DELAWARE COMPENSATION RATING BUREAU, INC.

Expense Study

The following exhibits are used in the development of specific expense provisions to be used in the DCRB's proposed 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 expense and total production costs from the last three calendar years. The data is obtained from Financial Call #2 submissions for 2014 - 2016 for stock agency companies only, and 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 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 deductible losses on a gross basis.

Exhibit IV-A shows the development of an average provision for premium discount based upon the Schedule Y premium discount table. The data used by the DCRB for this purpose is Unit Statistical Plan data. This exhibit forms the basis for Exhibit IV-B, which develops the average interstate premium discount for Schedule Y companies.

Exhibit V develops the provision for uncollectible premium based on the ratio of uncollectible premium to gross written premium. The data used is courtesy of NCCI, Inc.

EXHIBIT I STOCK AGENCY COMPANIES

CALENDAR YEAR

		2014	2015	2016
(1)	Standard Earned Premium at DCRB Rate Level including Large Deductible on a <u>Net</u> Basis excluding Expense Constant Dollars (Page 8.2, line (10))	\$ 156,146,761	\$ 177,441,850	\$ 171,251,856
(2)	Standard Earned Premium at DCRB Rate Level including Large Deductible on a <u>Gross</u> Basis excluding Expense Constant Dollars (Page 8.2, line (11))	\$ 227,307,301	\$ 260,165,171	\$ 249,616,904
(3)	Commission and Brokerage	\$ 9,729,845	\$ 9,692,319	\$ 10,732,863
(3a)	Reported Ratio { (3) / (1) }	0.0623	0.0546	0.0627
(4)	Other Acquisition	\$ 6,179,501	\$ 6,144,836	\$ 6,643,067
(4a)	Reported Ratio { (4) / (2) }	0.0272	0.0236	0.0266
(5)	General Expense	\$ 8,962,282	\$ 9,179,767	\$ 10,866,816
(5a)	Reported Ratio { (5) / (2) }	0.0394	0.0353	0.0435

	Three Year Average (1)	Expense Constant Income (Page 8.3) (2)	Difference { (1) - (2) }
COMMISSION AND BROKERAGE OTHER ACQUISITION	0.0599 0.0258	0.0053 0.0023	0.0546 0.0235
TOTAL PRODUCTION	0.0857	0.0076	0.0781
GENERAL EXPENSE	0.0394	0.0044	0.0350

EXHIBIT I - A STOCK AGENCY COMPANIES

		CALENDAR YEAR		
		2014	2015	2016
(1)	Standard Earned Premium at DCRB DSR Level including Large Deductible on a <u>Net</u> Basis	\$ 116,700,017	\$ 131,735,850	\$ 126,241,250
(2)	Multiplier to Bring Premium to DCRB Rate Level	1.3429	1.3521	1.3615
(3)	Standard Earned Premium at DCRB Rate Level <u>including</u> Large Deductible on a <u>Net</u> Basis { (1) * (2) }	\$ 156,716,453	\$ 178,120,043	\$ 171,877,462
(4)	Large Deductible Adj. at DCRB DSR Level	\$ 51,095,383	\$ 59,109,197	\$ 55,633,287
(5)	Multiplier to Bring L. D. Adj. to DCRB Rate Level	1.3927	1.3995	1.4086
(6)	Large Deductible Adj. at DCRB Rate Level { (4) * (5) }	\$ 71,160,540	\$ 82,723,321	\$ 78,365,048
(7)	Standard Earned Premium at DCRB Rate Level <u>including</u> Large Deductible on a <u>Gross</u> Basis { (3) + (6) }	\$ 227,876,993	\$ 260,843,364	\$ 250,242,510
(8)	Expense Constant Removal Factor	0.9975	0.9974	0.9975
(9)	Expense Constant Dollars { (7)[1 - (8)] }	\$ 569,692	\$ 678,193	\$ 625,606
(10)	Standard Earned Premium at DCRB Rate Level including Large Deductible on a <u>Net</u> Basis excluding Expense Constant Dollars { (3) - (9) }	\$ 156,146,761	\$ 177,441,850	\$ 171,251,856
(11)	Standard Earned Premium at DCRB Rate Level <u>including</u> Large Deductible on a <u>Gross</u> Basis <u>excluding</u> Expense Constant Dollars { (7) - (9) }	\$ 227,307,301	\$ 260,165,171	\$ 249,616,904

<u>EXHIBIT II</u>

EXPENSE CONSTANT INCOME - STOCK AGENCY COMPANIES

MANUAL YEAR 2015

(1)	Number of Policies	15,483			
(2)	Expense Constant Income With Expense Constant		\$4,567,485		
(3)	Interstate Adjustment Factor				0.65
(4)	Adjusted Expense Constant Income {(2) * (3)}				\$2,968,865
(5)	Standard Earned Premium <u>Excluding</u> Expense Con including Large Deductible on a <u>Net</u> Basis		\$202,140,203		
(5a)	Factor to Bring Premium to Current Level				0.9553
(5b)	Standard Earned Premium <u>Excluding</u> Expense Con including Large Deductible on a <u>Net</u> Basis at Curre				\$193,104,536
(6)	Standard Earned Premium <u>Excluding</u> Expense Con including Large Deductible on a <u>Gross</u> Basis		\$304,290,962		
(6a)	Factor to Bring Premium to Current Level		0.9545		
(6b)	Standard Earned Premium <u>Excluding</u> Expense Col including Large Deductible on a <u>Gross</u> Basis at Cu		\$290,445,723		
(7)	Distribution of Expense Constant Income	%	%	\$	Total Expense \$
	(a) General Expense	43.3%		\$127.74	\$1,285,519
	(b) Production i) Commission ii) Other Acquisition	\$102.03 \$65.23	\$1,026,841 \$656,505		
	Total	100.0%		\$295.00	\$2,968,865
(8) Expense Constant Ratio for General Expense { (7a) / (6b) }					
(9) Expense Constant Ratio for Commission { (7b(i)) / (5b) }					
(10) Expense Constant Ratio for Other Acquisition { (7b(ii)) / (6b) }					0.0023

EXHIBIT III

LOSS ADJUSTMENT EXPENSE RATIOS - ALL COMPANIES

		CALENDAR TEAR			
	=	2014	2015	2016	
(1a)	Allocated Loss Adjustment Expense Incurred	\$ 16,200,006	\$ 17,785,481	\$ 18,919,609	
(1b)	Unallocated Loss Adjustment Expense Incurred	\$ 11,677,631	\$ 12,122,859	\$ 12,442,048	
(1c)	Total Loss Adjustment Expense Incurred on a Net Basis{(1a) + (1b)}	\$ 27,877,637	\$ 29,908,340	\$ 31,361,657	
(1d)	ALAE Deductible Adjustment	\$ 8,884,546	\$ 9,665,225	\$ 10,351,434	
(1e)	ULAE Deductible Adjustment	\$ 978,520	\$ 590,713	\$ 87,019	
(1f)	Total Loss Adjustment Expense Incurred on a Gross Basis{(1c)+(1d)+(1e)}	\$ 37,740,703	\$ 40,164,278	\$ 41,800,110	
(2)	Incurred Losses <u>including</u> Deductibles on a <u>Net</u> Basis	\$ 127,674,951	\$ 114,437,706	\$ 122,233,956	
(3)	Deductible Adjustment (Losses)	\$ 56,612,855	\$ 66,206,556	\$ 63,463,858	
(4)	Incurred Losses <u>including</u> Deductibles on a <u>Gross</u> Basis {(2) + (3)}	\$ 184,287,806	\$ 180,644,262	\$ 185,697,814	
(5a) (5b)	Ratio of Loss Adjustment Expense to Incurred Losses <u>including</u> Deductibles on a <u>Net</u> Basis {(1c) / (2)} Ratio of Allocated Loss Adjustment Expense	0.2183	0.2614	0.2566	
	to Incurred Losses <u>including</u> Deductibles on a <u>Net</u> Basis {(1a) / (2)}	0.1269	0.1554	0.1548	
(6a)	Ratio of Loss Adjustment Expense to Incurred Losses <u>including</u> Deductibles on a <u>Gross</u> Basis {(1f) / (4)}	0.2048	0.2223	0.2251	
(6b)	Ratio of Allocated Loss Adjustment Expense to Incurred Losses <u>including</u> Deductibles on a <u>Gross</u> Basis {((1a)+(1d)) / (4)}	0.1361	0.1520	0.1576	
(7)	Three-Year Average of Loss Adjustment Expense Incurred Losses including Deductibles on a Net Ba			0.2454	
(8a)	Three-Year Average of Loss Adjustment Expense Incurred Losses including Deductibles on a Gross	0.2174			
(8b)	Three-Year Average of Allocated Loss Adjustment Direct Incurred Losses including Deductibles on a	b)}	0.1486		
(8c)	Provision for Unallocated Loss Adjustment Expens {(8a) - (8b)}	se		0.0688	

CALENDAR YEAR

EXHIBIT IV - A

SIZE OF RISKS - SCHEDULE Y COMPANIES

MANUAL YEAR 2015

Intrastate Risks	Number of Risks (1)	Intrastate SEP <u>excluding</u> Loss and Expense Constant (2)	
Under \$10,000 \$10,000 - \$200,000 \$200,000 - \$1,750,000 Over \$1,750,000	12,422 2,479 201 12	24,272,604 100,288,342 89,045,712 37,576,945	
TOTAL	15,114	251,183,603	

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
Under \$10,000 \$10,000 - \$200,000 \$200,000 - \$1,750,000 Over \$1,750,000	12,422 2,479 201 12	24,272,604 24,790,000 2,010,000 120,000	75,498,342 38,190,000 2,280,000	48,845,712 18,600,000	16,576,945
TOTAL	15,114	51,192,604	115,968,342	67,445,712	16,576,945
PERCENTAGE		20.38%	46.17%	26.85%	6.60%

EXHIBIT IV - B

AVERAGE COMPANY PREMIUM DISCOUNT

SCHEDULE Y COMPANIES

	Premium Distribution to Discount Block (EXHIBIT IV - A)	Reduction from Manual	;	Weighted Reduction
First \$10,000	20.38	0.0		0.00
Next \$190,000	46.17	9.1		4.20
Next \$1,550,000	26.85	11.3		3.03
Over \$1,750,000	6.60	12.3		0.81
		Premium Discount	=	8.04
Intrastate Premium Discount		8.04		
Interstate Pr	emium Discount	8.64		

<u>EXHIBIT V</u>

DELAWARE POOL GROSS WRITTEN PREMIUM AND UNCOLLECTIBLE PREMIUM*

Data as of 3/31/2018			
POLICY YEAR	(1) GROSS WRITTEN PREMIUM	(2) UNCOLLECTIBLE PREMIUM	(3)=(2)/(1) RATIO
2007 2008 2009 2010 2011 2012 2013 2014 2015 2016	21,572,856 12,934,207 7,536,169 6,906,022 10,744,005 15,490,200 22,239,462 17,268,661 17,968,243 16,850,273	713,646 190,417 45,267 102,051 61,518 121,840 571,596 154,370 102,328 416,448	3.31% 1.47% 0.60% 1.48% 0.57% 0.79% 2.57% 0.89% 0.57% 2.47%
		All Year Average Five Year Average	1.47% 1.46%
		Three Year Average Selected	1.31% 1.45%

* Data courtesy of NCCI, Inc.