#### 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 2012 - 2014 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 Exhibits 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**

		2012	2013	2014
(1)	Standard Earned Premium at DCRB Rate Level including Large Deductible on a Net Basis excluding Expense Constant Dollars (Page 8.2, line (10))	\$ 112,622,325	\$ 133,551,320	\$ 157,063,748
(2)	Standard Earned Premium at DCRB Rate Level including Large Deductible on a Gross Basis excluding Expense Constant Dollars (Page 8.2, line (11))	\$ 162,730,108	\$ 200,382,026	\$ 231,213,843
(3) (3a)	Commission and Brokerage Reported Ratio { (3) / (1) }	\$ 6,648,041 0.0590	\$ 8,099,991 0.0607	\$ 9,744,010 0.0620
(4) (4a)	Other Acquisition Reported Ratio { (4) / (2) }	\$ 4,600,195 0.0283	\$ 5,717,032 0.0285	\$ 6,199,443 0.0268
(5) (5a)	General Expense Reported Ratio { (5) / (2) }	\$ 7,384,100 0.0454	\$ 7,579,916 0.0378	\$ 8,981,557 0.0388
		Three Year Average (1)	Expense Constant Income (Page 8.3) (2)	<b>Difference</b> { (1) - (2) }
	COMMISSION AND BROKERAGE OTHER ACQUISITION	0.0606 0.0279	0.0050 0.0023	0.0556 0.0256
	TOTAL PRODUCTION	0.0885	0.0073	0.0812
	GENERAL EXPENSE	0.0407	0.0044	0.0363

# EXHIBIT I - A STOCK AGENCY COMPANIES

## **CALENDAR YEAR**

		2012	2013	2014
(1)	Standard Earned Premium at DCRB DSR Level including Large Deductible on a Net Basis	\$ 86,619,795	\$ 99,631,015	\$ 117,067,733
(2)	Multiplier to Bring Premium to DCRB Rate Level	1.3049	1.3455	1.3464
(3)	Standard Earned Premium at DCRB Rate Level including Large Deductible on a Net Basis { (1) * (2) }	\$ 113,030,170	\$ 134,053,531	\$ 157,619,996
(4)	Large Deductible Adj. at DCRB DSR Level	\$ 37,410,619	\$ 47,883,289	\$ 53,264,920
(5)	Multiplier to Bring L. D. Adj. to DCRB Rate Level	1.3394	1.3957	1.3921
(6)	Large Deductible Adj. at DCRB Rate Level { (4) * (5) }	\$ 50,107,783	\$ 66,830,706	\$ 74,150,095
(7)	Standard Earned Premium at DCRB Rate Level including Large Deductible on a Gross Basis { (3) + (6) }	\$ 163,137,953	\$ 200,884,237	\$ 231,770,091
(8)	Expense Constant Removal Factor	0.9975	0.9975	0.9976
(9)	Expense Constant Dollars { (7)[1 - (8)] }	\$ 407,845	\$ 502,211	\$ 556,248
(10)	Standard Earned Premium at DCRB Rate Level including Large Deductible on a Net Basis excluding Expense Constant Dollars { (3) - (9) }	\$ 112,622,325	\$ 133,551,320	\$ 157,063,748
(11)	Standard Earned Premium at DCRB Rate Level including Large Deductible on a Gross Basis excluding Expense Constant Dollars { (7) - (9) }	\$ 162,730,108	\$ 200,382,026	\$ 231,213,843

# **EXHIBIT II**

# **EXPENSE CONSTANT INCOME - STOCK AGENCY COMPANIES**

## **MANUAL YEAR 2013**

(1)	Number of Policies				14,947	
(2)	Expense Constant Income With Expense Constant @ Current Level = \$290				\$4,334,630	
(3)	Interstate Adjustment Factor				0.65	
(4)	Adjusted Expense Constant Income {(2) * (3)}				\$2,817,510	
(5)	Standard Earned Premium <u>Excluding</u> Expense Constant <u>including</u> Large Deductible on a <u>Net</u> Basis				\$178,940,787	
(5a)	Factor to Bring Premium to Current Level				1.0683	
(5b)	Standard Earned Premium Excluding Expense Constant including Large Deductible on a Net Basis at Current Level				\$191,162,443	
(6)	Standard Earned Premium Excluding Expense Constant including Large Deductible on a Gross Basis				\$262,224,739	
(6a)	Factor to Bring Premium to Current Level				1.0675	
(6b)	Standard Earned Premium <u>Excluding</u> Expense Constant <u>including</u> Large Deductible on a <u>Gross</u> Basis at Current Level				\$279,924,909	
(7)	Distribution of Expense Constant Income				Total Expense \$	
	(a) General Expense	43.3%		\$125.67	\$1,220,941	
	(b) Production i) Commission ii) Other Acquisition	56.7%	60.0% 40.0%	\$98.60 \$65.73	\$957,941 \$638,627	
	Total	100.0%		\$290.00	\$2,817,509	
(8) Expense Constant Ratio for General Expense { (7a) / (6b) } 0.0044					0.0044	
(9) Expense Constant Ratio for Commission { (7b(i)) / (5b) }					0.0050	
(10) Expense Constant Ratio for Other Acquisition { (7b(ii)) / (6b) }					0.0023	

#### **EXHIBIT III**

#### LOSS ADJUSTMENT EXPENSE RATIOS - ALL COMPANIES

## **CALENDAR YEAR**

	<u>-</u>	2012	2013	2014
(1a)	Allocated Loss Adjustment Expense Incurred	\$ 14,780,692	\$ 15,435,185	\$ 16,140,011
(1b)	Unallocated Loss Adjustment Expense Incurred	\$ 8,235,462	\$ 11,240,075	\$ 11,681,064
(1c)	Total Loss Adjustment Expense Incurred on a Net Basis{(1a) + (1b)}	\$ 23,016,154	\$ 26,675,260	\$ 27,821,075
(1d)	ALAE Deductible Adjustment	\$ 8,973,237	\$ 7,485,851	\$ 8,854,570
(1e)	ULAE Deductible Adjustment	(\$82,972)	\$ 181,985	\$ 967,100
(1f)	Total Loss Adjustment Expense Incurred on a Gross Basis{(1c)+(1d)+(1e)}	\$ 31,906,419	\$ 34,343,096	\$ 37,642,745
(2)	Incurred Losses <u>including</u> Deductibles on a <u>Net</u> Basis	\$ 103,703,650	\$ 119,674,131	\$ 125,442,130
(3)	Deductible Adjustment (Losses)	\$ 48,276,006	\$ 53,301,554	\$ 56,280,722
(4)	Incurred Losses <u>including</u> Deductibles on a <u>Gross</u> Basis {(2) + (3)}	\$ 151,979,656	\$ 172,975,685	\$ 181,722,852
(5a)	Ratio of Loss Adjustment Expense to Incurred Losses including Deductibles on a Net Basis {(1c) / (2)}	0.2219	0.2229	0.2218
(5b)	Ratio of Allocated Loss Adjustment Expense to Incurred Losses including Deductibles on a Net Basis {(1a) / (2)}	0.1425	0.1290	0.1287
(6a)	Ratio of Loss Adjustment Expense to Incurred Losses including Deductibles on a Gross Basis {(1f) / (4)}	0.2099	0.1985	0.2071
(6b)	Ratio of Allocated Loss Adjustment Expense to Incurred Losses including Deductibles on a Gross Basis {((1a)+(1d)) / (4)}	0.1563	0.1325	0.1375
(7)	Three-Year Average of Loss Adjustment Expense Incurred Losses including Deductibles on a Net Ba			0.2222
(8a)	Three-Year Average of Loss Adjustment Expense Ratios to Direct Incurred Losses including Deductibles on a Gross Basis {Line (6a)}			0.2052
(8b)	Three-Year Average of Allocated Loss Adjustment Expense Ratios to Direct Incurred Losses including Deductibles on a Gross Basis {Line (6b)}			0.1421
(8c)	Provision for Unallocated Loss Adjustment Expens {(8a) - (8b)}	se		0.0631

# **EXHIBIT IV - A**

#### SIZE OF RISKS - SCHEDULE Y COMPANIES

#### **MANUAL YEAR 2013**

		Intrastate SEP
		excluding Loss
	Number	and Expense
Intrastate Risks	of Risks	Constant
	(1)	(2)
Under \$10,000	11,980	24,809,003
\$10,000 - \$200,000	2,563	102,059,629
\$200,000 - \$1,750,000	193	83,425,587
Over \$1,750,000	16	43,722,396
TOTAL	14,752	254,016,615

#### 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	11,980 2,563 193 16	24,809,003 25,630,000 1,930,000 160,000	76,429,629 36,670,000 3,040,000	44,825,587 24,800,000	15,722,396
	Over \$1,730,000		100,000	3,040,000	24,800,000	13,722,390
	TOTAL	14,752	52,529,003	116,139,629	69,625,587	15,722,396
	PERCENTAGE		20.68%	45.72%	27.41%	6.19%

# 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	20.68	0.0	0.00
Next \$190,000	45.72	9.1	4.16
Next \$1,550,000	27.41	11.3	3.10
Over \$1,750,000	6.19	12.3	0.76
		Premium Discount =	8.02
Intrastate P	remium Discount	8.02	
Interstate P	remium Discount	8.62	

EXHIBIT V

DELAWARE POOL GROSS WRITTEN PREMIUM AND UNCOLLECTIBLE PREMIUM\*

Data as of 3/31/2016

POLICY	(1) GROSS WRITTEN	(2) UNCOLLECTIBLE	(3)=(2)/(1)	
YEAR	PREMIUM	PREMIUM	RATIO	
2005	39,613,229	785,863	1.98%	
2006	33,123,068	1,142,553	3.45%	
2007	21,572,856	713,646	3.31%	
2008	12,934,207	190,417	1.47%	
2009	7,535,127	45,267	0.60%	
2010	6,906,254	102,051	1.48%	
2011	10,740,630	66,318	0.62%	
2012	15,490,205	123,061	0.79%	
2013	22,258,857	628,913	2.83%	
2014	17,265,686	151,685	0.88%	
		All Year Average	1.74%	
		Five Year Average	1.32%	
		Three Year Average	1.50%	
		Selected	1.32%	

<sup>\*</sup> Data courtesy of NCCI, Inc.