



Pennsylvania Compensation Rating Bureau

United Plaza Building • Suite 1500
30 South 17th Street • Philadelphia, PA 19103-4007
(215)568-2371 • FAX (215)564-4328 • www.pcrb.com

TO: The Honorable Teresa D. Miller
Insurance Commissioner, Commonwealth of Pennsylvania

FROM: John R. Pedrick, FCAS, MAAA
Vice President, Actuarial Services

DATE: July 1, 2016

RE: Actuarial Memorandum: F-Classification and USL&HW Rating Value Filing

This actuarial memorandum provides a discussion of the analysis performed by the PCRB that results in proposed rating values for employment classifications subject to the United States Longshore and Harbor Workers (USL&HW) Compensation Act (the Act or the USL&HW Act). The overall impact of the proposed change to collectible premium is -41.6%, while the associated impact to manual rates is -42.1%. These changes are proposed to be effective on October 1, 2016.

Questions regarding this filing should be directed to John Pedrick, Vice President – Actuarial Services, jpедrick@pcrb.com, 215-320-4429, or to Ken Creighton, Chief Actuary, kcreighton@pcrb.com, 215-320-4924.

DEFINITION OF COVERAGES SUBJECT TO THIS FILING

The employment classifications that are the subject of this filing, known as “F-Classifications” or “F-Classes,” provide insurance coverage for compensation liability for maritime or federal employment subject to the USL&HW Act. The F-Classes are used for employees that are “employed in maritime employment, in whole or in part, upon the navigable waters of the United States...”¹ Examples of employment generally subject to this Act are longshoremen, harbor workers, ship repairmen, shipbuilders, ship breakers and other employees engaged in loading, unloading, repairing or building vessels.

On occasion, employer operations not subject to assignment to an F-Class may involve some employees whose duties are subject to the USL&HW Act. State Act classifications (those not designated by an F suffix) do not contemplate liability under the USL&HW Act. Accordingly, a United States Longshore and Harbor Workers Compensation Coverage Percentage is provided in the PCRB Manual to adjust rating values otherwise applicable to State Act classifications for the different (and higher) benefits payable under the USL&HW Act.

SUMMARY OF THE PROPOSAL IN THIS FILING

This filing proposes an overall average decrease of 41.6% in collectible F-Class rates, which produces an overall average decrease in manual rates for F-Classes of 42.1%. The changes vary by F-Class from a decrease of 15.1% (Class 8709F) to a decrease of 44.9% (Class 7317F). The USL&HW Compensation Coverage Percentage is proposed to change from 77.46% to 74.43%. This results in a factor of 1.7443 which, when applied to the approved carrier rate(s) in State Act classifications, produces appropriate rates for employees whose duties are subject to USL&HW Act benefits. The Tax Multiplier applicable to F-Class exposures in retrospective rating is proposed to change from 1.1729 to 1.1226.

¹ 33 USC Ch.18.

DEVIATION FROM STANDARD METHODS

In this filing, the PCRB has deviated from its previous methods for two related reasons. First, due to the low volume of payroll and premium in the F-Classes, the PCRB's previous methodology would apply 25% credibility to the loss ratio from recent experience for these classifications, with the remaining 75% weight given to the loss ratio underlying the current rates. The 25% credibility level was judgmentally selected in prior filings to assign greater weight to the experience due, in part, to the fact that changes are not filled annually. Without judgmentally selecting a minimum, the standard calculation based on payroll used in class ratemaking would result in 14.5% credibility.

The second reason for the deviation comes from a comparison of F-Class rates for Pennsylvania to those in other selected states, with ports primarily serving ocean-going ships. Rates for F-Classes for the selected states, along with Pennsylvania, are shown in F-Class Exhibit 15.

For several F-Classes, the rate for Pennsylvania is the highest, in some cases several multiples higher than the other states' average. Since benefits for USL&HW coverage are set at the National level, a basic a priori assumption is that the rates should be similar for states that have similar ports, with differences due to factors other than benefit levels. It is reasonable to expect that F-Class rates in Pennsylvania should be closer to those of the other states, to the extent that the premium and loss experience produce lower rates.

Under the current methodology rates would not fall to the level seen in other states for years. The low credibility that is currently applied would allow only incremental changes over several years. As a result, the PCRB considered rate level indications with higher levels of credibility given to recent experience.

While the rates that would result from changes at the 100% credibility level would be much closer to those found in other states, in some cases they would fall below the average of the other states' rates. In order to avoid being too aggressive with the rate level decrease and the real potential of needing to increase rates in subsequent filings, the PCRB proposes changes by F-Class based on the following guidelines.

PCRB F-Classification Rate Proposal, Effective October 1, 2016
The rate for each F-Class will be the rate that results from the use of 100% credibility, subject to the following exceptions: <ol style="list-style-type: none">1. The proposed rate should not be lower than the average rate for the other selected states.2. The off-balance that results will be used to further adjust the F-Class rates to achieve the 100% credibility indicated manual rate level change.
The overall collectible rate level effect is -41.6%, which produces a manual rate level effect of -42.1%.

The deviation from previous methods described above is consistent with Actuarial Principles and Standards of Practice. The Casualty Actuarial Society's Statement of Principles Regarding Property and Casualty Insurance Ratemaking provides this principle: "A rate is reasonable and not excessive, inadequate, or unfairly discriminatory if it is an actuarially sound estimate of the expected value of all future costs associated with an individual risk transfer."² It also provides the following discussion:

A number of ratemaking methodologies have been established by precedent or common usage within the actuarial profession. Since it is desirable to encourage experimentation and innovation in ratemaking, the actuary need not be completely bound by these precedents. Regardless of the ratemaking methodology utilized, the material

² CAS Statement of Principles Regarding Property and Casualty Insurance Ratemaking lines 52 through 54, Principle 4.

assumptions should be documented and available for disclosure. While no ratemaking methodology is appropriate in all cases, a number of considerations commonly apply ... Informed actuarial judgments can be used effectively in ratemaking. Such judgments may be applied throughout the ratemaking process and should be documented and available for disclosure.³

Actuarial Standard of Practice No. 25, Credibility Procedures (ASOP25 or the Standard), provides guidance that is applicable to this filing. ASOP25 defines the term “Credibility” as, “A measure of the predictive value in a given application that the actuary attaches to a particular set of data (predictive is used here in the statistical sense and not in the sense of predicting the future).”⁴ The Standard provides guidance to actuaries for the use of credibility procedures. Relevant to this filing, the standard describes the use of professional judgment:

The actuary should use professional judgment when selecting, developing, or using a credibility procedure. The use of credibility procedures is not always a precise mathematical process. For example, in some situations, an acceptable procedure for blending the subject experience with the relevant experience may be based on the actuary assigning full, partial, or zero credibility to the subject experience without using a rigorous mathematical model.

In the PCR F-Class filing, the loss ratio from recent experience is the “subject experience” in the above quote, and the loss ratio underlying current rates is the “relevant experience.” ASOP25 also provides, “Whenever appropriate in the actuary’s professional judgment, the actuary should disclose the credibility procedures used and any material changes from prior credibility procedures.”⁵

DISCUSSION OF THIS FILING’S METHODS, ANALYSIS AND FINDINGS

Key Results

F-Class	Current PCR B F-Class Rates	Selected States’ Average	Proposed PCR B F-Class Rates	Percentage Change
6824F	20.31	10.36	11.30	-44.4%
6826F	21.25	6.48	11.82	-44.4%
6843F	26.72	11.90	14.84	-44.5%
6872F	61.41	14.58	34.15	-44.4%
7309F	105.98	19.98	58.59	-44.7%
7313F	22.50	4.86	12.39	-44.9%
7317F	55.78	13.04	30.97	-44.5%
7327F	42.77	20.52	24.10	-43.7%
7366F	19.80	12.53	12.53	-36.7%
8709F	7.61	6.46	6.46	-15.1%
8726F	6.52	3.27	3.62	-44.5%
Overall Percentage Change in Manual Rates				-42.1%
Other Changes:				
<ul style="list-style-type: none"> • Revise Expense Constant from \$295 to \$305 • Revise USL&HW Compensation Coverage Percentage (Rule XII) from 77.46% to 74.43% • Revise the Tax Multiplier used in retrospective rating from 1.1729 to 1.1226 				

³ CAS Principles of Ratemaking, lines 59 through 64, 138 through 140.

⁴ ASOP25, Section 2.1.

⁵ ASOP25, Section 4.1

Data Used for Loss and Exposures

This filing uses loss and exposure data attributed to F-Class business as submitted on unit reports under the approved Statistical Plan in Pennsylvania. Unit statistical data has been used in lieu of financial data because the PCRB has found this information to be more consistent, accurate and reliable than the separate reporting for F-Class business in Financial Calls.

Unit statistical data is limited to case incurred losses separately reported for indemnity and medical benefits for a series of ten successive annual evaluations beginning 18 months after the inception of each policy period (First Report through Tenth Report.)

Supporting information for this filing includes standard earned premium and incurred loss from unit statistical data for the policy periods 1997 through 2012.

Unit statistical data used for the analysis of the overall indicated rate level change in this filing is presented in F-Class Exhibit 5.

Analysis of Loss Experience

The PCRB performed incurred loss development analyses separately for indemnity and medical benefits. For indemnity losses, average age-to-age development factors based on the latest available seven years were used in a curve-fitting procedure intended to smooth age-to-age factors within the development periods available in unit statistical data and to extrapolate the development observed in that available data to an ultimate basis after tenth report.

A number of different curve-fitting procedures were considered in the preparation of this filing. The curve selected for indemnity is based on the formula $y = 1 / (a + bx + cx^2)$ fitted to the differences between the observed average age-to-age development factors and unity (1.000). These differences or "residuals" were used based on the expected behavior of the development factors converging to 1.000 over time. The use of the residuals allowed the selected curve to more closely replicate this expected behavior. As an additional step to align the general shape of the fitted development factors with expected results, a factor of 1.000 (residual of 0.000) was selected as input for the 14th to 15th development points in applying the curve-fitting formulas.

For medical loss development, although a number of different curve-fitting procedures were considered, no satisfactory curve fits resulted. The PCRB instead selected a seven-year arithmetic average to calculate age-to-age factors for medical losses along with a 10th-to-ultimate factor of 1.0000.

Development factors derived by cumulatively multiplying the age-to-age factors were used to estimate ultimate losses for indemnity and medical benefits by policy year.

Linear and exponential trend models were applied to the developed indemnity and medical loss ratios. The most recent six policy year loss ratios were selected as the basis for the indicated change in F-Class rates.

The PCRB's loss development and trend analyses are included in F-Class Exhibit 5.

Data Used for Expenses

Expense data is not reported to the PCRB separately for F-Class business. Accordingly, much of the expense data used in preparation of this filing is total Pennsylvania workers compensation expense data, related to total Pennsylvania workers compensation premiums.

The PCRB's expense study performed in support of this filing is included in F-Class Exhibit 3. Provisions were separately measured based on total Pennsylvania workers compensation experience for the following expense components: commission and brokerage, other acquisition, general expense and loss adjustment expense.

Using unit statistical data, an indicated provision in proposed rates for premium discounts was obtained separately and specifically for F-Class business. This derivation is also presented in F-Class Exhibit 3. A provision for uncollectible premium has been added based on data collected by the NCCI for residual market business in the State of Delaware. The analysis appears on Page 3.9 of F-Class Exhibit 3.

Analysis of Expense Experience

Historical ratios of expense to premium were obtained from the most recent available three years of experience. Provisions for the Security Fund and Premium Tax were based on current assessment levels. Miscellaneous taxes were estimated based on historical relationships between such taxes and premiums. Loss adjustment expenses were measured in relation to losses on the basis of the most recent available three years' experience.

Consistent with practice adopted in prior Pennsylvania rate filings, expense attributable to the Security Fund, General Expenses and Other Acquisition have been treated as "fixed expenses" in the preparation of this filing. "Fixed expenses" are presumed to be independent of premium levels, so that their relationships to premiums will change as rate levels rise or fall.

Historical ratios of expenses to premium were used as starting points in the determination of final proposed expense loadings. Preliminary rate level indications were used to revise the proposed fixed expense needs as a function of premium, and new rate level indications were successively determined until the fixed expense needs and indicated rate level change were in balance. These balanced indications serve as the basis for the proposed changes in rates submitted with this filing.

The proposed expense loadings consistent with this filing are shown in F-Class Exhibit 2.

Derivation of Permissible Loss, Loss Adjustment and Fixed Expense Ratio

The PCRB retained an economic consultant to accomplish the following portions of the analysis supporting this filing:

- Determine an appropriate rate of return for the enterprise of writing workers compensation insurance in Pennsylvania
- Prepare a model to account for all applicable cash flows attendant with the writing of workers compensation insurance business in Pennsylvania
- Using the aforementioned model, compute a permissible portion of premium to be attributed to loss, loss adjustment expense and loss-based assessments in combination and a separate provision for profit consistent with the anticipated cash flows and rate of return noted above

As noted above with respect to the PCRB's analysis of expense data, preliminary indicated changes in rate level were derived. Fixed expense provisions were then modified consistent with the previous indicated rate change, and a new indicated rate change was determined. This process continued until proposed fixed expense needs and the overall rate level change were in balance.

Detail of the model applied in preparation of this filing with a summary of key inputs, outputs and assumptions is provided in F-Class Exhibit 4.

Analysis of USL&HW Factor

The USL&HW Factor is based on a comparison of benefit levels between State Act coverage and the USL&HW Act. This comparison is performed by type of claim and type of benefit to measure the respective potential obligations arising from injuries occurring under the jurisdiction of federal, as compared to state, law. Such a comparison then serves as the basis for the factor to adjust premiums in state classifications for the contingency of exposure to federal benefits.

The derivation of the proposed USL&HW Factor is presented in F-Class Exhibit 6.

Proposed Classification Rates

The PCRB has applied the same classification pricing methods customarily used in loss cost filings for State Act coverage, with the exceptions noted in the Deviation from Standard Methods section above and in the discussion of F-Class Exhibits below, to derive rate relativities for the F-Classes subject to this filing. The rate formulae used are set forth in F-Class Exhibit 10. Summaries of unit statistical data for the experience period included in the derivation of F-Class rate relativities in this filing are shown in F-Class Exhibit 7. Details of individual F-Class experience and the application of the prescribed rating formulae are presented in F-Class Exhibit 14. Proposed F-Class rates are shown in F-Class Exhibit 12.

Miscellaneous Rating Values

Tax Multiplier – A factor to account for assessments made on losses when policies are written using retrospective rating plans for F-Class business is derived as shown in F-Class Exhibit 8.

Experience Rating Plan Parameters – The approved Experience Rating Plan applies to F-Class business in Pennsylvania. Expected loss rates are required for the F-Classes in order to incorporate experience under those classifications into the determination of employers' experience modifications. The derivation of expected loss rate factors, which are multiplied by the proposed rates to produce the necessary expected loss rates by year in each F-Class, is shown in F-Class Exhibit 11.

DISCUSSION OF EXHIBITS

An index of all exhibits appears at the end of this memorandum. The following material provides discussion of the key elements.

F-Class Exhibit 1 – Indicated Change in Rate Level

F-Class Exhibit 1 shows the derivation of an indicated change of -41.6% in collectible premium for Pennsylvania F-Class business. On a manual basis, the indicated change is a decrease of -42.1%.

With the exception of the use of 100% credibility, as discussed above, the procedure for developing the indicated change in F-Class Exhibit 1 is the same as that used in the 2014 Pennsylvania F-Class filing. Derivation of the trended loss ratios on Line (1) is described in F-Class Exhibit 5.

The assignment of 100% credibility to the trended loss ratio in Line (1), results in 0% credibility applicable to the loss ratio underlying current rates in Line (3), and a credibility weighted trended loss ratio in Line (4) equal to Line (1).

The credibility weighted trended loss ratio is adjusted to include loss adjustment expenses (Line (5)) and fixed expenses (Line (7)). The total on Line (8) is then compared to the permissible loss, loss adjustment and fixed expense ratio (Line (9)) to produce the indication on Lines (10) and (11). Derivation of Lines (5), (7) and (9) are discussed below.

The indicated change in collectible premium is converted to an indicated change in manual rate level (Lines (14) and (15)) by adjusting for the change in the off-balance of the Experience Rating Plan (collectible premium ratio). The proposed collectible premium ratio is taken from the Pennsylvania April 1, 2016 Loss Cost Filing (C-366), as approved by the Pennsylvania Insurance Department.

F-Class Exhibit 5 – Analysis of Experience

F-Class Exhibit 5 presents a review of F-Class experience as reported under the Unit Statistical Plan. Experience for the most recent available years through 2012 was newly extracted from the current revision database. This recent data has been supplemented by prior experience included in each F-Class

filing since 1997. Page 1 of F-Class Exhibit 5 shows reported standard earned premiums (1997 to 2012) and indemnity incurred losses (1997 to 2012). The step-shaped lines separating successive evaluations for a given policy period indicate that the data was extracted from successive reviews: the 2002 filing (above the first line, reading top to bottom), the 2005 review (between the first and second lines), the 2007 review (between the second and third lines), the 2009 review (between the third and fourth lines), the 2011 review (between the fourth and fifth lines), the 2014 review (between the fifth and sixth lines) or the current review (below the sixth line). Page 2 shows similar detail for F-Class medical experience.

Page 3 shows the age-to-age incurred loss development factors for indemnity losses from 1st through 10th report. The step-shaped lines separate ratios of losses whose successive evaluations were drawn from six different rate revision extracts mentioned above (2002-2005, 2005-2007, 2007-2009, 2009-2011, 2011-2014 or 2014-2016). The data from prior filings was not re-extracted and edited and may therefore have a degree of inconsistency with data subsequently extracted due to corrections of units, availability of previously missing units or the lack of units previously included. The cells denoted with asterisks (****) represent points where an inconsistency in data was observed between successive extracts for a given report year and maturity. Average age-to-age factors for the latest three, five and seven years available are shown. The selected age-to-age factors for indemnity are derived on Page 5 and are the result of fitting the seven-year average age-to-age factors to a curve and also projecting a tail factor (10th-to-ultimate) based on that curve. Age-to-age incurred loss development factors for medical losses were likewise fitted to a number of curves. However, no satisfactory curve fits resulted. A seven-year arithmetic average was instead selected to calculate age-to-age factors for medical losses along with a 10th-to-ultimate factor of 1.0000. The bottom sections of Pages 3 and 4 show incurred loss development factors to an ultimate basis for indemnity and medical losses, respectively.

Page 5 shows the derivation of selected indemnity age-to-age development factors. Residuals (LDF-1) of average age-to-age loss development factors are fitted to a curve of the form $y = 1 / (a + bx + cx^2)$. A factor of 1.0000 was chosen for the 15th to ultimate development stage to improve the fit and shape of the resulting curve. A tail factor was selected by compounding the age-to-age factors for successive stages beyond 10th report.

Ultimate on-level loss ratios are calculated on Page 6 for indemnity, medical and in total. Page 7 shows a graph of the resulting projected ultimate loss ratios.

An analysis of loss ratio trend is summarized on Page 8. Linear and exponential trend lines were used to project trended loss ratios for indemnity and medical, using combinations of policy years ranging from three to ten points. Six-year average loss ratios and zero percent annual trend were selected for both indemnity and medical losses. The resulting trended loss ratios of 21.70% for indemnity and 9.34% for medical were carried to Line (1) of F-Class Exhibit 1.

F-Class Exhibit 2 – Expense Loading

Expense provisions are presented in F-Class Exhibit 2 and are broadly categorized as loss and loss adjustment, fixed expenses, and variable expenses. Variable expenses are those expenses which are expected to remain a constant percentage of premium regardless of the overall premium level or premium charge. Fixed expenses are considered to be a function of changes in payroll levels and/or expense costs independent of changes in premium levels. Fixed expenses are, therefore, separately trended.

The first column of F-Class Exhibit 2 shows expense provisions prior to trending, where trending refers to the separate trending applicable to fixed expenses. Provision for the Security Fund (0.00%) and taxes (2.00%) are based on current assessment levels. Miscellaneous taxes, also included in "Taxes," are estimated to be 0.33%. Provision for general expense, other acquisition, premium discount, commissions and uncollectible premiums are derived in F-Class Exhibit 3 – Expense Study.

The second column of F-Class Exhibit 2 shows expenses after trending, where trending applies to fixed expenses. The fixed expense trend of 2.39% is based on a review of countrywide workers compensation dollars of expense for general and other acquisition expenses for the period 2005 through 2013, as compiled by A. M. Best Company. The payroll trend of 3.25% is based on insured payrolls from Unit

Statistical Plan data for the eleven years 2002 to 2012. The trended loss ratio is carried from Line 4 of F-Class Exhibit 1. Loss adjustment expenses and the federal assessment are functions of losses, with LAE derived in F-Class Exhibit 3 and the federal assessment based on the latest available assessment rate.

The last column of F-Class Exhibit 2 shows the proposed provision for expenses, consistent with the overall indicated change in rates from F-Class Exhibit 1. Premium discount, commissions, taxes and the provision for uncollectible premiums remain a constant percentage of premium and are, therefore, unchanged from Column 2. The fixed expense ratios of Column 2 are adjusted to the proposed rate level by dividing the Column 2 figure by the indicated change from Line (10) of F-Class Exhibit 1 (i.e., $9.03 = 5.27/0.5838$). The provisions for profit (0.31%) and the combined provision for loss and loss-related expenses (74.63%) were derived from an internal rate of return model, as described in F-Class Exhibit 4. The combined provision for loss and loss-related expenses of 74.63% was split into the loss (58.77%), loss adjustment expense (8.75%) and the federal assessment (7.11%) components by maintaining a ratio of loss adjustment expense to loss of 14.89% and a ratio of federal assessment expense to loss of 12.09%.

F-Class Exhibit 3 – Expense Study

Page 3.1 of F-Class Exhibit 3 derives provisions for commission, other acquisition, and general expense exclusive of expense constant dollars. Commissions are related to premium, including large deductible business on a net (as reported) basis. Other acquisition and general expense are related to premiums, including large deductible business on a gross (before deductible credits) basis. An average factor over three years, 2011 through 2013, is used. Experience for all companies is included.

Loss adjustment expenses for Calendar Years 2011 through 2013 are related to incurred losses, including large deductible business on a gross (before reimbursement) basis. The resulting average factor of 14.89% is shown on Page 3.4. Experience for all companies is included.

An average premium discount figure of 7.98% is derived on pages 3.5 through 3.8 of F-Class Exhibit 3, based on the total Pennsylvania premium for all policies including those with F-Class exposure. The figure includes an adjustment to account for multi-state risks.

Based on data from the Delaware (Assigned Risk) Insurance Plan, an average uncollectible premium rate of approximately 0.8% was observed. An uncollectible premium provision of 0.40% was selected for Pennsylvania F-Class business.

F-Class Exhibit 4 – Internal Rate of Return Model

F-Class Exhibit 4 presents an internal rate of return model which tracks the premium, loss and expense cash flows of Pennsylvania workers compensation F-Class business for the prospective rating period. The model combines expense assumptions from F-Class Exhibit 2, a premium collection pattern, loss and expense payout patterns, and a base standard premium of \$1 million to model the net cash flows for F-Class business.

A profit loading is chosen so that the net cash flows, when discounted to present value, provide a return on equity equal to the projected target rate of return or cost of capital. The cost of capital is derived in F-Class Exhibit 4 and is equal to 8.07%.

In the internal rate of return analysis, the profit provision was 0.31%. A loss ratio, including provision for loss, loss adjustment and the federal assessment, and consistent with the other expense values used in the model, was also derived and equal to 74.63%. That loss ratio is subsequently split into the loss (58.77%), loss adjustment expense (8.75%) and federal assessment (7.11%) values, as indicated in F-Class Exhibit 2.

F-Class Exhibits 9, 10, 11, 12 and 14 – Classification Analysis and Exhibits

In the Deviation from Standard Methods section above, rates for two classes (7366F and 8709F) were selected to be equal to the average rate for the selected states. This caused the rate for Class 8709F to fall outside of the range used in the standard methodology. See Step (15) in F-Class Exhibit 10, which describes the range. Otherwise, the standard methodology for the derivation of F-Class rates used in this filing is the same as that used to develop F-Class rates in each F-Class filing since 1997, and is similar to the process used in the calculation of State Act loss costs. F-Class Exhibit 10, Rate Formulae, describes the steps used in the classification ratemaking process. F-Class Exhibit 9, Derivation of F-Class Rates, shows current and proposed rates by class and the respective percentage changes. No classes were capped at the upper or lower allowable ranges. Expected loss rate factors used to calculate expected losses for experience rating are derived in F-Class Exhibit 11, Calculation of Expected Loss Rate Factors. Proposed rating values are shown in F-Class Exhibit 12, Manual Rates and Expected Loss Rates. F-Class Exhibit 14, F-Classification Exhibits and the F-Class Book are also included. The Class Book shows the reported and projected experience for each class and the derivation of proposed rates. The F-Classification Exhibits show various factors used in the class ratemaking process. The per-claim and per-accident loss limits and the credibility table are the same as the ones used in the April 1, 2016 Pennsylvania State Act Loss Cost Filing.

F-Class Exhibit 6 – U. S. Longshore & Harbor Workers Coverage Factor

F-Class Exhibit 6 shows the derivation of a USL&HW factor which, when applied to State Act class rating values, provides for the pricing of State Act risks with USL&HW exposure. The USL&HW loading is based on a comparison of average benefit levels by type of injury under the USL&HW Act and the Pennsylvania Workers Compensation Act. These average benefit levels are then weighted by type of injury to get an overall benefit level for each coverage.

The PCRB proposes that the USL&HW factor be decreased from 1.7746 to 1.7443, representing a 74.43% load to State Act rating values.

Other F-Class Exhibits

F-Class Exhibit 7, Table II, presents a summary of Unit Statistical Plan experience on a reported and projected basis for F-Class business by type of injury.

F-Class Exhibit 8, Tax Multiplier, provides a tax multiplier factor applicable to F-Class exposures for use in retrospective rating. The PCRB proposes that the factor decrease from 1.1729 to 1.1226.

F-Class Exhibit 15, Pennsylvania F-Class Rates Comparison provides the rates for selected states for each Pennsylvania F-Class, as discussed in the Deviation from Standard Methods section above.

INDEX OF EXHIBITS

F-Class Exhibit 1	Indicated Change in Rate Level
F-Class Exhibit 2	Expense Loading
F-Class Exhibit 3	Expense Study
F-Class Exhibit 4	Internal Rate of Return Model
F-Class Exhibit 5	Analysis of Experience
F-Class Exhibit 6	U. S. Longshore & Harbor Workers Coverage Factor
F-Class Exhibit 7	Table II – Unit Statistical Data
F-Class Exhibit 8	Tax Multiplier
F-Class Exhibit 9	Derivation of F-Class Rates
F-Class Exhibit 10	Rate Formulae
F-Class Exhibit 11	Calculation of Expected Loss Rate Factors
F-Class Exhibit 12	Manual Rates and Expected Loss Rates
F-Class Exhibit 14	F-Class Exhibits and Class Book
F-Class Exhibit 15	Pennsylvania F-Class Rates Comparison