



Pennsylvania Compensation Rating Bureau

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TO: The Honorable Jessica K. Altman
Acting Insurance Commissioner, Commonwealth of Pennsylvania

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

DATE: February 2, 2018

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

This actuarial memorandum provides a brief discussion of the changes in the PCRB's analysis due to the Tax Cuts and Jobs Act enacted at the end of 2017. The discussion of calculations and assumptions in the original Actuarial Memorandum, dated November 29, 2017, still applies while the results have changed. This memorandum only discusses the changes. The modifications result in a proposed change to collectible premium of -12.40%, while the associated impact to manual rates is -12.28%. These changes are proposed to be effective on April 1, 2018.

The discussion in this memorandum supplements the discussion in the original Actuarial Memorandum.

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

REVISIONS DUE TO THE NEW CORPORATE TAX RATE

Federal tax reform legislation signed into law by the President on December 22, 2017, lowered the corporate tax rate from 35% to 21%. This happened after PCRB submitted Filing No. C-371, the F-Class filing. The use of the new corporate tax rate changed the indicated and proposed change, as well as other rating values as follows:

	Original Proposal	Amended Proposal
Proposed Change in Collectible Rates	-9.97%	-12.40%
Proposed Change in Manual Rates	-9.85%	-12.28%
USL&HW Compensation Coverage Percentage	60.68%	Unchanged
Tax Multiplier	1.0867	1.0882
Expense Constant	\$315	Unchanged

The proposed changes by F-Class are modified as follows:

F-Class	Current PCRB F-Class Rates	Original Proposal PCRB F-Class Rates	Amended Proposal PCRB F-Class Rates	Percentage Change
6824F	11.30	10.21	9.93	-12.1%
6826F	11.82	10.68	10.39	-12.1%
6843F	14.84	13.54	13.17	-11.3%
6872F	34.15	30.85	30.02	-12.1%
7309F	58.59	52.53	51.11	-12.8%
7313F	12.39	11.05	10.75	-13.2%
7317F	30.97	27.95	27.20	-12.2%
7327F	24.10	22.51	21.91	-9.1%
7366F	12.53	11.17	10.87	-13.2%
8709F	6.46	5.76	5.61	-13.2%
8726F	3.62	3.26	3.18	-12.2%

AMENDED EXHIBITS

F-Class Exhibit 1 – Indicated Change in Rate Level

The following entries have changed:

- Line (7), Fixed Expense Ratio changed from 0.613 to 0.630.
- Line (8), Total Loss, LAE and Fixed Expense Ratio changed from 0.7043 to 0.7060.
- Line (9), Permissible Loss, Loss Adjustment and Fixed Expense Ratio changed from 0.7823 to 0.8059
- Line (10), Indicated Change in Rates changed from 0.9003 to 0.8760.
- Line (13), Indicated Change in Manual Level changed from 0.9015 to 0.8772.

F-Class Exhibit 2 – Expense Loading

The proposed provisions for expenses have changed as follows:

Expense Provisions	Original Proposed Provision	Amended Proposed Provision
Losses	62.60	64.50
Loss Adjustment Expense	9.50	9.79
Loss & Loss Adjustment	72.10	74.29
Security Fund	0.00	Unchanged
General Expenses	3.39	3.48
Other Acquisition	2.74	2.82
Fixed Expense Total	6.13	6.30
Premium Discount	7.92	Unchanged
Commission	5.44	Unchanged
Taxes	2.33	Unchanged
Uncollectible Premium	0.55	Unchanged
Federal Assessment	4.28	4.41
Combined Profit & Contingencies	1.25	-1.24
Variable Expense Total	21.77	19.41
Permissible Loss, Loss Adjustment and Fixed Expense Ratio	78.23	80.59

F-Class Exhibit 4 – Internal Rate of Return Model

The following Table I entries under Section 1: Inputs & Assumptions have changed: Lines (2), (2A), (2B), (8B) and (8C). Section 2: Outputs has changed, as follows:

	Original Proposal	Amended Proposal
(1) Loss Ratio – Including LAE and Loss Based Assessments	76.38	78.70
(2) Profit & Contingencies	1.25	-1.24

In addition, entries in cash flow tables and supporting exhibits have changed as follows:

- Table II, Cash Flow Patterns, Column (3)
- Table III, Cash Flow for Loss and Unearned Premium Reserves, Columns (5), (7) and (8)
- Table IV, Tax Credits Available from Underwriting Operations, Columns (3), (4), (5), (7), (8) and (9)
- Table V, Net Cash Flows from Underwriting, Columns (1), (2), (3) and (5)
- Table VI, Derivation of Funds in Surplus Account, Columns (1), (4) and (5)
- Table VII, Nominal Cash Flows to Investors, Columns (1), (2), (3), (4), (5), (6) and (7)

- Pennsylvania “F” Class – 2018 Pre & Post Tax Returns, Columns (5) and (6) and the Post Tax Weighted Yield – Post Tax Expense

F-Class Exhibit 8 – Tax Multiplier

The following changes were made to this exhibit:

Expense Provisions	Original Proposed Provision	Amended Proposed Provision
Losses	62.60	64.50
Loss Adjustment Expense	9.50	9.79
Loss & Loss Adjustment	72.10	74.29
Premium Discount	7.92	Unchanged
Acquisition	6.13	8.26
General Expenses	3.39	3.48
Profit & Contingencies	1.25	(1.24)
Taxes	2.33	Unchanged
Security Fund	-	Unchanged
Uncollectible Premium	0.55	Unchanged
Federal Assessment	4.28	4.41
Total	25.85	25.71
$E = 0.0258 = 0.0826 + 0.0348 - 0.0124 - 0.0792$		
$A = 0.0678 = 0.0683 \times \frac{1 - 0.0258 - 0.0288}{1 - 0.0193 - 0.0288}$		
$T = 1.0882 = \frac{0.0258 + 0.6450 (1 + 0.1518 + 0.0678)}{0.0258 + 0.6450 (1 + 0.1518)} \times \frac{1}{1 - 0.0288}$		

F-Class Exhibit 9 – Derivation of F-Class Rates

The following columns have changed: Proposed Pure Premium, Minimum Rate, Maximum Rate, Indicated Rate Pre-Cap, Indicated Rate Post-Cap, Premium at Proposed Rate, and Percent Change.

F-Class Exhibit 11 – Review of Experience Rating Plan Parameters

The following columns of table “Calculation of Expected Loss Rate Factors” have changed: Columns (5), (7) and (8).

F-Class Exhibit 12 – Manual Rates and Expected Loss Rates

F-Class Exhibit 14 – Index to F Classification Exhibits

The revisions in these exhibits reflect the changes discussed above.