466
10402	158	2	1/15/2013	0	65.42	353,705	91,460
10443	158	2	6/30/1998	0	72.56	316,257	59,079
10446	158	2	12/1/1992	0	69.46	149,285	74,040
10448	158	1	3/24/1992	0	37.69	1,251,259	250,685
10455	158	2	3/1/2002	0	67.39	320,209	82,463
10472	158	1	12/13/2012	0	62.02	715,098	106,022
10486	158	1	5/26/2000	0	61.38	219,770	111,173
10488	158	1	5/26/2000	0	60.52	450,711	111,173
10498	158	2	5/15/1992	0	75.59	100,990	49,348
10499	158	2	9/30/1996	0	62.19	210,135	106,022
10509	158	1	8/7/2000	0	63.25	200,738	101,021

Sub Totals for Exhibit IX-B Page 2-A

19,673,058 4,778,365

Combined Totals are on Exhibit IX-B Page 2-B

*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**

**Exhibit IX-B
Page 2-B
Underground Bituminous
Class 158**

ID No.	Class	Awd (2) Pend (1)	Exp. Date	Type*	Age of Miner at Comp. Date	Federal Benefit	Medical
10526	158	2	5/26/2000	0	69.84	311,140	70,060
10527	158	1	5/26/2000	0	58.95	645,659	121,901
10529	158	2	5/26/2000	0	66.26	327,100	86,892
10530	158	1	5/26/2000	0	65.36	397,560	91,460
10531	158	2	5/26/2000	0	72.88	217,180	59,079
10558	158	2	9/30/1994	0	66.17	317,871	86,892
10559	158	1	5/30/2014	0	65.00	353,705	91,460
10575	158	1	1/14/1991	0	41.82	895,781	226,234
10584	158	2	7/15/1996	0	79.41	180,595	40,776
10593	158	2	5/29/2000	0	62.50	400,196	101,021
10595	158	2	2/11/2010	0	73.09	247,929	59,079
10610	158	2	7/31/1999	0	66.67	478,521	82,463
10639	158	2	11/24/1996	0	62.00	396,818	106,022
10655	158	2	5/31/2017	0	61.49	394,355	111,173
10673	158	2	11/18/2011	0	65.02	325,124	91,460
10683	158	1	7/3/1999	0	56.64	535,193	133,141
10687	158	1	8/1/1997	0	35.99	481,817	262,254
10695	158	2	3/30/2000	0	59.79	423,636	116,468
10720	158	2	12/1/1992	WO	N/A	118,497	-
10721	158	2	7/1/1992	0	79.66	78,693	38,173
10725	158	2	4/1/1993	0	76.03	169,815	49,348
10734	158	1	2/1/2012	0	69.62	311,140	70,060
10757	158	1	5/1/1992	0	55.38	281,593	144,798
10765	158	2	6/30/2002	0	65.58	173,958	86,892
10770	158	2	9/1/2004	0	80.30	191,327	38,173
10795	158	2	12/31/1996	0	81.28	122,794	35,701
10800	158	1	12/31/2004	0	77.49	95,056	46,359
10804	158	1	5/26/2000	0	52.26	621,224	162,955
10820	158	1	10/6/2017	0	61.93	419,090	106,022
10824	158	2	1/15/2016	0	62.77	411,645	101,021
10830	158	2	12/1/2015	0	59.77	497,472	116,468
10846	158	1	7/20/2016	0	56.95	563,872	133,141
10870	158	1	10/10/2019	0	68.46	323,377	78,177
10872	158	2	7/1/1994	0	60.52	374,866	111,173
10874	158	2	7/7/2018	0	66.24	309,029	86,892
10875	158	2	10/31/1992	0	73.59	269,943	55,710
10881	158	2	7/20/2000	0	66.63	310,892	82,463
10883	158	2	5/19/2000	0	69.22	327,363	74,040
10885	158	2	4/15/1994	WO	N/A	191,531	-
10897	158	2	1/2/2003	0	69.83	282,456	70,060
10914	158	1	2/23/1997	0	73.43	239,683	59,079
10928	158	2	12/29/2014	0	64.45	392,938	96,168
10935	158	2	1/1/2019	0	64.57	364,027	91,460
10962	158	1	8/31/2015	0	54.11	574,694	150,767
10964	158	1	5/26/2000	0	68.73	279,955	74,040
10970	158	1	5/26/2000	0	69.95	265,260	70,060
10981	158	2	2/16/2018	0	71.65	261,976	62,584
10991	158	1	5/26/2000	0	75.67	224,496	49,348
11008	158	1	11/19/2021	0	61.38	450,711	111,173
11018	158	1	2/15/1994	0	36.06	1,076,716	262,254
11023	158	1	9/23/2021	0	57.39	563,872	133,141
11024	158	1	10/3/2022	0	67.07	409,295	82,463
11026	158	1	12/29/2014	0	31.30	1,143,031	288,338
11028	158	1	6/27/2019	0	60.10	446,434	116,468
11043	158	1	6/30/2012	0	63.46	368,487	101,021
11044	158	1	2/8/2013	0	54.04	534,677	150,767
11046	158	1	5/1/2014	0	59.49	454,594	121,901
11047	158	1	9/14/2014	0	66.36	415,586	86,892
11048	158	1	3/6/2015	0	56.22	530,024	138,922
11049	158	1	12/19/2015	0	60.46	638,277	116,468
11052	158	1	5/1/2019	0	65.71	327,100	86,892
11053	158	1	5/11/2021	0	59.59	446,434	116,468
11055	158	1	4/1/2022	0	64.93	353,705	91,460
11056	158	1	6/5/2023	0	66.41	277,549	86,892
11059	158	1	6/23/2023	0	66.63	320,209	82,463
11060	158	1	3/30/2016	0	60.56	438,535	111,173
11063	158	1	6/9/2020	0	61.02	533,123	111,173
11064	158	1	3/1/1999	0	49.17	710,526	181,709

Sub Totals for Exhibit IX-B Page 2-B 26,817,726 6,857,000

Total Underground Bituminous 46,490,784 11,635,365
Average of 123 claims 64.33 377,974 94,596
Medical plus Indemnity 472,570

*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. Date	Type*	Age of Miner at Comp. Date	Federal Benefit	Medical
926	153	2	2/29/1996	0	58.31	463,007	127,462
2157	153	1	10/10/1990	0	54.96	676,714	144,798
2299	153	2	1/15/1990	0	60.12	484,038	116,468
3725	153	2	9/30/1995	0	65.56	300,578	86,892
3955	153	2	10/29/1995	0	66.54	384,483	82,463
4749	153	2	1/3/1992	0	65.72	284,847	86,892
5044	153	2	2/4/1990	0	71.50	245,246	62,584
5131	153	2	5/22/1992	0	68.11	378,313	78,177
5372	153	2	3/10/1997	0	60.04	471,053	116,468
5952	153	2	1/31/1995	WO	N/A	143,369	-
6287	153	2	10/28/1990	0	73.92	218,867	55,710
6303	153	2	8/5/1990	WO	N/A	224,558	-
6581	153	2	6/5/1997	WO	N/A	236,198	-
7032	153	2	2/10/1993	0	62.41	430,904	106,022
7250	153	2	9/30/1993	WO	N/A	354,885	-
7263	153	2	3/1/1991	WO	N/A	236,198	-
7451	153	2	11/5/1990	0	72.80	224,316	59,079
9726	153	2	8/10/1995	0	68.28	323,377	78,177
9739	153	2	12/22/2000	0	73.86	251,398	55,710
9760	153	2	2/7/2000	0	75.44	221,308	52,466
9793	153	1	1/26/2001	0	53.76	560,875	150,767
9885	153	2	6/1/1998	0	66.88	310,892	82,463
9940	153	2	12/1/1990	0	63.20	566,371	101,021
10049	153	2	11/19/2005	0	72.28	245,246	62,584
10073	153	2	3/1/2005	0	60.49	458,518	116,468
10107	153	2	1/6/2004	0	56.26	504,351	138,922
10109	153	2	4/4/2003	0	65.00	182,656	91,460
10145	153	2	5/24/2007	0	59.55	497,472	116,468
10156	153	2	10/21/2002	0	75.14	246,469	52,466
10222	153	2	2/2/2006	0	74.97	229,319	52,466
10231	153	2	4/2/2003	0	65.03	343,788	91,460
10232	153	2	7/31/2004	0	56.70	495,689	133,141
10261	153	2	5/30/1996	0	67.25	350,491	82,463
10275	153	2	3/31/2003	0	68.92	349,046	74,040
10384	153	2	10/23/2007	0	76.31	100,990	49,348
10429	153	2	5/22/2013	0	54.36	588,995	150,767
10459	153	2	8/3/2009	0	57.34	483,444	133,141
10621	153	2	2/28/2013	0	69.01	317,118	74,040
10672	153	2	5/12/2013	0	70.05	282,456	70,060
10717	153	2	1/30/2008	0	70.84	267,671	66,241
10785	153	2	8/1/2016	0	66.94	340,001	82,463
10856	153	1	8/9/2018	0	61.42	438,535	111,173
10876	153	2	1/5/2004	0	79.13	155,271	40,776
10878	153	2	4/2/2003	0	63.12	400,196	101,021
10882	153	2	3/1/2004	0	64.07	371,190	96,168
10952	153	1	12/1/2018	0	61.83	469,020	106,022
10971	153	2	5/15/2015	0	64.36	351,132	96,168
11006	153	1	3/13/2020	0	62.51	411,645	101,021
11050	153	1	8/1/2015	0	60.32	229,629	116,468
11051	153	1	1/1/2017	0	77.99	178,148	43,504
11057	153	1	10/3/2023	0	60.25	229,629	116,468

Total Surface Anthracite		17,509,911	4,210,407
Average of 51 claims	65.71	343,332	82,557
Medical plus Indemnity		425,889	

*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**

**Exhibit IX-B
Page 4-A
Surface Bituminous
Class 156**

ID No.	Class	Awd (2) Pend (1)	Exp. Date	Type*	Age of Miner at Comp. Date	Federal Benefit	Medical
178	156	2	9/23/1994	0	70.19	291,638	70,060
600	156	2	9/10/1992	0	62.67	389,191	101,021
601	156	2	6/19/1992	0	66.18	357,128	86,892
1356	156	2	5/1/1995	0	55.30	626,472	144,798
2494	156	2	4/19/1996	0	64.66	397,560	91,460
3047	156	2	12/31/1996	0	77.58	178,148	43,504
3058	156	2	1/17/1991	0	65.64	367,953	86,892
5221	156	2	6/4/1995	0	66.01	327,100	86,892
5374	156	2	10/21/1991	WO	N/A	585,370	-
5483	156	2	8/6/1990	0	61.43	219,770	111,173
6244	156	2	10/10/1990	0	81.72	118,761	33,398
6949	156	2	12/7/1994	0	54.92	642,762	144,798
7245	156	2	9/1/1991	0	77.57	178,148	43,504
7248	156	2	8/31/1995	0	64.94	353,705	91,460
7893	156	2	2/19/1992	0	61.43	415,545	111,173
8012	156	2	1/1/1990	0	70.45	273,662	70,060
8022	156	2	11/1/1995	0	61.86	407,731	106,022
9761	156	2	9/30/1991	0	74.06	218,867	55,710
9767	156	2	6/1/2000	0	62.11	419,090	106,022
9795	156	2	12/1/1992	0	69.69	291,638	70,060
9866	156	2	9/20/1994	0	78.84	83,914	40,776
9945	156	2	8/31/1995	0	73.69	234,381	55,710
9953	156	2	3/1/1994	0	55.28	642,762	144,798
9961	156	2	5/31/2000	0	52.09	684,438	162,955
9967	156	2	1/15/1990	0	71.04	259,189	66,241
10003	156	2	5/30/1995	0	72.79	256,560	59,079
10104	156	2	6/1/1990	0	71.51	127,032	62,584
10112	156	2	12/1/2007	0	63.94	468,723	96,168
10114	156	2	10/26/1991	WO	N/A	202,209	-
10128	156	2	8/1/1994	0	74.82	221,308	52,466
10204	156	2	2/28/1992	0	69.78	301,200	70,060
10206	156	2	2/8/2010	0	70.65	315,830	66,241
10217	156	2	11/25/2008	0	63.72	360,957	96,168
10221	156	2	1/1/1993	0	81.01	141,309	35,701
10281	156	2	5/1/2011	0	75.14	107,160	52,466
10305	156	2	3/1/1995	0	61.87	430,904	106,022
10333	156	2	6/15/1992	0	80.08	78,693	38,173
10335	156	2	6/1/1995	WO	N/A	260,401	-
10351	156	2	12/27/2012	0	58.61	479,025	121,901
10385	156	2	3/1/2012	WO	N/A	285,878	-
10400	156	1	2/28/1993	0	80.02	176,491	38,173
10403	156	1	6/1/1996	0	46.06	901,330	200,834
10414	156	2	4/27/2001	0	75.85	241,770	49,348
10416	156	1	9/24/1998	0	48.42	884,772	188,059
10418	156	2	1/1/2003	0	73.15	256,560	59,079
10447	156	2	12/1/2008	0	76.83	196,586	46,359
10458	156	2	11/1/2008	0	73.78	234,381	55,710
10517	156	2	4/1/2014	0	67.97	313,592	78,177
10521	156	2	5/1/1996	0	67.14	350,491	82,463
10554	156	2	4/13/2015	0	76.53	204,002	46,359
10566	156	2	8/31/2001	0	76.17	181,388	49,348
10609	156	2	7/1/1996	0	68.92	307,253	74,040
10679	156	2	10/1/2008	0	60.63	426,811	111,173
10684	156	1	12/22/1998	0	50.54	660,610	169,153
10690	156	2	8/1/1995	0	67.23	340,001	82,463
Sub Totals for Exhibit IX-B Page 4-A						18,678,149	4,313,143

Combined Totals are on Exhibit IX-B Page 4-B

*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**

**Exhibit IX-B
Page 4-B
Surface Bituminous
Class 156**

ID No.	Class	Awd (2) Pend (1)	Exp. Date	Type*	Age of Miner at Comp. Date	Federal Benefit	Medical
10692	156	2	11/1/1994	0	74.28	322,743	55,710
10694	156	2	8/1/1992	0	76.16	175,419	49,348
10756	156	2	10/1/1991	0	60.98	365,718	111,173
10771	156	1	9/1/2013	0	66.63	165,491	82,463
10774	156	1	6/1/2012	0	63.74	381,845	96,168
10779	156	2	11/1/2014	0	74.24	242,698	55,710
10833	156	2	1/1/2015	0	68.23	304,189	78,177
10836	156	2	3/1/2008	0	73.09	265,578	59,079
10842	156	1	7/1/1999	0	43.34	887,416	219,942
10844	156	2	10/10/1997	0	82.97	64,736	31,253
10857	156	2	11/17/1993	0	84.89	104,388	27,386
10879	156	2	12/13/1994	0	76.53	176,412	46,359
10880	156	2	8/14/2007	0	61.18	548,404	111,173
10884	156	2	1/1/1994	0	68.06	313,592	78,177
10889	156	1	4/30/1997	0	66.73	165,491	82,463
10944	156	1	9/10/2011	0	56.36	572,063	138,922
10949	156	1	2/1/2003	0	45.76	788,300	200,834
10996	156	1	1/1/1999	0	61.57	210,135	106,022
11001	156	1	7/1/2009	0	63.67	381,845	96,168
11013	156	1	6/10/2007	0	63.21	489,622	101,021
11033	156	1	8/1/1993	0	35.82	1,057,458	262,254
11038	156	1	4/11/1995	0	55.19	580,438	144,798
11042	156	1	11/14/2008	0	69.45	288,667	74,040

Sub Totals for Exhibit IX-B Page 4-B 8,852,645 2,308,641

Total Surface Bituminous 27,530,795 6,621,784
Average of 78 claims 66.82 352,959 84,895
Medical plus Indemnity 437,854

*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. Date	Type*	Age of Miner at Comp. Date	Federal Benefit	Medical
10808	157	2	2/3/2008	0	73.71	251,398	55,710
3158	181	2	3/14/1997	0	62.00	430,904	106,022
10886	181	2	1/24/2020	0	52.63	597,733	156,822
11031	181	1	3/9/2018	0	57.11	508,395	133,141
10451	182	2	5/1/2005	0	65.93	173,958	86,892
4592	183	2	7/19/1997	WO	N/A	134,756	-
9887	183	1	2/2/2000	0	51.88	314,195	162,955
9904	183	2	12/31/1997	WO	N/A	171,225	-
9992	183	2	7/22/2004	0	71.54	261,976	62,584
10877	183	2	4/4/2003	0	58.24	487,241	127,462
10987	183	2	5/31/1998	0	77.56	224,135	43,504
11058	183	1	7/21/2023	0	62.19	407,731	106,022
10135	184	2	2/1/2002	0	75.55	280,770	49,348
10244	184	2	1/1/1999	0	81.69	155,366	33,398
10338	184	2	10/15/2005	0	68.77	149,285	74,040
10450	184	1	8/31/2009	0	62.73	378,628	101,021
10508	184	1	6/6/2006	0	53.57	650,990	150,767
10680	184	1	5/17/2006	0	54.69	552,121	144,798
10838	184	1	7/1/2004	0	45.32	763,075	207,230
10892	184	2	3/30/2018	0	64.15	351,132	96,168
10901	184	2	1/1/2008	0	66.89	310,892	82,463
10940	184	1	12/1/2003	0	56.31	270,925	138,922
10950	184	1	3/1/2014	0	59.50	229,629	116,468
11000	184	1	5/31/2008	0	67.13	320,209	82,463

Total Other Classes		8,376,671	2,318,200
Average of 24 claims	63.14	349,028	96,592
Medical plus Indemnity		445,620	

*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
Traumatic

	Anthracite Underground	Bituminous Underground	Anthracite Surface	Bituminous Surface	Coke	Auger	Anthracite Co-gen	Bituminous Co-gen	Anthracite Prep Plant	Bituminous Prep Plant	Total
<u>Traumatic</u>	<u>(1010)</u>	<u>(1001)</u>	<u>(1012)</u>	<u>(1014)</u>	<u>(1469)</u>	<u>(1015)</u>	<u>(1021)</u>	<u>(1023)</u>	<u>(1025)</u>	<u>(1027)</u>	
1979											
1980											
1981											
1982											
1983											
1984											
1985											
1986											
1987											
1988											
1989											
1990											
1991											
1992											
1993											
1994											
1995											
1996											
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	154,428,761	26,295,907	76,452,811	5,738,105	808,208	10,273,004	9,047,745	8,671,140	34,211,729	326,146,817
2013	175,900	149,953,068	22,449,824	61,349,745	4,791,910	1,025,399	8,342,651	10,355,884	8,265,665	34,253,697	300,963,743
2014	258,809	271,230,707	20,466,075	54,050,731	4,464,398	806,976	9,060,883	11,721,184	8,234,771	43,520,040	423,814,574
2015	254,336	216,454,460	24,218,779	40,934,048	4,340,376	582,619	10,469,089	11,748,205	7,606,274	33,564,176	350,172,362
2016	163,760	148,556,407	20,873,611	29,127,089	4,435,066	372,496	8,994,602	11,327,552	7,018,927	23,689,882	254,559,392
2017	252,383	172,708,778	21,167,074	33,140,780	4,566,113	449,009	8,819,700	11,435,057	7,746,154	28,803,457	289,088,505
2018	183,346	180,553,142	19,576,675	35,242,187	4,484,744	600,138	11,600,891	12,043,297	9,651,288	32,199,872	306,135,580
2019	179,379	177,833,672	23,224,142	35,362,714	4,466,971	539,914	8,191,669	11,818,883	12,873,320	36,099,579	310,590,243
2020	299,700	139,028,472	22,443,061	27,274,125	313,587	384,571	7,660,069	10,678,482	12,543,358	33,562,164	254,187,589
2021	232,531	129,326,591	24,346,630	29,072,359	-	206,478	8,371,756	12,282,842	12,875,453	35,684,224	252,398,864
2022	68,319	136,857,008	29,927,352	33,040,041	-	223,623	8,934,145	17,382,885	14,754,239	40,665,453	281,853,065
2023	199,052	145,920,907	35,342,111	33,302,085	-	252,349	9,705,257	24,193,248	16,725,093	41,687,661	307,327,763

Payroll data for these years is not readily available

Source: Exhibits X-C and X-D
Prior filings for 2012 and prior.

COAL MINE COMPENSATION RATING BUREAU
Summary of Developed & Adjusted Payrolls
State Occupational Disease

State OD	Anthracite	Bituminous	Anthracite	Bituminous	Coke	Auger	Anthracite	Bituminous	Anthracite	Bituminous	Total
	Underground	Underground	Surface	Surface			Co-gen	Co-gen	Prep Plant	Prep Plant	
	(1011)	(1002)	(1016)	(1013)	(1017)	(1019)	(1022)	(1024)	(1026)	(1028)	
1979	3,398,172	155,459,760	33,547,630	189,274,623	8,602,156	1,250,040	-	-	-	-	391,532,381
1980	3,933,740	146,370,736	39,976,938	180,192,249	4,240,988	1,445,092	-	-	-	-	376,159,743
1981	4,989,959	141,497,489	45,905,609	193,710,747	3,521,616	1,581,422	-	-	-	-	391,206,842
1982	5,295,887	170,306,624	42,724,737	194,074,092	1,831,640	1,682,037	-	-	-	-	415,915,017
1983	4,169,015	82,776,145	34,841,224	146,423,067	124,805	1,260,780	-	-	-	-	269,595,036
1984	4,137,720	77,024,693	34,531,000	174,212,221	2,078,069	1,778,957	-	-	-	-	293,762,660
1985	4,507,670	46,693,499	31,216,341	143,422,695	2,528,033	1,561,675	-	-	-	-	229,929,913
1986	4,896,054	43,203,448	32,077,958	136,641,573	19,044,481	1,669,241	-	-	-	-	237,532,755
1987	4,061,875	55,036,577	25,008,155	134,305,891	26,573,681	1,695,582	-	-	-	-	246,681,761
1988	2,745,685	64,843,301	23,099,360	126,493,210	18,498,632	1,626,194	-	-	-	-	237,306,382
1989	2,066,292	74,335,286	27,044,506	125,361,713	12,583,451	1,888,442	-	-	-	-	243,279,690
1990	1,547,051	77,524,448	32,392,891	124,189,071	61,308,712	2,295,585	676,180	-	-	-	299,933,938
1991	718,147	59,439,370	30,956,584	104,583,500	52,451,102	1,718,758	1,093,089	-	-	-	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	-	-	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	-	-	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	-	-	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	-	-	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
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	153,618,908	26,295,907	76,452,811	5,738,105	808,208	10,273,004	9,047,745	8,671,140	34,211,729	326,146,817
2013	381,876	149,747,092	22,449,824	61,349,745	4,791,910	1,025,399	8,342,651	10,355,884	8,265,665	34,253,697	300,963,743
2014	258,809	271,230,707	20,466,075	54,050,731	4,464,398	806,976	9,060,883	11,721,184	8,234,771	43,520,040	423,814,574
2015	254,336	216,454,460	24,218,779	40,934,048	4,340,376	582,619	10,469,089	11,748,205	7,606,274	33,564,176	350,172,362
2016	163,760	148,556,407	20,873,611	29,127,089	4,435,066	372,496	8,994,602	11,327,552	7,018,927	23,689,882	254,559,392
2017	252,383	172,708,778	21,167,074	33,140,780	4,566,113	449,009	8,819,700	11,435,057	7,746,154	28,803,457	289,088,505
2018	183,346	180,553,142	19,576,675	35,242,187	4,484,744	600,138	11,600,891	12,043,297	9,651,288	32,199,872	306,135,580
2019	179,379	177,833,672	23,224,142	35,362,714	4,466,971	539,914	8,191,669	11,818,883	12,873,320	36,099,579	310,590,243
2020	299,700	139,028,472	22,443,061	27,274,125	313,587	384,571	7,660,069	10,678,482	12,543,358	33,562,164	254,187,589
2021	232,531	129,326,591	24,346,630	29,072,359	-	206,478	8,371,756	12,282,842	12,875,453	35,684,224	252,398,864
2022	68,319	136,857,008	29,927,352	33,040,041	-	223,623	8,934,145	17,382,885	14,754,239	40,665,453	281,853,065
2023	199,052	145,920,907	35,342,111	33,302,085	-	252,349	9,705,257	24,193,248	16,725,093	41,687,661	307,327,763

Source: Exhibits X-C and X-D
Prior filings for 2012 and prior.

COAL MINE COMPENSATION RATING BUREAU
Summary of Developed & Adjusted Payrolls
Federal Occupational Disease

Federal OD	Anthracite Underground	Bituminous Underground	Anthracite Surface	Bituminous Surface	Coke	Auger	Anthracite Co-gen	Bituminous Co-gen	Anthracite Prep Plant	Bituminous Prep Plant	Total
	(0160)	(0158)	(0153)	(0156)	(0154)	(0157)	(0181)	(0182)	(0183)	(0184)	
1979	3,398,172	155,459,760	33,547,630	189,274,623	8,602,156	1,250,040	-	-	-	-	391,532,381
1980	3,933,740	146,370,736	39,976,938	180,192,249	4,240,988	1,445,092	-	-	-	-	376,159,743
1981	4,989,959	141,497,489	45,905,609	193,710,747	3,521,616	1,581,422	-	-	-	-	391,206,842
1982	5,295,887	170,306,624	42,724,737	194,074,092	1,831,640	1,682,037	-	-	-	-	415,915,017
1983	4,169,015	82,776,145	34,841,224	146,423,067	124,805	1,260,780	-	-	-	-	269,595,036
1984	4,137,720	77,024,693	34,531,000	174,212,221	2,078,069	1,778,957	-	-	-	-	293,762,660
1985	4,507,670	46,693,499	31,216,341	143,422,695	2,528,033	1,561,675	-	-	-	-	229,929,913
1986	4,896,054	43,203,448	32,077,958	136,641,573	19,044,481	1,669,241	-	-	-	-	237,532,755
1987	4,061,875	42,076,700	25,008,155	134,305,891	26,573,681	1,695,582	-	-	-	-	233,721,884
1988	2,745,685	51,133,431	23,099,360	126,493,210	18,498,632	1,626,194	-	-	-	-	223,596,512
1989	2,066,292	58,507,532	27,044,506	125,361,713	12,583,451	1,888,442	-	-	-	-	227,451,936
1990	1,547,051	63,271,520	32,392,891	124,189,071	61,308,712	2,295,585	676,180	-	-	-	285,681,010
1991	718,147	58,318,242	30,956,584	104,583,500	52,451,102	1,718,758	1,093,089	-	-	-	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	-	-	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	-	-	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	-	-	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	-	-	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
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	153,618,908	24,734,711	77,890,500	5,738,105	808,208	9,311,812	9,047,745	7,569,023	34,211,729	323,960,001
2013	381,876	145,146,253	20,720,014	62,718,061	4,791,910	1,046,947	7,630,762	10,355,884	7,074,886	33,639,969	293,506,562
2014	258,809	183,431,952	18,911,339	55,368,615	4,464,398	861,590	8,360,898	11,721,184	6,521,541	31,854,431	321,754,757
2015	254,336	140,570,275	22,234,350	42,000,092	4,340,376	654,766	9,554,806	11,748,205	6,196,596	24,320,608	261,874,410
2016	163,760	118,545,477	19,257,107	30,131,218	4,435,066	392,776	7,953,309	11,327,552	5,542,968	20,079,401	217,828,634
2017	252,383	172,708,778	19,094,634	34,248,962	4,566,113	566,324	7,793,558	11,435,057	6,056,810	28,803,457	285,526,076
2018	183,346	180,599,760	18,303,511	36,305,197	4,484,744	600,138	10,053,839	12,043,297	6,916,759	32,199,872	301,690,463
2019	179,379	178,019,000	20,165,184	36,503,594	4,519,863	593,214	6,807,496	11,818,883	10,829,165	36,117,344	305,553,122
2020	299,700	139,217,518	19,343,807	27,989,489	313,587	395,231	6,903,273	10,678,482	10,671,271	33,562,164	249,374,522
2021	232,531	129,326,591	21,048,411	29,872,239	-	227,558	7,786,285	12,282,842	11,359,096	35,684,224	247,819,777
2022	73,399	136,857,008	26,640,206	33,691,047	-	223,623	8,051,457	17,382,885	13,319,056	40,667,005	276,905,686
2023	252,915	145,920,907	35,654,202	34,001,644	-	252,349	9,739,556	24,193,248	16,885,757	41,687,661	308,588,239

Source: Exhibits X-C and X-D
Prior filings for 2012 and prior.

COAL MINE COMPENSATION RATING BUREAU
TRAUMATIC LOSS COST PREMIUM

Exhibit X-B
Page 1

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
2013	14.98	175,900	26,350	6.28	149,953,068	9,417,053	4.78	22,449,824	1,073,102	1.07	61,349,745	656,442
2014	14.98	258,809	38,770	6.28	271,230,707	17,033,288	4.78	20,466,075	978,278	1.07	54,050,731	578,343
2015	14.98	254,336	38,100	6.28	216,454,460	13,593,340	4.78	24,218,779	1,157,658	1.07	40,934,048	437,994
2016	14.98	163,760	24,531	6.28	148,556,407	9,329,342	4.78	20,873,611	997,759	1.07	29,127,089	311,660
2017	14.98	252,383	37,807	6.28	172,708,778	10,846,111	4.78	21,167,074	1,011,786	1.07	33,140,780	354,606
2018	14.98	183,346	27,465	6.28	180,553,142	11,338,737	4.78	19,576,675	935,765	1.07	35,242,187	377,091
2019	14.98	179,379	26,871	6.28	177,833,672	11,167,955	4.78	23,224,142	1,110,114	1.07	35,362,714	378,381
2020	14.98	299,700	44,895	6.28	139,028,472	8,730,988	4.78	22,443,061	1,072,778	1.07	27,274,125	291,833
2021	14.98	232,531	34,833	6.28	129,326,591	8,121,710	4.78	24,346,630	1,163,769	1.07	29,072,359	311,074
2022	14.98	68,319	10,234	6.28	136,857,008	8,594,620	4.78	29,927,352	1,430,527	1.07	33,040,041	353,528
2023	14.98	199,052	29,818	6.28	145,920,907	9,163,833	4.78	35,342,111	1,689,353	1.07	33,302,085	356,332

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
2013	4.45	4,791,910	213,240	6.14	1,025,399	62,959	6.53	8,342,651	544,775	1.34	10,355,884	138,769
2014	4.45	4,464,398	198,666	6.14	806,976	49,548	6.53	9,060,883	591,676	1.34	11,721,184	157,064
2015	4.45	4,340,376	193,147	6.14	582,619	35,773	6.53	10,469,089	683,632	1.34	11,748,205	157,426
2016	4.45	4,435,066	197,360	6.14	372,496	22,871	6.53	8,994,602	587,348	1.34	11,327,552	151,789
2017	4.45	4,566,113	203,192	6.14	449,009	27,569	6.53	8,819,700	575,926	1.34	11,435,057	153,230
2018	4.45	4,484,744	199,571	6.14	600,138	36,848	6.53	11,600,891	757,538	1.34	12,043,297	161,380
2019	4.45	4,466,971	198,780	6.14	539,914	33,151	6.53	8,191,669	534,916	1.34	11,818,883	158,373
2020	4.45	313,587	13,955	6.14	384,571	23,613	6.53	7,660,069	500,203	1.34	10,678,482	143,092
2021	4.45	0	0	6.14	206,478	12,678	6.53	8,371,756	546,676	1.34	12,282,842	164,590
2022	4.45	0	0	6.14	223,623	13,730	6.53	8,934,145	583,400	1.34	17,382,885	232,931
2023	4.45	0	0	6.14	252,349	15,494	6.53	9,705,257	633,753	1.34	24,193,248	324,190

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
2013	2.62	8,265,665	216,560	1.67	34,253,697	572,037	300,963,743	12,921,287
2014	2.62	8,234,771	215,751	1.67	43,520,040	726,785	423,814,574	20,568,169
2015	2.62	7,606,274	199,284	1.67	33,564,176	560,522	350,172,362	17,056,876
2016	2.62	7,018,927	183,896	1.67	23,689,882	395,621	254,559,392	12,202,177
2017	2.62	7,746,154	202,949	1.67	28,803,457	481,018	289,088,505	13,894,194
2018	2.62	9,651,288	252,864	1.67	32,199,872	537,738	306,135,580	14,624,997
2019	2.62	12,873,320	337,281	1.67	36,099,579	602,863	310,590,243	14,548,685
2020	2.62	12,543,358	328,636	1.67	33,562,164	560,488	254,187,589	11,710,481
2021	2.62	12,875,453	337,337	1.67	35,684,224	595,927	252,398,864	11,288,594
2022	2.62	14,754,239	386,561	1.67	40,665,453	679,113	281,853,065	12,284,644
2023	2.62	16,725,093	438,197	1.67	41,687,661	696,184	307,327,763	13,347,154

Payroll - Exhibit X-D, Pages 1, 2, 3, 4 and 5; Loss Costs - Exhibit X-B Page 2

**Coal Mine Compensation Rating Bureau
Traumatic & OD Loss costs
Approved Effective April 1, 2024**

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	\$14.98	1011	\$20.79	0160	\$17.74
Bituminous	1001	\$6.28	1002	\$0.79	0158	\$1.12
SURFACE						
Anthracite	1012	\$4.78	1016	\$0.90	0153	\$1.59
Bituminous	1014	\$1.07	1013	\$0.61	0156	\$0.84
COKE	1469	\$4.45	1017	\$0.09	0154	\$0.10
AUGER	1015	\$6.14	1019	\$0.19	0157	\$0.41
CO-GEN						
Anthracite	1021	\$6.53	1022	\$0.49	0181	\$0.37
Bituminous	1023	\$1.34	1024	\$0.19	0182	\$0.25
PREP PLANT						
Anthracite	1025	\$2.62	1026	\$2.98	0183	\$0.81
Bituminous	1027	\$1.67	1028	\$0.21	0184	\$0.31

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	\$14.29	1011	\$20.79	0160	\$17.74
Bituminous	1001	\$5.80	1002	\$0.79	0158	\$1.12
SURFACE						
Anthracite	1012	\$4.61	1016	\$0.90	0153	\$1.59
Bituminous	1014	\$0.98	1013	\$0.61	0156	\$0.84
	1469	\$4.28	1017	\$0.09	0154	\$0.10
	1015	\$5.84	1019	\$0.19	0157	\$0.41
CO-GEN						
Anthracite	1021	\$6.31	1022	\$0.49	0181	\$0.37
Bituminous	1023	\$1.25	1024	\$0.19	0182	\$0.25
PREP PLANT						
Anthracite	1025	\$2.50	1026	\$2.98	0183	\$0.81
Bituminous	1027	\$1.57	1028	\$0.21	0184	\$0.31

Source: Current Manual Loss Costs from Exhibit I-A-M approved filing effective April 1, 2024
Unloaded Approved Loss Costs from Exhibit I-A-UL approved filing effective April 1, 2024

**Coal Mine Compensation Rating Bureau
Adjustments from 2024 Filing**

Section 1 Catastrophic Loss Cost (2024)

Underground	
Anthracite	0.33
Bituminous	0.33
Auger	0.15 (1/3 Underground, 2/3 Surface)
Other Classes	0.06

Section 2 Load Factors (2024)

Experience Rating	1.0000
Merit Rating (Exh XIV-A, Page 1)	1.0000
Safety Committee (Exh. XIV-B)	1.0245
	<hr style="width: 100px; margin-left: auto; margin-right: 0;"/>
	1.0245
Small Business Advocate (XI-A)	1.0003

COAL MINE COMPENSATION RATING BUREAU
FEDERAL OD PAYROLL

ANTHRACITE UNDERGROUND (1010)

Year	State OD			Development Factor	Federal OD	Payroll
	Developed Payroll	Federal Exempt Reported Payroll	Partnership Reported Payroll		Payroll (1) + [(3)-(2)]*(4)	Per Million (5)/1000000
	(1)	(2)	(3)	(4)	(5)	(6)
2013	381,876	0	0	1.0000	381,876	0.381876
2014	258,809	0	0	1.0000	258,809	0.258809
2015	254,336	0	0	1.0000	254,336	0.254336
2016	163,760	0	0	1.0000	163,760	0.163760
2017	252,383	0	0	1.0000	252,383	0.252383
2018	183,346	0	0	1.0000	183,346	0.183346
2019	179,379	0	0	1.0000	179,379	0.179379
2020	299,700	0	0	1.0000	299,700	0.299700
2021	232,531	0	0	1.0000	232,531	0.232531
2022	68,319	0	5,080	1.0000	73,399	0.073399
2023	199,052	0	53,863	1.0000	252,915	0.252915

BITUMINOUS UNDERGROUND (1001)

Year	State OD			Development Factor	Federal OD	Payroll
	Developed Payroll	Federal Exempt Reported Payroll	Partnership Reported Payroll		Payroll (1) + [(3)-(2)]*(4)	Per Million (5)/1000000
	(1)	(2)	(3)	(4)	(5)	(6)
2013	149,747,092	4,600,839	0	1.0000	145,146,253	145.146253
2014	271,230,707	87,798,755	0	1.0000	183,431,952	183.431952
2015	216,454,460	75,884,185	0	1.0000	140,570,275	140.570275
2016	148,556,407	30,010,930	0	1.0000	118,545,477	118.545477
2017	172,708,778	0	0	1.0000	172,708,778	172.708778
2018	180,553,142	0	46,618	1.0000	180,599,760	180.599760
2019	177,833,672	0	185,328	1.0000	178,019,000	178.019000
2020	139,028,472	0	189,046	1.0000	139,217,518	139.217518
2021	129,326,591	0	0	1.0000	129,326,591	129.326591
2022	136,857,008	0	0	1.0000	136,857,008	136.857008
2023	145,920,907	0	0	1.0000	145,920,907	145.920907

ANTHRACITE SURFACE (1012)

Year	State OD			Development Factor	Federal OD	Payroll
	Developed Payroll	Federal Exempt Reported Payroll	Partnership Reported Payroll		Payroll (1) + [(3)-(2)]*(4)	Per Million (5)/1000000
	(1)	(2)	(3)	(4)	(5)	(6)
2013	22,449,824	2,307,223	577,413	1.0000	20,720,014	20.720014
2014	20,466,075	2,210,807	656,071	1.0000	18,911,339	18.911339
2015	24,218,779	2,669,091	684,662	1.0000	22,234,350	22.234350
2016	20,873,611	2,378,155	761,651	1.0000	19,257,107	19.257107
2017	21,167,074	2,801,185	728,745	1.0000	19,094,634	19.094634
2018	19,576,675	1,971,490	698,326	1.0000	18,303,511	18.303511
2019	23,224,142	3,889,152	830,194	1.0000	20,165,184	20.165184
2020	22,443,061	3,744,355	645,101	1.0000	19,343,807	19.343807
2021	24,346,630	3,817,925	519,706	1.0000	21,048,411	21.048411
2022	29,927,352	3,742,054	454,908	1.0000	26,640,206	26.640206
2023	35,342,111	0	310,076	1.0065	35,654,202	35.654202

BITUMINOUS SURFACE (1014)

Year	State OD			Development Factor	Federal OD	Payroll
	Developed Payroll	Federal Exempt Reported Payroll	Partnership Reported Payroll		Payroll (1) + [(3)-(2)]*(4)	Per Million (5)/1000000
	(1)	(2)	(3)	(4)	(5)	(6)
2013	61,349,745	0	1,368,316	1.0000	62,718,061	62.718061
2014	54,050,731	0	1,317,884	1.0000	55,368,615	55.368615
2015	40,934,048	0	1,066,044	1.0000	42,000,092	42.000092
2016	29,127,089	0	1,004,129	1.0000	30,131,218	30.131218
2017	33,140,780	0	1,108,182	1.0000	34,248,962	34.248962
2018	35,242,187	0	1,063,010	1.0000	36,305,197	36.305197
2019	35,362,714	0	1,140,880	1.0000	36,503,594	36.503594
2020	27,274,125	0	715,364	1.0000	27,989,489	27.989489
2021	29,072,359	0	799,880	1.0000	29,872,239	29.872239
2022	33,040,041	0	651,006	1.0000	33,691,047	33.691047
2023	33,302,085	0	699,559	1.0000	34,001,644	34.001644

Source: Anthracite Underground (1010) - Exhibit X-C, Page 4
 Bituminous Underground (1001) - Exhibit X-C, Page 4
 Anthracite Surface (1012) - Exhibit X-D, Page 2
 Bituminous Surface (1014) - Exhibit X-D, Page 2

COAL MINE COMPENSATION RATING BUREAU
Federal OD Payrolls

COKE (1469)

Year	State OD	Federal Exempt Reported Payroll	Partnership Reported Payroll	Development Factor	Federal OD	Payroll
	Developed Payroll				Payroll	Per Million
	(1)	(2)	(3)	(4)	(1) + [(3)-(2)]*(4)	(5)/1000000
2013	4,791,910	0	0	1.0000	4,791,910	4.791910
2014	4,464,398	0	0	1.0000	4,464,398	4.464398
2015	4,340,376	0	0	1.0000	4,340,376	4.340376
2016	4,435,066	0	0	1.0000	4,435,066	4.435066
2017	4,566,113	0	0	1.0000	4,566,113	4.566113
2018	4,484,744	0	0	1.0000	4,484,744	4.484744
2019	4,466,971	0	52,892	1.0000	4,519,863	4.519863
2020	313,587	0	0	1.0000	313,587	0.313587
2021	0	0	0	1.0000	0	0.000000
2022	0	0	0	1.0000	0	0.000000
2023	0	0	0	1.0097	0	0.000000

AUGER (1015)

Year	State OD	Federal Exempt Reported Payroll	Partnership Reported Payroll	Development Factor	Federal OD	Payroll
	Developed Payroll				Payroll	Per Million
	(1)	(2)	(3)	(4)	(1) + [(3)-(2)]*(4)	(5)/1000000
2013	1,025,399	0	21,548	1.0000	1,046,947	1.046947
2014	806,976	0	54,614	1.0000	861,590	0.861590
2015	582,619	0	72,147	1.0000	654,766	0.654766
2016	372,496	0	20,280	1.0000	392,776	0.392776
2017	449,009	0	117,315	1.0000	566,324	0.566324
2018	600,138	0	0	1.0000	600,138	0.600138
2019	539,914	0	53,300	1.0000	593,214	0.593214
2020	384,571	0	10,660	1.0000	395,231	0.395231
2021	206,478	0	21,080	1.0000	227,558	0.227558
2022	223,623	0	0	1.0000	223,623	0.223623
2023	252,349	0	0	1.0000	252,349	0.252349

ANTHRACITE CO-GEN (1021)

Year	State OD	Federal Exempt Reported Payroll	Partnership Reported Payroll	Development Factor	Federal OD	Payroll
	Developed Payroll				Payroll	Per Million
	(1)	(2)	(3)	(4)	(1) + [(3)-(2)]*(4)	(5)/1000000
2013	8,342,651	792,519	80,630	1.0000	7,630,762	7.630762
2014	9,060,883	838,824	138,839	1.0000	8,360,898	8.360898
2015	10,469,089	1,048,903	134,620	1.0000	9,554,806	9.554806
2016	8,994,602	1,137,185	95,892	1.0000	7,953,309	7.953309
2017	8,819,700	1,121,002	94,860	1.0000	7,793,558	7.793558
2018	11,600,891	1,704,620	157,568	1.0000	10,053,839	10.053839
2019	8,191,669	1,508,278	124,105	1.0000	6,807,496	6.807496
2020	7,660,069	1,316,271	559,475	1.0000	6,903,273	6.903273
2021	8,371,756	1,323,798	738,327	1.0000	7,786,285	7.786285
2022	8,934,145	993,185	110,497	1.0000	8,051,457	8.051457
2023	9,705,257	0	34,000	1.0088	9,739,556	9.739556

BITUMINOUS CO-GEN (1023)

Year	State OD	Federal Exempt Reported Payroll	Partnership Reported Payroll	Development Factor	Federal OD	Payroll
	Developed Payroll				Payroll	Per Million
	(1)	(2)	(3)	(4)	(1) + [(3)-(2)]*(4)	(5)/1000000
2013	10,355,884	0	0	1.0000	10,355,884	10.355884
2014	11,721,184	0	0	1.0000	11,721,184	11.721184
2015	11,748,205	0	0	1.0000	11,748,205	11.748205
2016	11,327,552	0	0	1.0000	11,327,552	11.327552
2017	11,435,057	0	0	1.0000	11,435,057	11.435057
2018	12,043,297	0	0	1.0000	12,043,297	12.043297
2019	11,818,883	0	0	1.0000	11,818,883	11.818883
2020	10,678,482	0	0	1.0000	10,678,482	10.678482
2021	12,282,842	0	0	1.0000	12,282,842	12.282842
2022	17,382,885	0	0	1.0000	17,382,885	17.382885
2023	24,193,248	0	0	1.0000	24,193,248	24.193248

Source: Auger (1015) - Exhibit X-D, Page 3
Coke (1469) - Exhibit X-D, Page 3
Anthracite Co-Gen (1021) - Exhibit X-D, Page 4
Bituminous Co-Gen (1023) - Exhibit X-D, Page 4

COAL MINE COMPENSATION RATING BUREAU
Federal OD Payrolls

ANTHRACITE PREP PLANT (1025)

Year	State OD			Development Factor (4)	Federal OD	Payroll
	Developed Payroll (1)	Federal Exempt Reported Payroll (2)	Partnership Reported Payroll (3)		Payroll (1) + [(3)-(2)]*(4) (5)	Per Million (5)/1000000 (6)
2013	8,265,665	1,400,236	209,457	1.0000	7,074,886	7.074886
2014	8,234,771	1,877,979	164,749	1.0000	6,521,541	6.521541
2015	7,606,274	1,549,878	140,200	1.0000	6,196,596	6.196596
2016	7,018,927	1,728,560	252,601	1.0000	5,542,968	5.542968
2017	7,746,154	1,886,894	197,550	1.0000	6,056,810	6.056810
2018	9,651,288	2,865,985	131,456	1.0000	6,916,759	6.916759
2019	12,873,320	2,160,285	116,130	1.0000	10,829,165	10.829165
2020	12,543,358	1,982,278	110,191	1.0000	10,671,271	10.671271
2021	12,875,453	1,803,692	287,335	1.0000	11,359,096	11.359096
2022	14,754,239	1,632,269	197,086	1.0000	13,319,056	13.319056
2023	16,725,093	0	158,728	1.0122	16,885,757	16.885757

BITUMINOUS PREP PLANT (1027)

Year	State OD			Development Factor (4)	Federal OD	Payroll
	Developed Payroll (1)	Federal Exempt Reported Payroll (2)	Partnership Reported Payroll (3)		Payroll (1) + [(3)-(2)]*(4) (5)	Per Million (5)/1000000 (6)
2013	34,253,697	613,728	0	1.0000	33,639,969	33.639969
2014	43,520,040	11,665,609	0	1.0000	31,854,431	31.854431
2015	33,564,176	9,243,568	0	1.0000	24,320,608	24.320608
2016	23,689,882	3,610,481	0	1.0000	20,079,401	20.079401
2017	28,803,457	0	0	1.0000	28,803,457	28.803457
2018	32,199,872	0	0	1.0000	32,199,872	32.199872
2019	36,099,579	0	17,765	1.0000	36,117,344	36.117344
2020	33,562,164	0	0	1.0000	33,562,164	33.562164
2021	35,684,224	0	0	1.0000	35,684,224	35.684224
2022	40,665,453	0	1,550	1.0013	40,667,005	40.667005
2023	41,687,661	0	0	1.0200	41,687,661	41.687661

Source: Anthracite Prep Plant (1025) - Exhibit X-D, Page 5
Bituminous Prep Plant (1027) - Exhibit X-D, Page 5

COAL MINE COMPENSATION RATING BUREAU
Payroll Adjustment - UAE Reclassification

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
2013	175,900	205,976	381,876	0.381876
2014	258,809	0	258,809	0.258809
2015	254,336	0	254,336	0.254336
2016	163,760	0	163,760	0.163760
2017	252,383	0	252,383	0.252383
2018	183,346	0	183,346	0.183346
2019	179,379	0	179,379	0.179379
2020	299,700	0	299,700	0.299700
2021	232,531	0	232,531	0.232531
2022	68,319	0	68,319	0.068319
2023	199,052	0	199,052	0.199052

BITUMINOUS UNDERGROUND (1001)

Year	Developed Payroll (1)	Files 258,330,4027 & 4049 Developed Payroll* (2)	OD Payroll (3) = (1) - (2)	Payroll Per Million (4) = (3)/1000000
2013	149,953,068	205,976	149,747,092	149.747092
2014	271,230,707	0	271,230,707	271.230707
2015	216,454,460	0	216,454,460	216.454460
2016	148,556,407	0	148,556,407	148.556407
2017	172,708,778	0	172,708,778	172.708778
2018	180,553,142	0	180,553,142	180.553142
2019	177,833,672	0	177,833,672	177.833672
2020	139,028,472	0	139,028,472	139.028472
2021	129,326,591	0	129,326,591	129.326591
2022	136,857,008	0	136,857,008	136.857008
2023	145,920,907	0	145,920,907	145.920907

The reclassification from Anthracite U/G to Bituminous U/G applies to Traumatic, but not to OD. For Traumatic Files 258, 330, 4027 & 4049 are coded 1001 (payroll and losses).

The above reclassification is made to move State and Federal O.D. exposures from Class 1001 (Bituminous U/G) back to Class 1010 (Anthracite U/G)

Other classification payrolls for these four files are unaffected by the re-classification.

Source: Developed Payroll - Exhibit X-D, Page 1

CMCRB database for files 258, 330, 4027 and 4049 Payrolls as of 4-30-2024

COAL MINE COMPENSATION RATING BUREAU
Payroll Adjustment - UAE Reclassification

ANTHRACITE UNDERGROUND (1010)

Year	REPORTED PAYROLL* (1)	DEVELOPMENT FACTORS** (2)	DEVELOPED PAYROLL (3) = (1) * (2)
2013	205,976	1.0000	205,976
2014	0	1.0000	0
2015	0	1.0000	0
2016	0	1.0000	0
2017	0	1.0000	0
2018	0	1.0000	0
2019	0	1.0000	0
2020	0	1.0000	0
2021	0	1.0000	0
2022	0	1.0000	0
2023	0	1.0000	0

CMCRB database for files 258, 330, 4027 and 4049 Payrolls as of 4-30-2024

* 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, Page 1

COAL MINE COMPENSATION RATING BUREAU
Developed Payrolls

ANTHRACITE UNDERGROUND (1010)

YEAR	REPORTED PAYROLL (1)	DEVELOPMENT FACTORS (2)	DEVELOPED PAYROLL (3) =(1) x (2)	PAYROLL PER MILLION (4) =(1)X(2)/1000000
2013	175,900	1.0000	175,900	0.175900
2014	258,809	1.0000	258,809	0.258809
2015	254,336	1.0000	254,336	0.254336
2016	163,760	1.0000	163,760	0.163760
2017	252,383	1.0000	252,383	0.252383
2018	183,346	1.0000	183,346	0.183346
2019	179,379	1.0000	179,379	0.179379
2020	299,700	1.0000	299,700	0.299700
2021	232,531	1.0000	232,531	0.232531
2022	68,319	1.0000	68,319	0.068319
2023	199,052	1.0000	199,052	0.199052

BITUMINOUS UNDERGROUND (1001)

YEAR	REPORTED PAYROLL (1)	DEVELOPMENT FACTORS (2)	DEVELOPED PAYROLL (3) =(1) x (2)	PAYROLL PER MILLION (4) =(1)X(2)/1000000
2013	149,953,068	1.0000	149,953,068	149.953068
2014	271,230,707	1.0000	271,230,707	271.230707
2015	216,454,460	1.0000	216,454,460	216.454460
2016	148,556,407	1.0000	148,556,407	148.556407
2017	172,708,778	1.0000	172,708,778	172.708778
2018	180,553,142	1.0000	180,553,142	180.553142
2019	177,833,672	1.0000	177,833,672	177.833672
2020	139,028,472	1.0000	139,028,472	139.028472
2021	129,326,591	1.0000	129,326,591	129.326591
2022	136,857,008	1.0000	136,857,008	136.857008
2023	145,920,907	1.0000	145,920,907	145.920907

Source: (1) Payroll and (2) Development - Exhibit X-E, Page 1

COAL MINE COMPENSATION RATING BUREAU
Developed Payrolls

ANTHRACITE SURFACE (1012)

YEAR	REPORTED PAYROLL (1)	DEVELOP FACTORS (2)	DEVELOPMENT PAYROLL (3) =(1) x (2)	PAYROLL PER MILLION (4) =(1)X(2)/1000000
2013	22,449,824	1.0000	22,449,824	22.449824
2014	20,466,075	1.0000	20,466,075	20.466075
2015	24,218,779	1.0000	24,218,779	24.218779
2016	20,873,611	1.0000	20,873,611	20.873611
2017	21,167,074	1.0000	21,167,074	21.167074
2018	19,576,675	1.0000	19,576,675	19.576675
2019	23,224,142	1.0000	23,224,142	23.224142
2020	22,443,061	1.0000	22,443,061	22.443061
2021	24,346,630	1.0000	24,346,630	24.346630
2022	29,927,352	1.0000	29,927,352	29.927352
2023	35,113,871	1.0065	35,342,111	35.342111

BITUMINOUS SURFACE (1014)

YEAR	REPORTED PAYROLL (1)	DEVELOP FACTORS (2)	PAYROLL (3) =(1) x (2)	PAYROLL PER MILLION (4) =(1)X(2)/1000000
2013	61,349,745	1.0000	61,349,745	61.349745
2014	54,050,731	1.0000	54,050,731	54.050731
2015	40,934,048	1.0000	40,934,048	40.934048
2016	29,127,089	1.0000	29,127,089	29.127089
2017	33,140,780	1.0000	33,140,780	33.140780
2018	35,242,187	1.0000	35,242,187	35.242187
2019	35,362,714	1.0000	35,362,714	35.362714
2020	27,274,125	1.0000	27,274,125	27.274125
2021	29,072,359	1.0000	29,072,359	29.072359
2022	33,040,041	1.0000	33,040,041	33.040041
2023	33,302,085	1.0000	33,302,085	33.302085

Source: (1) Payroll and (2) Development - Exhibit X-E, Page 2

COAL MINE COMPENSATION RATING BUREAU
Developed Payrolls

COKE (1469)

YEAR	REPORTED PAYROLL (1)	DEVELOPMENT FACTORS (2)	DEVELOPED PAYROLL (3) =(1) x (2)	PAYROLL PER MILLION (4) =(1)X(2)/1000000
2013	4,791,910	1.0000	4,791,910	4.791910
2014	4,464,398	1.0000	4,464,398	4.464398
2015	4,340,376	1.0000	4,340,376	4.340376
2016	4,435,066	1.0000	4,435,066	4.435066
2017	4,566,113	1.0000	4,566,113	4.566113
2018	4,484,744	1.0000	4,484,744	4.484744
2019	4,466,971	1.0000	4,466,971	4.466971
2020	313,587	1.0000	313,587	0.313587
2021	-	1.0000	-	0.000000
2022	-	1.0000	-	0.000000
2023	-	1.0097	-	0.000000

AUGER (1015)

YEAR	REPORTED PAYROLL (1)	DEVELOPMENT FACTORS (2)	DEVELOPED PAYROLL (3) =(1) x (2)	PAYROLL PER MILLION (4) =(1)X(2)/1000000
2013	1,025,399	1.0000	1,025,399	1.025399
2014	806,976	1.0000	806,976	0.806976
2015	582,619	1.0000	582,619	0.582619
2016	372,496	1.0000	372,496	0.372496
2017	449,009	1.0000	449,009	0.449009
2018	600,138	1.0000	600,138	0.600138
2019	539,914	1.0000	539,914	0.539914
2020	384,571	1.0000	384,571	0.384571
2021	206,478	1.0000	206,478	0.206478
2022	223,623	1.0000	223,623	0.223623
2023	252,349	1.0000	252,349	0.252349

Source: (1) Payroll and (2) Development - Exhibit X-E, Page 3

COAL MINE COMPENSATION RATING BUREAU
Developed Payrolls

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
2013	8,342,651	1.0000	8,342,651	8.342651
2014	9,060,883	1.0000	9,060,883	9.060883
2015	10,469,089	1.0000	10,469,089	10.469089
2016	8,994,602	1.0000	8,994,602	8.994602
2017	8,819,700	1.0000	8,819,700	8.819700
2018	11,600,891	1.0000	11,600,891	11.600891
2019	8,191,669	1.0000	8,191,669	8.191669
2020	7,660,069	1.0000	7,660,069	7.660069
2021	8,371,756	1.0000	8,371,756	8.371756
2022	8,934,145	1.0000	8,934,145	8.934145
2023	9,620,596	1.0088	9,705,257	9.705257

BITUMINOUS CO-GEN (1023)

YEAR	REPORTED PAYROLL (1)	DEVELOPMENT FACTORS (2)	DEVELOPED PAYROLL (3) =(1) x (2)	PAYROLL PER MILLION (4) =(1)X(2)/1000000
2013	10,355,884	1.0000	10,355,884	10.355884
2014	11,721,184	1.0000	11,721,184	11.721184
2015	11,748,205	1.0000	11,748,205	11.748205
2016	11,327,552	1.0000	11,327,552	11.327552
2017	11,435,057	1.0000	11,435,057	11.435057
2018	12,043,297	1.0000	12,043,297	12.043297
2019	11,818,883	1.0000	11,818,883	11.818883
2020	10,678,482	1.0000	10,678,482	10.678482
2021	12,282,842	1.0000	12,282,842	12.282842
2022	17,382,885	1.0000	17,382,885	17.382885
2023	24,193,248	1.0000	24,193,248	24.193248

Source: (1) Payroll and (2) Development - Exhibit X-E, Page 4

COAL MINE COMPENSATION RATING BUREAU
Developed Payrolls

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
2013	8,265,665	1.0000	8,265,665	8.265665
2014	8,234,771	1.0000	8,234,771	8.234771
2015	7,606,274	1.0000	7,606,274	7.606274
2016	7,018,927	1.0000	7,018,927	7.018927
2017	7,746,154	1.0000	7,746,154	7.746154
2018	9,651,288	1.0000	9,651,288	9.651288
2019	12,873,320	1.0000	12,873,320	12.873320
2020	12,543,358	1.0000	12,543,358	12.543358
2021	12,875,453	1.0000	12,875,453	12.875453
2022	14,754,239	1.0000	14,754,239	14.754239
2023	16,523,506	1.0122	16,725,093	16.725093

BITUMINOUS PREP PLANT (1027)

YEAR	REPORTED PAYROLL (1)	DEVELOPMENT FACTORS (2)	PAYROLL (3) =(1) x (2)	PAYROLL PER MILLION (4) =(1)X(2)/1000000
2013	34,253,697	1.0000	34,253,697	34.253697
2014	43,520,040	1.0000	43,520,040	43.520040
2015	33,564,176	1.0000	33,564,176	33.564176
2016	23,689,882	1.0000	23,689,882	23.689882
2017	28,803,457	1.0000	28,803,457	28.803457
2018	32,199,872	1.0000	32,199,872	32.199872
2019	36,099,579	1.0000	36,099,579	36.099579
2020	33,562,164	1.0000	33,562,164	33.562164
2021	35,684,224	1.0000	35,684,224	35.684224
2022	40,612,657	1.0013	40,665,453	40.665453
2023	40,870,256	1.0200	41,687,661	41.687661

Source: (1) Payroll and (2) Development - Exhibit X-E, Page 5

COAL MINE COMPENSATION RATING BUREAU
Payroll Development

PAYROLLS
ANTHRACITE UNDERGROUND (1010)

RPT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	5 YEAR		
												<u>AVERAGE</u>	<u>ACCUM.</u>	<u>SELECTED</u>
1ST	175,900	258,809	254,336	163,760	252,383	183,346	179,379	299,700	232,531	63,653	199,052			
2ND	175,900	258,809	254,336	163,760	252,383	183,346	179,379	299,700	232,531	68,319				
3RD	175,900	258,809	254,336	163,760	252,383	183,346	179,379	299,700	232,531					
4TH	175,900	258,809	254,336	163,760	252,383	183,346	179,379	299,700						
5TH	175,900	258,809	254,336	163,760	252,383	183,346	179,379							
DEV.	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022				
1-2	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0733	1.0147	1.0147	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	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	1.0000
4-5	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				1.0000	1.0000	1.0000	1.0000

PAYROLLS
BITUMINOUS UNDERGROUND (1001)

RPT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	5 YEAR		
												<u>AVERAGE</u>	<u>ACCUM.</u>	<u>SELECTED</u>
1ST	148,858,839	269,946,018	216,498,553	148,894,215	169,570,264	178,663,437	184,595,015	138,142,265	131,501,704	135,401,635	145,920,907			
2ND	149,953,068	271,230,707	216,454,460	148,556,407	172,800,836	180,553,142	177,833,672	139,141,836	129,544,914	136,857,008				
3RD	149,953,068	271,230,707	216,454,460	148,556,407	172,708,778	180,553,142	177,833,672	139,028,472	129,326,591					
4TH	149,953,068	271,230,707	216,454,460	148,556,407	172,708,778	180,553,142	177,833,672	139,028,472						
5TH	149,953,068	271,230,707	216,454,460	148,556,407	172,708,778	180,553,142	177,833,672							
DEV.	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022				
1-2	1.0074	1.0048	0.9998	0.9977	1.0191	1.0106	0.9634	1.0072	0.9851	1.0107	0.9954	0.9948	1.0000	1.0000
2-3	1.0000	1.0000	1.0000	1.0000	0.9995	1.0000	1.0000	0.9992	0.9983		0.9994	0.9994	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	1.0000
4-5	1.0000	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 4-30-2024 - Traumatic Payroll Reports

COAL MINE COMPENSATION RATING BUREAU
Payroll Development

PAYROLLS
ANTHRACITE SURFACE (1012)

RPT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	5 YEAR		
												<u>AVERAGE</u>	<u>ACCUM.</u>	<u>SELECTED</u>
1ST	22,127,846	20,422,650	24,275,156	20,717,621	20,760,851	19,515,547	23,605,037	22,766,320	24,120,432	27,712,088	35,113,871			
2ND	22,449,824	20,466,075	24,218,779	20,873,611	21,167,074	19,576,675	23,563,089	22,813,839	24,346,630	29,927,352				
3RD	22,449,824	20,466,075	24,218,779	20,873,611	21,167,074	19,576,675	23,563,089	22,443,061	24,346,630					
4TH	22,449,824	20,466,075	24,218,779	20,873,611	21,167,074	19,576,675	23,224,142	22,443,061						
5TH	22,449,824	20,466,075	24,218,779	20,873,611	21,167,074	19,576,675	23,224,142							
DEV.	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022				
1ST	1.0146	1.0021	0.9977	1.0075	1.0196	1.0031	0.9982	1.0021	1.0094	1.0799	1.0185	1.0122	1.0065	
2-3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9837	1.0000		0.9967	0.9938	1.0000	
3-4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9856	1.0000			0.9971	0.9971	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	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	5 YEAR		
												<u>AVERAGE</u>	<u>ACCUM.</u>	<u>SELECTED</u>
1ST	63,473,577	54,685,762	41,179,672	28,999,042	34,474,120	35,266,431	35,476,154	27,341,658	29,582,319	33,074,473	33,302,085			
2ND	61,349,745	54,050,731	40,934,048	29,127,089	33,140,780	35,242,187	35,362,714	27,274,125	29,178,687	33,040,041				
3RD	61,349,745	54,050,731	40,934,048	29,127,089	33,140,780	35,242,187	35,362,714	27,274,125	29,072,359					
4TH	61,349,745	54,050,731	40,934,048	29,127,089	33,140,780	35,242,187	35,362,714	27,274,125						
5TH	61,349,745	54,050,731	40,934,048	29,127,089	33,140,780	35,242,187	35,362,714							
DEV.	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022				
1-2	0.9665	0.9884	0.9940	1.0044	0.9613	0.9993	0.9968	0.9975	0.9864	0.9990	0.9958	0.9951	1.0000	
2-3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9964		0.9993	0.9993	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 4-30-2024 - Traumatic Payroll Reports

COAL MINE COMPENSATION RATING BUREAU
Payroll Development

PAYROLLS COKE (1469)													
RPT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		
1ST	4,791,910	4,464,398	4,057,561	4,435,066	4,462,231	4,375,412	4,466,971	313,587	0	0	0		
2ND	4,791,910	4,464,398	4,340,376	4,435,066	4,566,113	4,484,744	4,466,971	313,587	0	0			
3RD	4,791,910	4,464,398	4,340,376	4,435,066	4,566,113	4,484,744	4,466,971	313,587	0				
4TH	4,791,910	4,464,398	4,340,376	4,435,066	4,566,113	4,484,744	4,466,971	313,587					
5TH	4,791,910	4,464,398	4,340,376	4,435,066	4,566,113	4,484,744	4,466,971						
DEV.	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	5 YEAR		
1-2	1.0000	1.0000	1.0697	1.0000	1.0233	1.0250	1.0000	1.0000			<u>AVERAGE</u>	<u>ACCUM.</u>	<u>SELECTED</u>
2-3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			1.0097	1.0097	1.0097
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	1.0000

PAYROLLS AUGER (1015)													
RPT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		
1ST	1,082,639	876,196	592,775	372,496	452,051	560,126	539,914	388,307	208,581	222,909	252,349		
2ND	1,025,399	806,976	582,619	372,496	449,009	600,138	539,914	384,571	206,478	223,623			
3RD	1,025,399	806,976	582,619	372,496	449,009	600,138	539,914	384,571	206,478				
4TH	1,025,399	806,976	582,619	372,496	449,009	600,138	539,914	384,571					
5TH	1,025,399	806,976	582,619	372,496	449,009	600,138	539,914						
DEV.	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	5 YEAR		
1-2	0.9471	0.9210	0.9829	1.0000	0.9933	1.0714	1.0000	0.9904	0.9899	1.0032	<u>AVERAGE</u>	<u>ACCUM.</u>	<u>SELECTED</u>
2-3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		1.0110	1.0110	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	1.0000

Source: CMCRB Database as of 4-30-2024 - Traumatic Payroll Reports

COAL MINE COMPENSATION RATING BUREAU
Payroll Development

PAYROLLS
ANTHRACITE CO-GEN (1021)

RPT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	5 YEAR		
DEV.	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		<u>AVERAGE</u>	<u>ACCUM.</u>	<u>SELECTED</u>
1ST	8,678,376	9,279,611	10,646,550	10,847,424	9,038,435	11,591,488	8,219,127	7,659,713	8,263,749	8,646,476	9,620,596			
2ND	8,342,651	9,060,883	10,469,089	8,994,602	8,819,700	11,600,891	8,191,669	7,660,069	8,371,756	8,934,145				
3RD	8,342,651	9,060,883	10,469,089	8,994,602	8,819,700	11,600,891	8,191,669	7,660,069	8,371,756					
4TH	8,342,651	9,060,883	10,469,089	8,994,602	8,819,700	11,600,891	8,191,669	7,660,069						
5TH	8,342,651	9,060,883	10,469,089	8,994,602	8,819,700	11,600,891	8,191,669							
1-2	0.9613	0.9764	0.9833	0.8292	0.9758	1.0008	0.9967	1.0000	1.0131	1.0333		1.0088	1.0088	1.0088
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	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	5 YEAR		
DEV.	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		<u>AVERAGE</u>	<u>ACCUM.</u>	<u>SELECTED</u>
1ST	13,079,796	11,451,621	11,723,112	11,386,837	11,576,297	11,996,610	11,778,971	10,877,350	12,244,359	17,306,049	24,193,248			
2ND	10,355,884	11,721,184	11,748,205	11,327,552	11,435,057	12,043,297	11,818,883	10,678,482	12,282,842	17,382,885				
3RD	10,355,884	11,721,184	11,748,205	11,327,552	11,435,057	12,043,297	11,818,883	10,678,482	12,282,842					
4TH	10,355,884	11,721,184	11,748,205	11,327,552	11,435,057	12,043,297	11,818,883	10,678,482						
5TH	10,355,884	11,721,184	11,748,205	11,327,552	11,435,057	12,043,297	11,818,883							
1-2	0.7917	1.0235	1.0021	0.9948	0.9878	1.0039	1.0034	0.9817	1.0031	1.0044		0.9993	0.9993	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

Source: CMCRB Database as of 4-30-2024 - Traumatic Payroll Reports

COAL MINE COMPENSATION RATING BUREAU
Payroll Development

PAYROLLS
ANTHRACITE PREP PLANT (1025)

RPT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	5 YEAR		
												<u>AVERAGE</u>	<u>ACCUM.</u>	<u>SELECTED</u>
1ST	8,249,896	8,098,851	7,770,095	6,971,270	7,502,719	9,572,250	12,538,743	12,124,609	12,661,812	15,814,851	16,523,506			
2ND	8,265,665	8,234,771	7,606,274	7,018,927	7,746,154	9,651,288	12,534,373	12,170,346	12,875,453	14,754,239				
3RD	8,265,665	8,234,771	7,606,274	7,018,927	7,746,154	9,651,288	12,534,373	12,543,358	12,875,453					
4TH	8,265,665	8,234,771	7,606,274	7,018,927	7,746,154	9,651,288	12,873,320	12,543,358						
5TH	8,265,665	8,234,771	7,606,274	7,018,927	7,746,154	9,651,288	12,873,320							
DEV.	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022				
1-2	1.0019	1.0168	0.9789	1.0068	1.0324	1.0083	0.9997	1.0038	1.0169	0.9329	0.9923	1.0037	1.0122	
2-3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0306	1.0000		1.0061	1.0115	1.0000	
3-4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0270	1.0000			1.0054	1.0054	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	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	5 YEAR		
												<u>AVERAGE</u>	<u>ACCUM.</u>	<u>SELECTED</u>
1ST	33,730,152	43,397,620	34,011,862	22,065,227	28,602,522	31,517,751	36,922,176	33,334,214	31,554,548	40,183,513	40,870,256			
2ND	34,207,489	43,520,040	33,564,176	23,689,882	28,816,678	32,199,872	36,099,579	33,297,067	35,717,767	40,612,657				
3RD	34,253,697	43,520,040	33,564,176	23,689,882	28,803,457	32,199,872	36,099,579	33,562,164	35,684,224					
4TH	34,253,697	43,520,040	33,564,176	23,689,882	28,803,457	32,199,872	36,099,579	33,562,164						
5TH	34,253,697	43,520,040	33,564,176	23,689,882	28,803,457	32,199,872	36,099,579							
DEV.	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022				
1-2	1.0142	1.0028	0.9868	1.0736	1.0075	1.0216	0.9777	0.9989	1.1319	1.0107	1.0282	1.0295	1.0200	
2-3	1.0014	1.0000	1.0000	1.0000	0.9995	1.0000	1.0000	1.0080	0.9991		1.0013	1.0013	1.0013	
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 4-30-2024 - Traumatic Payroll Reports

COAL MINE COMPENSATION RATING BUREAU
 OD Frequencies From Approved Filing

Exhibit X-F

		State OD Class Code	State OD Indicated Frequency (Eff. 4/1/2024) (1)	Federal OD Class Code	Federal OD Basic Indicated Frequency (Eff. 4/1/2024) (2)	Federal OD Excess Indicated Frequency (Eff. 4/1/2024) (3)
Underground:	Anthracite	1011	0.234854	160	0.466299	0.084358
	Bituminous	1002	0.023559	158	0.021539	0.008511
Surface:	Anthracite	1016	0.014374	153	0.037288	0.006786
	Bituminous	1013	0.014448	156	0.018773	0.004639
	Coke	1017	0.002097	154	0.002051	0.000809
	Auger	1019	0.004252	157	0.009584	0.001724
Co-Gen:	Anthracite	1022	0.007744	181	0.008558	0.002554
	Bituminous	1024	0.004298	182	0.005518	0.001480
Prep Plants:	Anthracite	1026	0.047486	183	0.015724	0.018790
	Bituminous	1028	0.004723	184	0.006860	0.001541

Source: (1): Exhibit III Column (3) of prior filing.
 (2) & (3): Exhibit IV-A Column (3) of prior filing.

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 Run Date: August 14, 2024 - 11:40:42 AM

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 Effective Date - April 01, 2025
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COAL MINE COMPENSATION RATING BUREAU
Calculation of Coal Class Adjustment Factor to SAWW

Exhibit X-G

Average Coal Class Weekly Wages										
Year	Anthracite Underground	Bituminous Underground	Anthracite Surface	Bituminous Surface	Coke	Auger	Anthracite Co-gen	Bituminous Co-gen	Anthracite Prep Plant	Bituminous Prep Plant
	1010	1001	1012	1014	1469	1015	1021	1023	1025	1027
2014	#	1,489.37	972.96	972.11	100.00	520.00	843.52	908.00	943.94	1,307.50
2015	#	1,632.46	1,071.78	968.80	564.33	722.00	1,075.00	836.67	1,019.38	1,295.56
2016	#	1,660.09	1,076.11	1,001.43	2109		1,133.39	714.00	1,148.41	1,816.23
2017	#	1,576.88	1,163.04	1,381.20	588.83		1,206.39	1,376.75	1,277.00	1,419.95
2018	#	1,624.47	1,434.53	1,260.86	546		950.16	1,388.60	1,021.75	1,103.76
2019	#	1,644.08	1,008.62	1,038.07	607		1,330.00	914.00	1,122.17	2,226.66
2020	#	1,681.26	1,319.82	1,326.58		710.31	1,267.77	1,180.50	1,161.30	1,298.33
2021	#	1,610.48	1,219.42	1,037.50			580.00	1,471.25	943.00	1,401.53
2022	#	1,625.64	1,348.95	1,317.80			1,204.60	1,789.00	1,546.50	1,607.73
2023	#	1,855.96	1,462.97	1,522.75			1,355.50	1,330.33	1,092.50	1,849.89

Number of Wage Records Used to Calculate Average Coal Class Weekly Wages										
Year	1010	1001	1012	1014	1469	1015	1021	1023	1025	1027
2014	#	216	21	18	1	2	3	5	6	16
2015	#	135	18	10	3	2	3	3	5	8
2016	#	99	22	7	1		7	1	4	9
2017	#	123	23	5	6		7	4	1	6
2018	#	129	11	7	1		11	5	4	5
2019	#	125	16	11	1		2	1	6	8
2020	#	89	11	12		1	11	2	10	3
2021	#	117	13	4			1	4	2	6
2022	#	85	11	5			4	2	4	8
2023	#	100	6	4			2	6	2	5
Total		1218	152	83	13	5	51	33	44	74

Average Coal Class Weekly Wage Indexed to Statewide Average Weekly Wage											
Year	SAWW	1010	1001	1012	1014	1469	1015	1021	1023	1025	1027
2014	932	#	1.598	1.044	1.043	0.107	0.558	0.905	0.974	1.013	1.403
2015	951	#	1.717	1.127	1.019	0.593	0.759	1.130	0.880	1.072	1.362
2016	978	#	1.697	1.100	1.024	2.156		1.159	0.730	1.174	1.857
2017	995	#	1.585	1.169	1.388	0.592		1.212	1.384	1.283	1.427
2018	1025	#	1.585	1.400	1.230	0.533		0.927	1.355	0.997	1.077
2019	1049	#	1.567	0.962	0.990	0.579		1.268	0.871	1.070	2.123
2020	1081	#	1.555	1.221	1.227		0.657	1.173	1.092	1.074	1.201
2021	1130	#	1.425	1.079	0.918			0.513	1.302	0.835	1.240
2022	1205	#	1.349	1.119	1.094			1.000	1.485	1.283	1.334
2023	1273	#	1.458	1.149	1.196			1.065	1.045	0.858	1.453
Average			1.554	1.137	1.113	0.760	0.658	1.035	1.112	1.066	1.448

Average Coal Class Weekly Wage Indexed to Statewide Average Weekly Wage - Classes Combined			
Year	SAWW	Bit. Und. & Prep	All Other Classes
2014	932	1.585	0.993
2015	951	1.697	1.026
2016	978	1.710	1.121
2017	995	1.578	1.145
2018	1025	1.566	1.167
2019	1049	1.600	0.992
2020	1081	1.543	1.163
2021	1130	1.416	1.045
2022	1205	1.348	1.149
2023	1273	1.458	1.090
Average		1.550	1.089
Selected Coal Class Adj. Factor to SAWW		1.550	1.089

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.

Section A. Office of Small Business Advocate Assessment Factor Calculation

1.	2024-2025 Small Business Advocate Assessment	\$ 550,000
2.	2023 Insurance Carrier Paid Losses	
	CMCRB	16,516,341
	<u>PCRB</u>	<u>2,116,246,027</u>
	Total	2,132,762,368
3.	Insurer Assessment Ratio (item 1 divided by item 2)	0.0003

Section B. Employer Assessment Factor Calculation

1.	2024/2025 INSURANCE CARRIER ASSESSMENT AMOUNTS	
	A. Administrative Fund	49,885,137
	B. Subsequent Injury Fund	108,963
	C. Supersedeas Fund	20,437,628
	D. Uninsured Employers Guaranty Fund	<u>5,331,964</u>
	TOTAL	75,763,692
2.	2023 Employer Assessment Premium Base	3,414,286,225
3.	2023 Coal Mine Premium Base	23,154,542
4.	Coal Premium percent of Total (3)/(2)	0.678%
5.	Assessments to be paid by coal employers	513,804
6.	Coal Employer Assessment Factor	0.0222

Source: Pa. Dept. of Labor & Industry
PCRB

PAB
Effective Date - April 01, 2025

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COAL MINE COMPENSATION RATING BUREAU
 CATASTROPHE - Spread of Loss Cost to Classes

Exhibit XII-A

<u>Classification</u>		(1) 2023 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 4/1/2024	(8) Selected	(9) Change (8)/(7) - 1
Underground										
Anthracite Underground	1010	\$199,052								
Bituminous Underground	1001	145,920,907								
Total		146,119,959	7	1,022,840	86.4%	545,117	0.37	0.33	0.37	12.1%
Other than Underground										
Anthracite Surface	1012	35,342,111								
Bituminous Surface	1014	33,302,085								
Coke	1469	0								
Auger	1015	252,349								
Anthracite Co-Gen	1021	9,705,257								
Bituminous Co-Gen	1023	24,193,248								
Anthracite Prep Plant	1025	16,725,093								
Bituminous Prep Plant	1027	41,687,661								
Total		161,207,804	1	161,208	13.6%	85,915	0.05	0.06	0.05	-16.7%
Grand Total		307,327,763	8	1,184,048	100.0%	631,032	0.21	a-0.19	0.20	5.3%

a - Current Total Loss Cost is based on 2023 Payroll weights
 b- Auger = one-third underground & two-thirds surface or \$0.16

Source: Column (1) - Exhibit X-A
 Column (2) - Judgement
 Column (5) - Exhibit XII-B

COAL MINE COMPENSATION RATING BUREAU
 CATASTROPHE CALCULATION
 TRAUMATIC ON-LEVEL LOSSES IN EXCESS OF \$1,250,000

Exhibit XII-B

Accident Year	Number of Excess Claims	Excess Over \$ 1,250,000
2004	3	2,330,404
2005	4	2,686,196
2006	2	372,084
2007	2	3,427,367
2008	2	1,164,835
2009	1	272,923
2010	1	96,906
2011	3	878,894
2012	1	366,283
2013	1	62,891
2014	-	-
2015	2	280,801
2016	1	116,547
2017	2	305,906
2018	1	131,767
2019	-	-
2020	-	-
2021	-	-
2022	-	-
2023	1	126,830
	<u>27</u>	<u>12,620,634</u>
Average over 20 years		631,032
2023 Developed Payroll from Exhibit XII-A		307,327,763
Loss Cost		0.21

Source: Exhibit XII-C

COAL MINE COMPENSATION RATING BUREAU
CATASTROPHE CALCULATION
TRAUMATIC LOSSES OVER \$1,250,000

Exhibit XII-C

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Key Number	Class	Accident Year	Injury Type	Incurred Indemnity & Funeral	Incurred Medical	Trend	Loss at Current Level	Excess Over \$1,250,000
40926	100100	2004	9	605,294	504,258	2.0493	2,273,805	1,023,805
40959	101200	2004	9	186,825	520,966	2.0493	1,450,476	200,476
41102	102700	2004	2	505,991	643,730	2.0493	2,356,123	1,106,123
41534	101400	2005	1	1,028,410	25,566	1.9749	2,081,497	831,497
41618	101400	2005	2	231,682	479,321	1.9749	1,404,160	154,160
41672	100100	2005	2	743,254	607,534	1.9749	2,667,671	1,417,671
41676	100100	2005	2	681,537	94,638	1.9749	1,532,868	282,868
42274	146900	2006	9	290,552	528,955	1.8980	1,555,424	305,424
42379	101200	2006	2	602,157	91,552	1.8980	1,316,660	66,660
42863	100100	2007	9	423,025	391,002	1.8151	1,477,540	227,540
43059	101200	2007	2	552,146	1,899,414	1.8151	4,449,827	3,199,827
43335	100100	2008	1	918,605	223	1.7522	1,609,970	359,970
43835	100100	2008	1	1,161,302	11,432	1.7522	2,054,865	804,865
45177	101200	2009	9	629,643	270,749	1.6914	1,522,923	272,923
44994	100100	2010	9	394,662	410,230	1.6734	1,346,906	96,906
45469	101200	2011	9	450,275	350,000	1.6480	1,318,853	68,853
45686	101400	2011	9	321,808	632,412	1.6480	1,572,555	322,555
46013	100100	2011	9	312,490	741,810	1.6480	1,737,486	487,486
46135	100100	2012	9	246,748	768,314	1.5923	1,616,283	366,283
47009	101200	2013	9	601,421	250,000	1.5420	1,312,891	62,891
48423	100100	2015	1	929,317	707	1.4869	1,382,853	132,853
48542	100100	2015	1	940,176	-	1.4869	1,397,948	147,948
48759	100100	2016	1	943,426	1,758	1.4458	1,366,547	116,547
49353	100100	2017	9	410,995	499,823	1.4211	1,294,363	44,363
49424	100100	2017	9	526,969	536,674	1.4211	1,511,543	261,543
49769	100100	2018	9	336,287	665,356	1.3795	1,381,767	131,767
51989	100100	2023	9	239,494	1,000,000	1.1108	1,376,830	126,830
<hr/>								
Totals	27						46,370,634	12,620,634

Sources: Columns (1) through (6) from CMCRB Database.

Injury types are as follows: 1 (Death), 2 (PT), 9 (PP).

Column (7): Exhibit XII-D.

Column (8) is equal to Columns [(5) + (6)] x (7)

Column (9) is equal to Column (8), minus \$1,250,000

20 Year Average
2023 Developed Payroll
Loss Cost

631,032
307,327,763
0.21

Coal Mine Compensation Rating Bureau
 Catastrophe Calculation
 Trend Factors for Medical and Indemnity

Exhibit XII-D

<u>Year</u>	<u>Statewide Average Weekly Wage</u>	<u>Yearly Percentage Change</u>	<u>Trend Factor</u>	<u>Year</u>	<u>Statewide Average Weekly Wage</u>	<u>Yearly Percentage Change</u>	<u>Trend Factor</u>
2004	\$690		2.0493	2015	\$951	2.0%	1.4869
2005	\$716	3.8%	1.9749	2016	\$978	2.8%	1.4458
2006	\$745	4.1%	1.8980	2017	\$995	1.7%	1.4211
2007	\$779	4.6%	1.8151	2018	\$1,025	3.0%	1.3795
2008	\$807	3.6%	1.7522	2019	\$1,049	2.3%	1.3480
2009	\$836	3.6%	1.6914	2020	\$1,081	3.1%	1.3080
2010	\$845	1.1%	1.6734	2021	\$1,130	4.5%	1.2513
2011	\$858	1.5%	1.6480	2022	\$1,205	6.6%	1.1734
2012	\$888	3.5%	1.5923	2023	\$1,273	5.6%	1.1108
2013	\$917	3.3%	1.5420	2024	\$1,325	4.1%	1.0672
2014	\$932	1.6%	1.5172				

Average of All Years= 3.33%
 Average of last 10 years= 3.59%
 Average of last 5 years= 4.79%
 Average of last 3 years= 5.46%

Selected Change from	2024	to	2025	4.00%
Selected Change from	2025	to	2026	3.50%
Selected Change from	2026	to	2027	3.10%

Selected= 3.10% Last Year's Selection was 3.10%

Projected		<u>Wage</u>	<u>Weight</u>
01-01-2025	\$1,378	a	28.125%
01-01-2026	\$1,426	a	68.750%
01-01-2027	\$1,470	a	3.125%

Average Weekly Wage For Policies effective between 04-01-2025 and 04-01-2027

\$1,414 b

- a. Previous year's wage times annual increase of 3.10%
- b. Weighted average of projected wage levels from 01-01-2025 to 01-01-2027

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

<u>Class Code</u>	<u>Description</u>	<u>Number of Claims</u>	<u>Excess Over \$1,250,000</u>
1010	Anthracite Underground	-	-
1001	Bituminous Underground	16	6,029,245
1012	Anthracite Surface	6	3,871,630
1014	Bituminous Surface	3	1,308,212
1469	Coke	1	305,424
1015	Auger	-	-
1021	Anthracite Co-Gen	-	-
1023	Bituminous Co-Gen	-	-
1025	Anthracite Prep Plant	-	-
1027	Bituminous Prep Plant	1	1,106,123
	Total	27	\$12,620,634

Sources: Exhibit XII-C

PAB

Coal Mine Compensation Rating Bureau of Pennsylvania
Experience Rating Plan
Basic Data Lookup Tables

2025 plan factors at 50k and 150 k splits:

Table A: Ratemaking Factors

Year:	2023	2022	2021	Average split by Layer
Loss Develop.	1.4507	1.1324	1.0684	
Layers:	Split of total losses by Layer			
0- 50	0.53429	0.45721	0.41892	0.47014
50-150	0.28234	0.26768	0.26096	0.27033
Over 150	0.18337	0.27511	0.32012	0.25953
Trend	0.9175	0.8863	0.8603	1.0000

Table B: Payroll Development

Classification	Payroll Development
1001 Bit deep	1.0000
1010 Anth deep	1.0000
1012 Anth surf	1.0065
1014 Bit surf	1.0000
1015 Auger	1.0000
1021 Anth Co-gen	1.0088
1023 Bit Co-gen	1.0000
1025 Anth Prep	1.0122
1027 Bit Prep	1.0200
1469 Coke	1.0097

Table C: Unloaded Loss Costs - Traumatic

Classification	Unloaded Loss Cost (1)
1001 Bit deep	4.72
1010 Anth deep	11.10
1012 Anth surf	3.46
1014 Bit surf	0.88
1015 Auger	5.56
1021 Anth Co-gen	4.73
1023 Bit Co-gen	1.04
1025 Anth Prep	2.13
1027 Bit Prep	1.29
1469 Coke	3.81

Table D: Manual Loss Costs - Traumatic

Classification	Unloaded Loss Cost (1)	Loadings			Manual Loss Cost (5)	Off-* Balances
		Catastrophe Exh. XII-A (2)	Small Business Assessment (3)	Off-Balances# (4)		
1001 Bit deep	4.72	0.37	1.0003	1.0238	5.21	Merit Rating Exh. XIV-A 1.0000
1010 Anth deep	11.10	0.37	1.0003	1.0238	11.74	Safety Rating Exh XIV-B 1.0238
1012 Anth surf	3.46	0.05	1.0003	1.0238	3.59	Combined 1.0238
1014 Bit surf	0.88	0.05	1.0003	1.0238	0.95	
1015 Auger	5.56	0.16	1.0003	1.0238	5.86	
1021 Anth Co-gen	4.73	0.05	1.0003	1.0238	4.89	
1023 Bit Co-gen	1.04	0.05	1.0003	1.0238	1.12	
1025 Anth Prep	2.13	0.05	1.0003	1.0238	2.23	
1027 Bit Prep	1.29	0.05	1.0003	1.0238	1.37	
1469 Coke	3.81	0.05	1.0003	1.0238	3.95	

Table E: Expected Traumatic Loss Costs

Classification	Unloaded Manual Loss Cost (3)	2023						2022						2021					
		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			
		De-trended Loss Cost* (4)	Undeveloped Losses** (5)	Split of total losses by Layer			De-trended Loss Cost* (9)	Undeveloped Losses** (10)	Split of total losses by Layer			De-trended Loss Cost* (14)	Undeveloped Losses** (15)	Split of total losses by Layer					
				0.53429	0.28234	0.18337			0.45721	0.26768	0.27511			0.41892	0.26096	0.32012			
Undeveloped Expected Loss Cost*** (6)		Undeveloped Expected Loss Cost*** (7)		Undeveloped Expected Loss Cost*** (8)		Undeveloped Expected Loss Cost*** (11)		Undeveloped Expected Loss Cost*** (12)		Undeveloped Expected Loss Cost*** (13)		Undeveloped Expected Loss Cost*** (16)		Undeveloped Expected Loss Cost*** (17)		Undeveloped Expected Loss Cost*** (18)			
1001 Bit deep	4.72	5.14	3.54	1.89	1.00	0.65	5.33	4.71	2.15	1.26	1.30	5.49	5.14	2.15	1.34	1.65			
1010 Anth deep	11.10	12.10	8.34	4.46	2.35	1.53	12.52	11.06	5.06	2.96	3.04	12.90	12.07	5.06	3.15	3.86			
1012 Anth surf	3.46	3.77	2.60	1.39	0.73	0.48	3.90	3.44	1.57	0.92	0.95	4.02	3.76	1.58	0.98	1.20			
1014 Bit surf	0.88	0.96	0.66	0.35	0.19	0.12	0.99	0.87	0.40	0.23	0.24	1.02	0.95	0.40	0.25	0.30			
1015 Auger	5.56	6.06	4.18	2.23	1.18	0.77	6.27	5.54	2.53	1.48	1.52	6.46	6.05	2.53	1.58	1.94			
1021 Anth Co-gen	4.73	5.16	3.56	1.90	1.01	0.65	5.34	4.72	2.16	1.26	1.30	5.50	5.15	2.16	1.34	1.65			
1023 Bit Co-gen	1.04	1.13	0.78	0.42	0.22	0.14	1.17	1.03	0.47	0.28	0.28	1.21	1.13	0.47	0.29	0.36			
1025 Anth Prep	2.13	2.32	1.60	0.85	0.45	0.29	2.40	2.12	0.97	0.57	0.58	2.48	2.32	0.97	0.61	0.74			
1027 Bit Prep	1.29	1.41	0.97	0.52	0.27	0.18	1.46	1.29	0.59	0.35	0.35	1.50	1.40	0.59	0.37	0.45			
1469 Coke	3.81	4.15	2.86	1.53	0.81	0.52	4.30	3.80	1.74	1.02	1.05	4.43	4.15	1.74	1.08	1.33			

* 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

Exhibit XIII-A

50K-150K

Page 2

		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
<u>Indemnity</u>	2021	\$5,737,053	1.0774	\$6,181,101	64.00%	1.0524	1.0774	1.0684
	2022	\$4,063,486	1.1882	\$4,828,234	65.37%	1.0270	1.1882	1.1324
	2023	\$4,078,638	1.7250	<u>\$7,035,651</u>	<u>62.17%</u>	0.9998	1.7250	1.4507
				\$18,044,986	63.63%			
<u>Medical</u>	2021	\$3,303,358	1.0524	\$3,476,454	36.00%			
	2022	\$2,490,506	1.0270	\$2,557,750	34.63%			
	2023	\$4,281,580	0.9998	<u>\$4,280,724</u>	<u>37.83%</u>			
				\$10,314,928	36.37%			
	Total			\$28,359,914	1.0000			
				Years of Trend		Medical / HB 1846 Trend at <u>-1.3%</u>	Indemnity / HB 1840 Trend at <u>-4.2%</u>	Combined Trend Weighted by % indemnity vs medical by year
	Average Exp date AY 2021	7/1/2021		4.75		0.9397	0.8156	0.8603
	Average Exp date AY 2022	7/1/2022		3.75		0.9521	0.8514	0.8863
	Average Exp date AY 2023	7/1/2023		2.75		0.9647	0.8887	0.9175
	Average Date of Accident	4/1/2026						

Source: Loss Development - Exhibit V-F
Loss Trend - Exhibit V-C
Reported Losses - Exhibit V-B page 1

2025 Credibility Tables
 PCR shape

Credibility Zp or Ze
 $= (S \cdot \text{Payroll} + I \cdot G) / (J \cdot S \cdot \text{Payroll} + K \cdot G)$
 [where S adjusts Payroll to Expected Losses]

Expected Losses <u>Greater than</u>	Equivalent Modified Payroll at <u>\$3.27 *</u>	Primary Credibility	Excess Credibility	Variable	Layer 1	Layer 2
9,810	300,000	0.28	0.06	Av Claim G	N/A	11,512
11,516	352,156	0.29	0.06	S	N/A	0.054
14,394	440,191	0.30	0.06	I	N/A	43.50
17,632	539,213	0.31	0.07	J	N/A	2.4000
21,218	648,869	0.32	0.07	K	N/A	700.00
23,729	725,665	0.33	0.07			
25,895	791,896	0.34	0.07			
28,223	863,096	0.35	0.07			
31,724	970,153	0.36	0.07			
33,340	1,019,557	0.37	0.07			
36,148	1,105,443	0.38	0.07			
39,261	1,200,629	0.39	0.07			
42,723	1,306,521	0.40	0.07			
46,173	1,412,007	0.41	0.07			
50,260	1,536,995	0.42	0.07			
54,480	1,666,042	0.43	0.07			
58,930	1,802,133	0.44	0.07			
64,137	1,961,385	0.45	0.07			
69,460	2,124,155	0.46	0.07			
72,885	2,228,895	0.47	0.07			
75,602	2,311,974	0.48	0.07			
78,457	2,399,302	0.49	0.08			
81,395	2,489,134	0.50	0.08			
84,414	2,581,470	0.51	0.08			
87,590	2,678,605	0.52	0.08			
90,840	2,777,976	0.53	0.08			
94,219	2,881,321	0.54	0.08			
97,737	2,988,907	0.55	0.08			
101,336	3,098,956	0.56	0.08			
105,125	3,214,820	0.57	0.08			
109,027	3,334,144	0.58	0.08			
113,042	3,456,927	0.59	0.08			
117,273	3,586,315	0.60	0.08			
121,605	3,718,811	0.61	0.08			
126,119	3,856,846	0.62	0.08			
130,628	3,994,751	0.63	0.08			
135,136	4,132,599	0.64	0.08			
146,976	4,494,683	0.65	0.09			
159,790	4,886,557	0.66	0.09			
174,343	5,331,600	0.67	0.09			
190,774	5,834,076	0.68	0.09			
208,366	6,372,059	0.69	0.10			
228,292	6,981,402	0.70	0.10			
249,705	7,636,239	0.71	0.10			
274,047	8,380,651	0.72	0.10			
302,119	9,239,113	0.73	0.11			
333,210	10,189,908	0.74	0.11			
366,752	11,215,642	0.75	0.12			
407,662	12,466,728	0.76	0.12			
450,677	13,782,161	0.77	0.13			
498,112	15,232,783	0.78	0.13			
558,410	17,076,769	0.79	0.14			
624,012	19,082,931	0.80	0.15			
697,648	21,334,801	0.81	0.15			
788,985	24,127,982	0.82	0.16			
894,945	27,368,349	0.83	0.17			
1,018,370	31,142,813	0.84	0.18			
1,157,231	35,389,332	0.85	0.19			
1,321,831	40,422,961	0.86	0.20			
1,528,079	46,730,250	0.87	0.21			
1,528,079	49,908,820	0.87	0.22			
1,795,880	54,919,865	0.88	0.23			
2,120,319	64,841,560	0.89	0.24			
2,120,319	70,084,630	0.89	0.25			
2,505,663	76,625,780	0.90	0.26			
3,000,680	91,763,904	0.91	0.27			
3,000,680	99,118,112	0.91	0.28			
3,851,016	117,768,063	0.92	0.29			
3,851,016	126,769,048	0.92	0.30			
4,547,151	139,056,606	0.93	0.31			
4,547,151	165,861,750	0.93	0.32			
6,019,437	184,080,647	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			

* The average unloaded loss cost underlying the proposed filing is \$3.27.
 the table was updated to reflect this change.

**Coal Mine Compensation Rating Bureau of Pennsylvania
Experience Rating 2025
Mod Comparisons**

<u>File</u>	<u>Proposed Manual Premium</u>	<u>Proposed 2025 Mod</u>	<u>Proposed Experience Rated Premium</u>	<u>2024 Mod</u>	<u>Change in Mod Factor</u>
52	4,652	0.764	3,554	0.761	0.003
66	1,540	1.300	2,002	0.950	0.350
99	5,548	0.838	4,649	0.831	0.007
119	24,488	0.682	16,701	0.710	-0.028
121	138,401	0.752	104,078	0.896	-0.144
124	1,588	0.775	1,231	0.745	0.030
214	13,508	1.039	14,035	1.035	0.004
283	2,054	0.792	1,627	0.749	0.043
288	2,133	0.815	1,738	n/a	n/a
352	3,365	0.790	2,658	0.785	0.005
354	5,925	2.162	12,810	2.881	-0.719
360	1,143	0.816	933	0.810	0.006
370	1,495	0.811	1,212	0.805	0.006
421	1,453	0.804	1,168	1.421	-0.617
652	392,413	0.757	297,057	0.887	-0.130
690	7,940	0.884	7,019	0.863	0.021
954	524	0.813	426	0.780	0.033
1016	1,466	0.828	1,214	0.818	0.010
1037	23,369	0.811	18,952	0.798	0.013
1700	1,221	1.771	2,162	1.020	0.751
2353	10,030	0.781	7,833	0.780	0.001
2458	15,718	0.763	11,993	0.770	-0.007
2687	11,628	0.653	7,593	0.641	0.012
2839	3,177	0.777	2,469	1.215	-0.438
3157	14,938	0.772	11,532	0.766	0.006
3506	1,664	0.820	1,364	0.814	0.006
3552	0	0.813	0	0.795	0.018
3614	25,906	0.666	17,253	1.279	-0.613
3619	13,492	0.806	10,875	0.810	-0.004
3629	0	0.817	0	0.797	0.020
3691	5,489	0.753	4,133	2.171	-1.418
3804	3,912	0.984	3,849	1.003	-0.019
3932	2,976	0.786	2,339	0.774	0.012
3977	69,216	1.207	83,544	1.259	-0.052
3988	3,873	0.811	3,141	0.850	-0.039
3997	1,473	0.811	1,195	0.805	0.006
4025	38,204	0.854	32,626	0.908	-0.054
4030	1,224	0.816	999	0.806	0.010
4031	17,648	0.787	13,889	1.559	-0.772
4044	92,221	0.965	88,993	1.548	-0.583

**Coal Mine Compensation Rating Bureau of Pennsylvania
Experience Rating 2025
Mod Comparisons**

<u>File</u>	<u>Proposed Manual Premium</u>	<u>Proposed 2025 Mod</u>	<u>Proposed Experience Rated Premium</u>	<u>2024 Mod</u>	<u>Change in Mod Factor</u>
4052	39,871	0.937	37,359	1.047	-0.110
4058	13,556	0.678	9,191	1.749	-1.071
4072	271,807	0.738	200,594	0.820	-0.082
4077	778,390	0.862	670,972	0.805	0.057
4094	55,702	1.221	68,012	1.422	-0.201
4103	12,102	0.786	9,512	0.788	-0.002
4110	6,707	0.737	4,943	1.083	-0.346
4114	0	0.774	0	0.689	0.085
4120	0	0.824	0	0.784	0.040
4121	52,344	0.959	50,198	0.951	0.008
4123	10,076	0.839	8,454	1.097	-0.258
4124	3,414	0.816	2,786	n/a	n/a
4125	128,289	0.644	82,618	0.705	-0.061
4133	16,379	0.774	12,677	0.768	0.006
4134	798	0.820	654	n/a	n/a
4140	37,196	0.767	28,529	n/a	n/a
999014	157,017	0.811	127,341	1.040	-0.229
999019	304,151	0.785	238,759	0.871	-0.086
999020	2,382	0.791	1,884	0.770	0.021
999027	2,115	0.819	1,732	n/a	n/a
999031	61,038	0.924	56,399	0.656	0.268
999038	193,769	1.139	220,703	1.049	0.090
999039	17,732	2.610	46,281	1.881	0.729
999042	613,651	0.974	597,696	1.286	-0.312
999045	4,600	0.815	3,749	n/a	n/a
999048	10,679	0.790	8,436	0.796	-0.006
999051	942,775	1.041	981,429	0.885	0.156
999052	35,492	0.745	26,442	0.761	-0.016
999063	3,161,996	1.010	3,193,616	0.996	0.014
999065	1,343	0.816	1,096	0.850	-0.034
999071	2,997,743	1.136	3,405,436	1.081	0.055
999075	0	0.773	0	1.069	-0.296

Coal Mine Compensation Rating Bureau of Pennsylvania
Experience Rating 2025
Mod Comparisons

Exhibit XIII-C

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	2024 Mod	Proposed 2025 Mod	Limited Mod
354	2.881	2.162	2.531
421	1.421	0.804	1.071
1700	1.020	1.771	1.370
2839	1.215	0.777	0.865
3614	1.279	0.666	0.929
3691	2.171	0.753	1.821
4031	1.559	0.787	1.209
4044	1.548	0.965	1.198
4058	1.749	0.678	1.399
999039	1.881	2.610	2.231

PAB

Effective Date - April 01, 2025

COAL MINE COMPENSATION RATING BUREAU
MERIT RATING PLAN

MERIT RATING PLAN OFF-BALANCE CALCULATION

<u>Class</u>	(1) 2023 Developed <u>Payroll</u>	(2) Traumatic Proposed Unloaded <u>Loss Cost</u>	(3) <u>Credit/ Surcharge</u>	(4) <u>Loss Cost Premium</u>	<u>Off-Balance</u>
Underground Anthracite (1010)					
Total	\$199,052	11.10		\$22,095	
Credit	0	11.10	-5.00%	0	
Surcharge	0	11.10	5.00%	0	
Underground Bituminous (1001)					
Total	\$1,459,207	4.72		\$6,887,467	
Credit	0	4.72	-5.00%	0	
Surcharge	0	4.72	5.00%	0	
Surface Anthracite (1012)					
Total	\$35,342,111	3.46		\$1,222,837	
Credit	56,756	3.46	-5.00%	-98	
Surcharge	0	3.46	5.00%	0	
Surface Bituminous (1014)					
Total	\$33,302,085	0.88		\$293,058	
Credit	284,610	0.88	-5.00%	-125	
Surcharge	0	0.88	5.00%	0	
Coke (1469)					
Total	\$0	3.81		\$0	
Credit	0	3.81	-5.00%	0	
Surcharge	0	3.81	5.00%	0	
Auger (1015)					
Total	\$252,349	5.56		\$14,031	
Credit	22,104	5.56	-5.00%	-61	
Surcharge	0	5.56	5.00%	0	
Anthracite Co-Gen (1021)					
Total	\$9,705,257	4.73		\$459,059	
Credit	0	4.73	-5.00%	0	
Surcharge	0	4.73	5.00%	0	
Bituminous Co-Gen (1023)					
Total	\$24,193,248	1.04		\$251,610	
Credit	0	1.04	-5.00%	0	
Surcharge	0	1.04	5.00%	0	
Anthracite Prep Plant (1025)					
Total	\$16,725,093	2.13		\$356,244	
Credit	40,812	2.13	-5.00%	-43	
Surcharge	0	2.13	5.00%	0	
Bituminous Prep Plant (1027)					
Total	\$41,687,661	1.29		\$537,771	
Credit	124,272	1.29	-5.00%	-80	
Surcharge	0	1.29	5.00%	0	
All Classes Combined					
Total	\$307,327,763			\$10,044,172	
Credit	528,554		-5.00%	-407	
Surcharge	0		5.00%	0	
				\$10,043,765	1.0000

Source: (1) Exhibit XIV-A Page2
(2) Exhibit II
(4) = [(1) / 100] * (2) * (3)

2023 PAYROLL BY CLASS

Class	2023 Total Developed Payroll	2023 Experience Rated Payroll	2023 Merit Rated Payroll	2023 Manual Payroll
Underground Anthracite (1010)	\$199,052	\$199,052	\$0	\$0
Underground Bituminous(1001)	145,920,907	145,920,907	0	0
Surface Anthracite (1012)	35,342,111	34,525,500	56,756	759,855
Surface Bituminous (1014)	33,302,085	32,469,110	284,610	548,365
Coke (1469)	0	0	0	0
Auger (1015)	252,349	230,245	22,104	0
Anthracite Co-Gen (1021)	9,705,257	9,705,257	0	0
Bituminous Co-Gen (1023)	24,193,248	24,193,248	0	0
Anthracite Prep Plant(1025)	16,725,093	15,718,553	40,812	965,728
<u>Bituminous Prep Plant(1027)</u>	<u>41,687,661</u>	<u>41,563,389</u>	<u>124,272</u>	<u>0</u>
TOTAL	\$307,327,763	\$304,525,261	\$528,554	\$2,273,948

MERIT PAYROLL - CREDIT/SURCHARGE

Class	2023 Merit Rated Payroll	2023 Merit Credit Payroll	2023 Merit No Adjustment Payroll	2023 Merit Surcharge Payroll
Underground Anthracite (1010)	\$0	\$0	\$0	\$0
Underground Bituminous(1001)	0	0	0	0
Surface Anthracite (1012)	56,756	56,756	0	0
Surface Bituminous (1014)	284,610	284,610	0	0
Coke (1469)	0	0	0	0
Auger (1015)	22,104	22,104	0	0
Anthracite Co-Gen (1021)	0	0	0	0
Bituminous Co-Gen (1023)	0	0	0	0
Anthracite Prep Plant(1025)	40,812	40,812	0	0
<u>Bituminous Prep Plant(1027)</u>	<u>124,272</u>	<u>124,272</u>	<u>0</u>	<u>0</u>
TOTAL	\$528,554	\$528,554	\$0	\$0

Source: Exhibit X-A and CMCRB database as of 4/30/2024

COAL MINE COMPENSATION RATING BUREAU
SAFETY COMMITTEE CREDIT OFFSET

Exhibit XIV-B

<u>CLASS</u>	(1) 2023 Developed Payroll	(2) Traumatic Proposed Unloaded Loss Cost	(3) <u>Credit</u>	(4) Loss Cost Premium	<u>Off-Balance</u>
Underground Anthracite(1010)					
Total	\$199,052	\$11.10		\$22,095	
Safety Committee	0	11.10	-5.00%	0	
Underground Bituminous(1001)					
Total	\$145,920,907	4.72		\$6,887,467	
Safety Committee	73,986,698	4.72	-5.00%	(174,609)	
Surface Anthracite(1012)					
Total	\$35,342,111	3.46		\$1,222,837	
Safety Committee	13,938,869	3.46	-5.00%	(24,114)	
Surface Bituminous(1014)					
Total	\$33,302,085	0.88		\$293,058	
Safety Committee	9,086,289	0.88	-5.00%	(3,998)	
Coke(1469)					
Total	\$0	3.81		\$0	
Safety Committee	0	3.81	-5.00%	0	
Auger(1015)					
Total	\$252,349	5.56		\$14,031	
Safety Committee	0	5.56	-5.00%	0	
Anthracite Co-gen(1021)					
Total	\$9,705,257	4.73		\$459,059	
Safety Committee	2,434,116	4.73	-5.00%	(5,757)	
Bituminous Co-gen(1023)					
Total	\$24,193,248	1.04		\$251,610	
Safety Committee	6,709,030	1.04	-5.00%	(3,489)	
Anthracite Prep Plant(1025)					
Total	\$16,725,093	2.13		\$356,244	
Safety Committee	6,714,218	2.13	-5.00%	(7,151)	
Bituminous Prep Plant(1027)					
Total	\$41,687,661	1.29		\$537,771	
Safety Committee	22,097,801	1.29	-5.00%	(14,253)	
<u>All Classes Combined</u>					
Total	307,327,763			10,044,172	
Safety Committee	134,967,021			(233,371)	
				9,810,801	1.0238

Source: (1) Exhibit X-A and CMCRB Database as of 4-30-2024

(2) Exhibit II

(4) = [(1) / 100] * (2) * (3)

PAB