PENNSYLVANIA COMPENSATION RATING BUREAU F-CLASS FILING

Expense Study

The following exhibits are used in the development of specific expense provisions to be used in the PCRB's proposed F-Class filing. The provisions are for commission & brokerage, other acquisition, general and loss adjustment expense, premium discount and uncollectible premium.

Exhibit I of the attachment presents summary figures for standard earned premium, general expenses and total production costs from the last three calendar years. The data is drawn from Pennsylvania Expense Call submissions. The data has been adjusted to include the experience for large deductible policies.

Exhibit I-A develops standard earned premium on both net and gross bases after adjusting for large deductible policies and removing expense constant dollars.

Exhibit II shows the development of the expense constant offset that is carried forward to Exhibit I.

Exhibit III shows the calculation of the loss adjustment expense provision as a function of the incurred losses. The loss adjustment expense factor is based on all-company experience and is developed from the same source of data as Exhibit I above. We selected a three-year average of loss adjustment expense ratios to direct incurred losses including large deductibles on a gross basis.

Exhibits IV-A and IV-B show the development of an average provision for premium discount based upon the Schedule X and Schedule Y premium discount tables, respectively. The data used by the PCRB for this purpose is Unit Statistical Plan data. These exhibits form the basis for Exhibits IV-C and IV-D, which develop the average interstate premium discounts both for Schedule X and Y companies separately and on an all-company basis.

Exhibit V develops the provision for uncollectible premium based on the ratio of uncollectible premium to gross written premium. Please note that the selection of an uncollectible premium provision recognizes the fact that in the residual market, collection problems would be more prevalent than in the market as a whole. The data used is courtesy of NCCI, Inc.

EXHIBIT I ALL COMPANIES

CALENDAR YEAR

		2020	2021	2022
(1)	Standard Earned Premium at Company Rate Level including Large Deductible on a Net Basis excluding Expense Constant Dollars (Page 2, line (10))	\$ 2,659,310,289	\$ 2,693,916,630	\$ 2,937,790,320
(2)	Standard Earned Premium at Company Level including Large Deductible on a Gross Basis excluding Expense Constant Dollars (Page 2, line (11))	\$ 3,128,415,749	\$ 3,235,371,107	\$ 3,590,663,100
(3)	Commission and Brokerage	\$ 177,999,110	\$ 188,100,697	\$ 206,336,740
(3a)	Reported Ratio { (3) / (1) }	0.0669	0.0698	0.0702
(4) (4a)	Other Acquisition Reported Ratio { (4) / (2) }	\$ 82,350,546 0.0263	\$ 100,320,448 0.0310	\$ 93,379,633 0.0260
(5) (5a)	General Expense Reported Ratio { (5) / (2) }	\$ 186,041,663 0.0595	\$ 158,609,388 0.0490	\$ 176,013,418 0.0490
		Three Year Average (1)	Expense Constant Income (Page 3) (2)	Difference { (1) - (2) }
	COMMISSION AND BROKERAGE OTHER ACQUISITION	0.0690 0.0278	0.0176 0.0068	0.0514 0.0210
	TOTAL PRODUCTION	0.0968	0.0244	0.0724
	GENERAL EXPENSE	0.0525	0.0111	0.0414

EXHIBIT I - A ALL COMPANIES

CALENDAR YEAR

		2020	2021	2022
(1)	Standard Earned Premium at PCRB DSR Level including Large Deductible on a Net Basis	\$ 1,572,355,548	\$ 1,559,814,788	\$ 1,697,026,208
(2)	Multiplier to Bring Premium to Company Rate Level	1.7348	1.7733	1.7794
(3)	Standard Earned Premium at Company Rate Level including Large Deductible on a Net Basis { (1) * (2) }	\$ 2,727,722,405	\$ 2,766,019,564	\$ 3,019,688,435
(4)	Large Deductible Adj. at PCRB DSR Level	\$ 368,070,192	\$ 397,923,478	\$ 483,681,123
(5)	Multiplier to Bring L. D. Adj. to Company Rate Level	1.2745	1.3607	1.3498
(6)	Large Deductible Adj. at Company Rate Level $\{ (4) * (5) \}$	\$ 469,105,460	\$ 541,454,477	\$ 652,872,780
(7)	Standard Earned Premium at Company Rate Level including Large Deductible on a Gross Basis { (3) + (6) }	\$ 3,196,827,865	\$ 3,307,474,041	\$ 3,672,561,215
(8)	Expense Constant Removal Factor	0.9786	0.9782	0.9777
(9)	Expense Constant Dollars { (7)[1 - (8)] }	\$ 68,412,116	\$ 72,102,934	\$ 81,898,115
(10)	Standard Earned Premium at Company Rate Level including Large Deductible on a Net Basis excluding Expense Constant Dollars { (3) - (9) }	\$ 2,659,310,289	\$ 2,693,916,630	\$ 2,937,790,320
(11)	Standard Earned Premium at Company Level including Large Deductible on a <u>Gross</u> Basis <u>excluding</u> Expense Constant Dollars { (7) - (9) }	\$ 3,128,415,749	\$ 3,235,371,107	\$ 3,590,663,100

EXHIBIT II

EXPENSE CONSTANT INCOME - ALL COMPANIES

MANUAL YEAR 2020

(1)	Number of Policies	263,557			
(2)	Expense Constant Income With Expense Const	\$ 98,833,875			
(3)	Interstate Adjustment Factor				0.90
(4)	Adjusted Expense Constant Income {(2) * (3)}				\$ 88,950,488
(5)	Standard Earned Premium Excluding Expense (including Large Deductible on a Net Basis	Constant			\$ 1,600,604,326
(5a)	Factor to Bring Premium to Current Level				1.3786
(5b)	Standard Earned Premium <u>Excluding</u> Expense 0 <u>including</u> Large Deductible on a <u>Net</u> Basis at Cu				\$ 2,206,593,124
(6)	6) Standard Earned Premium Excluding Expense Constant \$ 2,162,33 including Large Deductible on a Gross Basis				
(6a)	Factor to Bring Premium to Current Level				1.2943
(6b)	Standard Earned Premium <u>Excluding</u> Expense of <u>including</u> Large Deductible on a <u>Gross</u> Basis at				\$ 2,798,712,172
(7)	Distribution of Expense Constant Income	%	%	\$	Total Expense \$
	(a) General Expense	35.0%		\$ 131.25	\$ 31,132,671
	(b) Production i) Commission ii) Other Acquisition	65.0%	67.0% 33.0%	\$ 163.31 \$ 80.44	\$ 38,737,937 \$ 19,079,880
	Total	100.0%		\$ 375.00	\$ 88,950,488
(8)	Expense Constant Ratio for General Expense {	0.0111			
(9)	Expense Constant Ratio for Commission { (7b(i)) / (5b }			0.0176
(10)	Expense Constant Ratio for Other Acquisition {	0.0068			

EXHIBIT III

LOSS ADJUSTMENT EXPENSE RATIOS - ALL COMPANIES

CALENDAR YEAR

	2020	2021	2022	
(1) Loss Adjustment Expense	\$ 224,341,207	\$ 269,211,088	\$ 370,677,772	
(2) Incurred Losses <u>including</u> Large Deductible on a <u>Net</u> Basis	\$ 902,583,496	\$ 1,072,987,856	\$ 1,355,175,188	
(3) Large Deductible Adjustment	\$ 624,343,216	\$ 638,795,290	\$ 746,765,609	
(4) Incurred Losses <u>including</u> Large Deductible on a <u>Gross</u> Basis { (2) + (3) }	\$ 1,526,926,712	\$ 1,711,783,146	\$ 2,101,940,797	
(5) Ratio of Loss Adjustment Expense to Incurred Losses including Large Deductible on a Net Basis { (1) / (2) }	0.2486	0.2509	0.2735	
(6) Ratio of Loss Adjustment Expense to Incurred Losses including Large Deductible on a Gross Basis { (1) / (4) }	0.1469	0.1573	0.1764	
Three-Year Average of Loss Adjustment Expense Ratios to Direct Incurred Losses including Large Deductible on a Net Basis				
Three-Year Average of Loss Adjustment Expension Incurred Losses including Large Deductible on a	0.1602			

EXHIBIT IV - A

SIZE OF RISKS - SCHEDULE X COMPANIES

MANUAL YEAR 2020

		Intrastate SEP
		excluding Loss
	Number	and Expense
Intrastate Risks	of Risks	Constant
	(1)	(2)
Up to \$10,000	72,493	\$ 88,476,994
\$10,001 - \$200,000	6,548	\$ 223,727,089
\$200,001 - \$1,750,000	261	\$ 116,270,663
Over \$1,750,000	12	\$ 44,635,340
TOTAL	79,314	\$ 473,110,086

DISTRIBUTION OF PREMIUM TO DISCOUNT BLOCK

Size of Risk	Number of Risks	First \$10,000	Next \$190,000	Next \$1,550,000	Over \$1,750,000
Up to \$10,000	72,493	\$ 88,476,994			
\$10,001 - \$200,000	6,548	\$ 65,480,000	\$ 158,247,089		
\$200,001 - \$1,750,000	261	\$ 2,610,000	\$ 49,590,000	\$ 64,070,663	
Over \$1,750,000	12	\$ 120,000	\$ 2,280,000	\$ 18,600,000	\$ 23,635,340
					
TOTAL	79,314	\$ 156,686,994	\$ 210,117,089	\$ 82,670,663	\$ 23,635,340
PERCENTAGE		33.12%	44.41%	17.47%	5.00%

EXHIBIT IV - B

SIZE OF RISKS - SCHEDULE Y COMPANIES

MANUAL YEAR 2020

		Intrastate SEP
		excluding Loss
	Number	and Expense
Intrastate Risks	of Risks	Constant
	(1)	(2)
Up to \$10,000	149,195	\$ 225,909,584
\$10,001 - \$200,000	21,549	\$ 835,971,180
\$200,001 - \$1,750,000	1,548	\$ 696,574,689
Over \$1,750,000	92	\$ 405,248,179
•		
TOTAL	172,384	\$ 2,163,703,632

DISTRIBUTION OF PREMIUM TO DISCOUNT BLOCK

Size of Risk	Number of Risks	First \$10,000	Next \$190,000	Next \$1,550,000	Over \$1,750,000
Up to \$10,000	149,195	\$ 225,909,584			
\$10,001 - \$200,000	21,549	\$ 215,490,000	\$ 620,481,180		
\$200,001 - \$1,750,000	1,548	\$ 15,480,000	\$ 294,120,000	\$ 386,974,689	
Over \$1,750,000	92	\$ 920,000	\$ 17,480,000	\$ 142,600,000	\$ 244,248,179
TOTAL	172,384	\$ 457,799,584	\$ 932,081,180	\$ 529,574,689	\$ 244,248,179
PERCENTAGE		21.16%	43.08%	24.48%	11.29%

EXHIBIT IV - C

AVERAGE COMPANY PREMIUM DISCOUNT

SCHEDULE X COMPANIES

	Premium Distribution to			
	Discount Block (EXHIBIT IV - A)	Reduction from Manual		Weighted Reduction
Up to \$10,000 \$10,001 - \$200,000 \$200,001 - \$1,750,000 Over \$1,750,000	33.12 44.41 17.47 5.00	0.0 5.1 6.5 7.5		0.00 2.26 1.14 0.38
		Premium Discount	=	3.78
Intrastate I	Premium Discount	3.78		
Interstate I	Premium Discount	4.28		

SCHEDULE Y COMPANIES

	Premium Distribution to Discount Block (EXHIBIT IV - B)	Reduction from Manual		Weighted Reduction
Up to \$10,000	21.16	0.0		0.00
\$10,001 - \$200,000	43.08	9.1		3.92
\$200,001 - \$1,750,000	24.48	11.3		2.77
Over \$1,750,000	11.29	12.3		1.39
		Premium Discount	=	8.08
Intrastate I	Premium Discount	8.08		
Interstate I	Premium Discount	8.58		

EXHIBIT IV - D

AVERAGE COMPANY PREMIUM DISCOUNT

ALL COMPANIES

	Intrastate SEP excluding Loss and Expense Constant	Interstate Premium Discount
SCHEDULE X	\$ 473,110,086	4.28
SCHEDULE Y	\$ 2,163,703,632	8.58
WEIGHTED AVERAGE		7.81

EXHIBIT V

DELAWARE POOL GROSS WRITTEN PREMIUM AND UNCOLLECTIBLE PREMIUM*

Data as of 3/31/2024

POLICY	(1) GROSS WRITTEN	(2) UNCOLLECTIBLE	(3)=(2)/(1)
YEAR	PREMIUM	PREMIUM	RATIO
2013	22,238,637	565,831	2.54%
2014	17,275,389	176,207	1.02%
2015	17,976,555	132,283	0.74%
2016	16,601,625	367,595	2.21%
2017	15,639,203	472,317	3.02%
2018	13,492,376	361,662	2.68%
2019	10,023,013	317,398	3.17%
2020	9,869,910	122,219	1.24%
2021	9,050,438	330,170	3.65%
2022	9,221,145	490,892	5.32%
		All Year Average	2.56%
		-	
		Five Year Average	3.21%
		Three Year Average	3.40%
		Selected	1.61%

NOTE: Selected as 50% of 5-year average reflecting collection differences between the residual and voluntary markets.

^{*} Data courtesy of NCCI, Inc. Excludes Audit Noncompliance Charge premium