

# Memorandum

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To: E. Allen, S. Leeret, B. Harris, R. D'Alfonso, J. Parker, R. Simmons, M. Stembridge

CC: J. Johnson, K. Hanna, J. Heaney, C. Steinbach, B. McCoy, I. Robbin, A. Markham, J. Stracher

Date: 6/08/2015

Re: Division 66 - UtilitySure US Profitability Study

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## I. Executive Summary

### A. Introduction -

The UtilitySure program provides Automobile, General Liability, Limited Pollution Liability, Property(including Boiler and Machinery), Business Income/Extra Expense, Inland Marine and Umbrella Liability for public and IOU(investor owned utility) gas utility companies. Some insureds are members of the APGA - American Public Gas Association.

Last year's analysis resulted in an overall PY 2015 Ultimate Loss Ratio indication of 42.3% which yielded a RAP neutral rate need of -34.2% based on 2014 RAP values.

The year to date rate change for 2015 is 4.6% in total, varying by LOB.

For purposes of this analysis we have used a 2015 forecasted rate change of 4.3% in total, varying by LOB.

### B. Summary of Results

IL and LAE evaluated as of: 1<sup>st</sup> Quarter 2015  
Currency Employed: USD

#### Exhibit 1:

Line of Business	Sub-Segment	Policy Year	2015		Projected		RAP		Projected RAP \$ **
			GWP (000)	IL and LAE Ratio*	Ultimate Ratio*	Combined Ratio*	Target Combined Ratio	RAP Rate Need	
GL	N/A	2015	1,236	25.0%	57.0%	99.1%	-59.7%	342	
AL	N/A	2015	718	38.0%	69.9%	98.1%	-40.5%	134	
Property	N/A	2015	549	23.5%	54.9%	96.8%	-61.3%	170	
APD	N/A	2015	152	63.0%	94.2%	97.9%	-5.2%	4	
Excess Liability	N/A	2015	765	62.5%	93.9%	98.7%	-6.8%	24	
TOTAL			3,421	37.6%	69.3%	98.4%	-41.6%	674	

\* Includes PY 2015 rate change achieved

\*\* Assumes a tax rate of 35%

- I. Discussion of Material Findings- The ultimate loss ratio change on an all LOB combined basis was -5.6% for PY's 05-14. This is largely driven by GL and Excess. GL had better than expected prior year development. The Excess Liability Ultimate Loss Ratio is based largely on the complement of credibility which decreased from the prior year. Property saw a slight increase in the Projected Ultimate Loss Ratio due to an increase in the AAL (from 2.0% to 4.2%) and XOL (from a 0.3% to a 1.9%) but remains profitable. APD makes up a small portion of this book and has deteriorated since the previous study.

## II. Assumptions/Limitations/Data Quality/Other

- A. Assumptions - For purposes of this analysis, the loss ratio indications are based on a 3.5% trend assumption for GL, 4% for AL, 5% for XS and 0.0% for Property and APD. The rate changes used in this analysis are a weighted average of 2014 expiring rate change, 2015 YTD rate change, and the 2015 Target rate change.
- B. Limitations/Weakness - The projected PY 2015 loss ratio shown in Exhibit 1 of this report assumes that the forecasted rate change for 2015 will be consistent throughout the remainder of the year. To the extent that the annual rate change does not equal the forecasted rate change, then the results of this report will vary. Besides that, there are no significant limitations/weaknesses with regards to this study outside of standard actuarial caveats that normally apply to projecting future losses. These include, but are not limited to, actual emerged actuarial parameters (LDF's, ILFs, ELR's, trend, etc.) not being in line with selected parameters; miss-coding/inaccurate representation of the data relied upon in this analysis; and future regulatory/judicial changes affecting the frequency/severity of the results.
- C. Data Quality - The data for all lines of business in this analysis is pulled from Sandbox which aggregates the data from CRS.
- D. Other -NA

## III. Methodology

A review of several claim diagnostics shows no clear evidence of case reserve strengthening for this book of business (no consistent increase in average outstanding or decrease in paid to incurred ratios). In addition, a review of implied claim disposal rate does not show any clear evidence of claims closure rate changes.

Several methodologies have been used to project loss & legal expenses to ultimate. This includes the following: paid and incurred loss development and Bornhuetter-Ferguson methods (on a paid and incurred basis) all for losses uncapped and at varying capped levels. Frequency and severity is employed along with ultimate ILAE ratio selections to select a final PY 2015 ultimate loss ratio. The selected frequency and severities are somewhat consistent in comparison to the prior profit study.

The commissions and underwriting expenses are program specific. The RAP neutral ratio is calculated based program specific RAP profit loads. Rate need is based on a ratio of the ultimate ILAE ratio and the target ILAE ratio.

## IV. Actuarial Next Steps - We will continue to monitor these results through quarterly actual versus expected analyses.

## V. Underwriting Action Plans - Below is the response provided by MaryAlice Stenbridge from an email dated 06/23/2015.

This book continues to produce good results. Our plan is to continue to work toward finding ways to increase our writings. Although this industry is highly regulated, we recognize the potential for catastrophic loss. We will continue to work with the PA on risk selection and risk management controls.

## Appendix - Methodology:

Please note that the analysis has five sections:

- Section I - General Liability
- Section II - Auto Liability
- Section III - Property
- Section IV - Auto Physical Damage
- Section V - Excess

Exhibit 1 - Summarizes PY 2015 ultimate ILAE ratios and PY 2015 rate need.

Exhibit 2 - PY reported incurred and paid loss and LAE ratios in triangle format.

Exhibit 3 - Indexing PY 2004 - 2014 ultimate ILAE (incurred + LAE) ratios to PY 2015 and selection of PY 2015 ultimate ILAE ratios.

Exhibit 4 - Frequency/Severity method used to calculate an indicated PY 2015 ultimate ILAE ratio

Exhibit 5 - Summarizes various methods (Exhibit 6a - Exhibit 8f) used to calculate ultimate + LAE & ratios for PY's 2004 - 2014.

- a) Policy Limits
- b) Capped at \$250,000
- c) Capped at \$100,000

Exhibit 6 - Bornhuetter-Ferguson methods

- a) Methodology
- b) A Priori Loss Ratios

Exhibit 7 - ILF selections

Exhibit 8 - Loss development methods. In general, the selected age to age loss development factors are determined by giving weight to the overall Division 66 loss development factors as well as historical results of the program.

- a) Uncapped Incurred
- b) Incurred Capped at \$250,000
- c) Incurred Capped at \$100,000
- d) Uncapped Paid
- e) Paid Capped at \$250,000
- f) Paid Capped at \$100,000

Exhibit 9 - Gross Written Premium developed to an ultimate PY basis. In general, the selected age to age premium development factors are determined by giving weight to the overall Division 66 premium development factors as well as the historical results of the program.

Exhibit 10 - Total claim counts (excluding closed w/no-pay) developed to ultimate. In general, the selected age to age loss development factors are determined by giving weight to the overall Division 66 claim development factors as well as the historical results of the program.

Exhibit 11 - Open claim count, closed with payment claim count, closed without payment claim count and total claim count development.

Exhibits 12 - Key diagnostic triangles.

- a) Case Reserves per Open Claim  
Paid & Legal per Closed With Payment  
Paid per Closed With Payment
- b) Paid & Legal to Incurred & Legal  
Paid to Incurred  
Closed W/Pay to Total Claim Count (Ex CWNP)
- c) Legal to Indemnity
- d) Total Claim Count to Total Policy Count  
Average Account Size - Total - GWP to Total Policy Count  
Average Account Size - New- GWP to New Policy Count  
Average Account Size - Renewal - GWP to Renewal Policy Count

Exhibit 13 - Large loss listing (Incurred + LAE > \$100,000 and >\$250,000 for Excess).

Please let me know if you have any questions or comments regarding this study.

Program Summary by LOB - PY 2015

(1) LOB	(2) PY 2016 Forecasted GWP	Direct	(3) Before 2015 Rate Change PY 2015 Ultimate ILAE Ratio
GL	1,236	3.5%	25.8%
AL	718	3.4%	40.5%
Property	549	2.9%	24.2%
APD	152	3.6%	69.2%
Excess Liability	765	3.0%	64.8%
Total Casualty	2,719	3.3%	40.7%
Total Property	702	3.1%	34.0%
All Lines Combined	3,421	3.3%	39.3%

RAP Neutral	
(4) Target Ratio	(5) Before 2015 Rate Change PY 2015 Rate Need
67.2%	-58.5%
66.2%	-36.9%
65.4%	-60.4%
66.7%	3.6%
67.3%	-3.5%
67.0%	-37.4%
65.7%	-46.2%
66.7%	-39.1%

(6) PY 2015 Forecasted Rate	(7) After 2015 Rate Change PY 2015 Ultimate ILAE Ratio
3.3%	25.0%
6.6%	38.0%
2.7%	23.5%
9.9%	63.0%
3.7%	62.5%
4.3%	39.0%
4.3%	32.1%
4.3%	37.6%

- (1) = Input
- (2) = Exhibit 2
- (3) = (7) \* [1 + (6)]
- (4) = Exhibit 1
- (5) = [(3) + (Direct Expense)] / [(4) + (Direct Expense)] - 1
- (6) = Exhibit 1
- (7) = Exhibit 1

Program Summary by LOB - PY 2016

(1)	(2)	Direct	(3) After 2015 Rate Change PY 2016 Ultimate ILAE Ratio	RAP Neutral	
				(4) Target Ratio	(5) After 2015 Rate Change PY 2016 Rate Need
LOB	PY 2016 Forecasted GWP				
GL	1,236	3.5%	25.9%	67.2%	-58.4%
AL	718	3.4%	39.5%	66.2%	-38.3%
Property	549	2.9%	23.5%	65.4%	-61.3%
APD	152	3.6%	63.0%	66.7%	-5.2%
Excess Liability	765	3.0%	65.6%	67.3%	-2.4%
Total Casualty	2,719	3.3%	40.7%	67.0%	-37.4%
Total Property	702	3.1%	32.1%	65.7%	-48.9%
All Lines Combined	3,421	3.3%	38.9%	66.7%	-39.7%

(1) = Input

(2) = Exhibit 2

(3) = Exhibit 1

(4) = Exhibit 1

(5) = [(3) + (Direct Expense)] / [(4) + (Direct Expense)] - 1

Program Summary by LOB

PY	GL					AL					Property - ex Cat Load & Reinsurance Charges					APD				
	GWP	Reported	Reported	Selected	Ultimate	GWP	Reported	Reported	Selected	Ultimate	GWP	Reported	Reported	Selected	Ultimate	GWP	Reported	Reported	Selected	Ultimate
		ILAE	ILAE Ratio	ILAE	ILAE Ratio		ILAE	ILAE Ratio	ILAE	ILAE Ratio		ILAE	ILAE Ratio	ILAE	ILAE Ratio		ILAE	ILAE Ratio	ILAE	ILAE Ratio
2005	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-
2006	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-
2007	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-
2008	1,046	526	50.3%	531	50.7%	388	113	29.1%	116	29.9%	316	79	24.9%	78	24.7%	91	46	50.6%	46	50.4%
2009	1,378	84	6.1%	85	6.2%	496	55	11.1%	57	11.5%	401	68	16.9%	67	16.8%	128	79	61.7%	79	62.1%
2010	1,413	286	20.3%	313	22.1%	635	161	25.3%	175	27.6%	468	154	32.9%	154	32.9%	143	101	70.5%	101	70.5%
2011	1,261	164	13.0%	170	13.5%	586	210	35.8%	262	44.7%	462	63	13.6%	63	13.6%	151	51	33.8%	51	33.8%
2012	1,070	53	5.0%	141	13.2%	538	135	25.1%	191	35.5%	455	67	14.8%	67	14.8%	115	661	573.8%	666	578.9%
2013	1,160	154	13.3%	297	25.6%	587	73	12.4%	175	29.7%	552	35	6.3%	35	6.3%	135	63	46.6%	64	47.5%
2014	1,321	33	2.5%	273	20.7%	609	4	0.7%	186	30.5%	574	30	5.3%	78	13.6%	148	40	26.8%	88	59.2%
2015	1,236	0	0.0%	297	24.0%	718	0	0.0%	266	37.0%	549	0	0.0%	91	16.5%	152	0	0.0%	94	62.0%

PY	Excess Liability					Total Casualty					Total Property - ex Cat Load & Reinsurance					All Lines Combined				
	GWP	Reported	Reported	Selected	Ultimate	GWP	Reported	Reported	Selected	Ultimate	GWP	Reported	Reported	Selected	Ultimate	GWP	Reported	Reported	Selected	Ultimate
		ILAE	ILAE Ratio	ILAE	ILAE Ratio		ILAE	ILAE Ratio	ILAE	ILAE Ratio		ILAE	ILAE Ratio	ILAE	ILAE Ratio		ILAE	ILAE Ratio	ILAE	ILAE Ratio
2005	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-
2006	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-
2007	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-	0	0	-	0	-
2008	564	0	0.0%	70	12.4%	1,998	639	32.0%	717	35.9%	407	125	30.6%	124	30.5%	2,405	764	31.8%	841	35.0%
2009	721	0	0.0%	120	16.6%	2,595	139	5.3%	262	10.1%	529	147	27.7%	147	27.7%	3,125	285	9.1%	409	13.1%
2010	841	0	0.0%	200	23.8%	2,890	447	15.5%	688	23.8%	611	255	41.7%	255	41.7%	3,501	702	20.1%	943	26.9%
2011	769	0	0.0%	240	31.2%	2,616	374	14.3%	672	25.7%	613	114	18.6%	114	18.6%	3,229	487	15.1%	786	24.3%
2012	677	0	0.0%	280	41.3%	2,285	188	8.2%	612	26.8%	570	728	127.6%	734	128.7%	2,855	916	32.1%	1,346	47.1%
2013	747	11	1.4%	390	52.2%	2,494	238	9.5%	862	34.6%	686	97	14.2%	99	14.4%	3,180	335	10.5%	960	30.2%
2014	777	0	0.0%	430	55.3%	2,707	37	1.4%	889	32.8%	722	70	9.7%	166	23.0%	3,429	107	3.1%	1,055	30.8%
2015	765	0	0.0%	367	48.0%	2,719	0	0.0%	930	34.2%	702	0	0.0%	185	26.4%	3,421	0	0.0%	1,115	32.6%

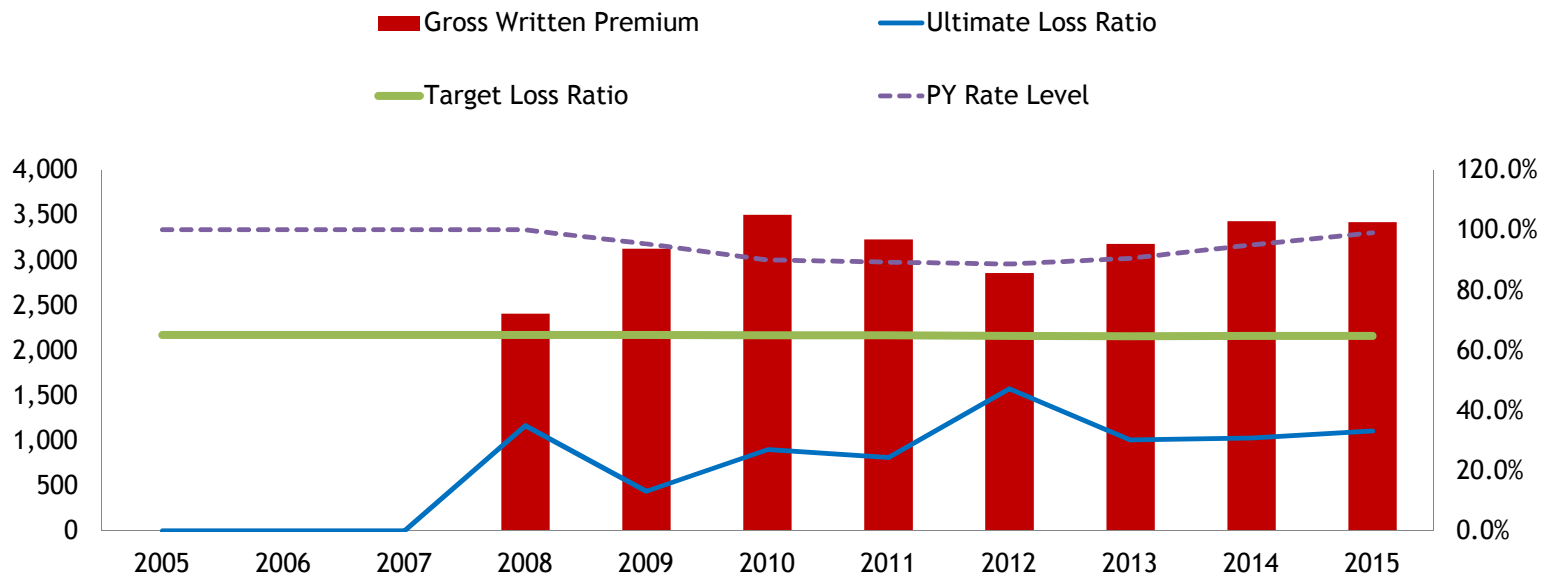
Program Summary by LOB - Prior Profitability Study Indications

PY	GL				AL				Property - ex Cat Load & Reinsurance Charges				APD			
	GWP	2013	2014	2015	GWP	2013	2014	2015	GWP	2013	2014	2015	GWP	2013	2014	2015
		Ultimate ILAE Ratio	Ultimate ILAE Ratio	Ultimate ILAE Ratio		Ultimate ILAE Ratio	Ultimate ILAE Ratio	Ultimate ILAE Ratio		Ultimate ILAE Ratio	Ultimate ILAE Ratio	Ultimate ILAE Ratio		Ultimate ILAE Ratio	Ultimate ILAE Ratio	
2005	0	-	-	-	0	-	-	-	0	-	-	-	0	-	-	-
2006	0	-	-	-	0	-	-	-	0	-	-	-	0	-	-	-
2007	0	-	-	-	0	-	-	-	0	-	-	-	0	-	-	-
2008	1,046	64.2%	56.6%	50.7%	388	31.5%	29.4%	29.9%	316	24.7%	24.7%	24.7%	91	50.4%	50.5%	50.4%
2009	1,378	8.5%	7.0%	6.2%	496	12.9%	11.1%	11.5%	401	16.8%	16.7%	16.8%	128	62.1%	60.9%	62.1%
2010	1,413	54.3%	29.4%	22.1%	635	37.9%	26.9%	27.6%	468	33.2%	32.9%	32.9%	143	70.5%	70.6%	70.5%
2011	1,261	52.9%	29.3%	13.5%	586	52.0%	45.2%	44.7%	462	13.6%	14.1%	13.6%	151	35.0%	35.1%	33.8%
2012	1,070	59.3%	26.0%	13.2%	538	54.0%	42.4%	35.5%	455	6.2%	15.2%	14.8%	115	94.9%	552.2%	578.9%
2013	1,160	52.0%	30.0%	25.6%	587	50.0%	36.0%	29.7%	552	23.0%	10.8%	6.3%	135	61.0%	28.0%	47.5%
2014	1,321	-	32.0%	20.7%	609	-	41.0%	30.5%	574	-	16.0%	13.6%	148	-	65.0%	59.2%
2015	1,236	-	-	24.0%	718	-	-	37.0%	549	-	-	16.5%	152	-	-	62.0%

PY	Excess Liability				Total Casualty				Property - ex Cat Load & Reinsurance				All Lines Combined			
	GWP	2013	2014	2015	GWP	2013	2014	2015	GWP	2013	2014	2015	GWP	2013	2014	2015
		Ultimate ILAE Ratio	Ultimate ILAE Ratio	Ultimate ILAE Ratio		Ultimate ILAE Ratio	Ultimate ILAE Ratio	Ultimate ILAE Ratio		Ultimate ILAE Ratio	Ultimate ILAE Ratio	Ultimate ILAE Ratio		Ultimate ILAE Ratio	Ultimate ILAE Ratio	
2005	0	-	-	-	0	-	-	-	0	-	-	-	0	-	-	-
2006	0	-	-	-	0	-	-	-	0	-	-	-	0	-	-	-
2007	0	-	-	-	0	-	-	-	0	-	-	-	0	-	-	-
2008	564	35.5%	0.0%	12.4%	1,998	49.8%	35.4%	35.9%	407	30.5%	30.5%	30.5%	2,405	46.5%	34.5%	35.0%
2009	721	27.7%	27.7%	16.6%	2,595	14.7%	13.6%	10.1%	529	27.7%	27.4%	27.7%	3,125	16.9%	15.9%	13.1%
2010	841	35.7%	35.7%	23.8%	2,890	45.3%	30.7%	23.8%	611	41.9%	41.7%	41.7%	3,501	44.7%	32.6%	26.9%
2011	769	52.0%	39.0%	31.2%	2,616	52.4%	35.7%	25.7%	613	18.9%	19.3%	18.6%	3,229	46.1%	32.6%	24.3%
2012	677	59.1%	59.1%	41.3%	2,285	58.0%	39.7%	26.8%	570	24.1%	123.6%	128.7%	2,855	51.2%	56.4%	47.1%
2013	747	50.0%	66.9%	52.2%	2,494	50.9%	42.5%	34.6%	686	30.5%	14.2%	14.4%	3,180	46.5%	36.4%	30.2%
2014	777	-	51.0%	55.3%	2,707	0.0%	39.5%	32.8%	722	0.0%	26.0%	23.0%	3,429	0.0%	36.7%	30.8%
2015	765	-	-	48.0%	2,719	-	0.0%	34.2%	702	-	0.0%	26.4%	3,421	-	0.0%	32.6%

Total Program Summary

PY	GWP	-----Loss Ratio-----			-----Combined Ratio-----		Normalized RAP Dollars	Rt Chg	Rt Lvl	Commission
		Reported	Ultimate	Target *	Ultimate	BECR				
2005	0	0.0%	0.0%	65.0%	68.5%	98.5%	0	0.0%	1.00	#DIV/0!
2006	0	0.0%	0.0%	65.0%	68.5%	98.5%	0	0.0%	1.00	#DIV/0!
2007	0	0.0%	0.0%	65.0%	68.5%	98.5%	0	0.0%	1.00	#DIV/0!
2008	2,405	31.8%	35.0%	65.0%	68.5%	98.5%	477	0.0%	1.00	20.0%
2009	3,125	9.1%	13.1%	65.0%	46.6%	98.5%	1,071	-4.6%	0.95	20.0%
2010	3,501	20.1%	26.9%	65.0%	60.5%	98.5%	879	-5.6%	0.90	20.0%
2011	3,229	15.1%	24.3%	64.9%	57.9%	98.5%	864	-0.8%	0.89	20.0%
2012	2,855	32.1%	47.1%	64.8%	80.8%	98.4%	332	-0.8%	0.89	20.0%
2013	3,180	10.5%	30.2%	64.7%	63.9%	98.4%	724	2.2%	0.91	20.0%
2014	3,429	3.1%	30.8%	64.7%	64.5%	98.4%	769	4.9%	0.95	20.0%
2015	3,421	0.0%	33.1%	64.7%	0.0%	98.4%	2,224	4.3%	0.99	20.0%
Total	25,145	14.3%	29.7%				7,339			



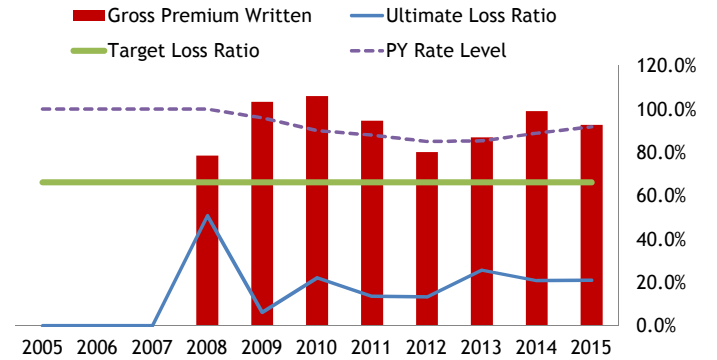
\* Target Ratio = 1 - (Expense Ratio) - (AAL) - (XOL) - (Corporate Cat Reinsurance) - (ULE) - (Claim Fees) - (Risk Load)

\* Ultimate Loss Ratios exclude modeled cats, ULE, non-machine claims fees and the impact of XOL/corporate cat reinsurance

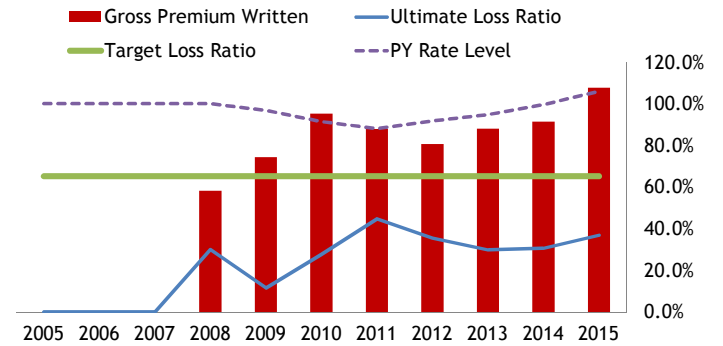


Program Summary by LOB - Casualty Lines

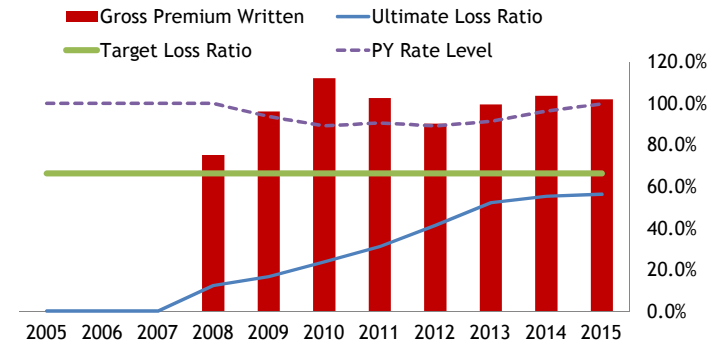
PY	GWP	Loss Ratio			Combined Ratio		Normalized RAP Dollars	Rt Chg	Rt Lvl	Commission
		Reported	Ultimate	Target *	Ultimate	BECR				
2005	0	0.0%	0.0%	66.2%	33.0%	99.1%	0	0.0%	1.00	20.0%
2006	0	0.0%	0.0%	66.2%	33.0%	99.1%	0	0.0%	1.00	20.0%
2007	0	0.0%	0.0%	66.2%	33.0%	99.1%	0	0.0%	1.00	20.0%
2008	1,046	50.3%	50.7%	66.2%	83.7%	99.1%	106	0.0%	1.00	20.0%
2009	1,378	6.1%	6.2%	66.2%	39.1%	99.1%	542	-4.1%	0.96	20.0%
2010	1,413	20.3%	22.1%	66.2%	55.1%	99.1%	408	-6.1%	0.90	20.0%
2011	1,261	13.0%	13.5%	66.2%	46.4%	99.1%	436	-2.3%	0.88	20.0%
2012	1,070	5.0%	13.2%	66.2%	46.1%	99.1%	372	-3.4%	0.85	20.0%
2013	1,160	13.3%	25.6%	66.2%	58.6%	99.1%	308	0.4%	0.85	20.0%
2014	1,321	2.5%	20.7%	66.2%	53.7%	99.1%	394	4.2%	0.89	20.0%
2015	1,236	0.0%	20.8%	66.2%	53.8%	99.1%	368	3.3%	0.92	20.0%
Total	9,885	13.2%	20.9%				2,934			



PY	GWP	Loss Ratio			Combined Ratio		Normalized RAP Dollars	Rt Chg	Rt Lvl	Commission
		Reported	Ultimate	Target *	Ultimate	BECR				
2005	0	0.0%	0.0%	65.2%	32.9%	98.1%	0	0.0%	1.00	20.0%
2006	0	0.0%	0.0%	65.2%	32.9%	98.1%	0	0.0%	1.00	20.0%
2007	0	0.0%	0.0%	65.2%	32.9%	98.1%	0	0.0%	1.00	20.0%
2008	388	29.1%	29.9%	65.2%	62.8%	98.1%	91	0.0%	1.00	20.0%
2009	496	11.1%	11.5%	65.2%	44.4%	98.1%	177	-3.1%	0.97	20.0%
2010	635	25.3%	27.6%	65.2%	60.4%	98.1%	158	-5.6%	0.91	20.0%
2011	586	35.8%	44.7%	65.2%	77.6%	98.1%	79	-3.8%	0.88	20.0%
2012	538	25.1%	35.5%	65.2%	68.4%	98.1%	106	4.2%	0.92	20.0%
2013	587	12.4%	29.7%	65.2%	62.6%	98.1%	138	3.5%	0.95	20.0%
2014	609	0.7%	30.5%	65.2%	63.3%	98.1%	140	4.9%	1.00	20.0%
2015	718	0.0%	36.8%	65.2%	69.6%	98.1%	135	6.6%	1.06	20.0%
Total	4,557	16.5%	31.3%				1,024			



PY	GWP	Loss Ratio			Combined Ratio		Normalized RAP Dollars	Rt Chg	Rt Lvl	Commission
		Reported	Ultimate	Target *	Ultimate	BECR				
2005	0	0.0%	0.0%	66.3%	32.4%	98.7%	0	0.0%	1.00	20.0%
2006	0	0.0%	0.0%	66.3%	32.4%	98.7%	0	0.0%	1.00	20.0%
2007	0	0.0%	0.0%	66.3%	32.4%	98.7%	0	0.0%	1.00	20.0%
2008	564	0.0%	12.4%	66.3%	44.9%	98.7%	200	0.0%	1.00	20.0%
2009	721	0.0%	16.6%	66.3%	49.1%	98.7%	236	-6.2%	0.94	20.0%
2010	841	0.0%	23.8%	66.3%	56.2%	98.7%	235	-4.8%	0.89	20.0%
2011	769	0.0%	31.2%	66.3%	63.6%	98.7%	178	1.5%	0.91	20.0%
2012	677	0.0%	41.3%	66.3%	73.8%	98.7%	111	-1.5%	0.89	20.0%
2013	747	1.4%	52.2%	66.3%	84.7%	98.7%	69	2.3%	0.91	20.0%
2014	777	0.0%	55.3%	66.3%	87.8%	98.7%	56	5.4%	0.96	20.0%
2015	765	0.0%	56.2%	66.3%	88.6%	98.7%	51	3.7%	1.00	20.0%
Total	5,862	0.2%	36.8%				1,136			

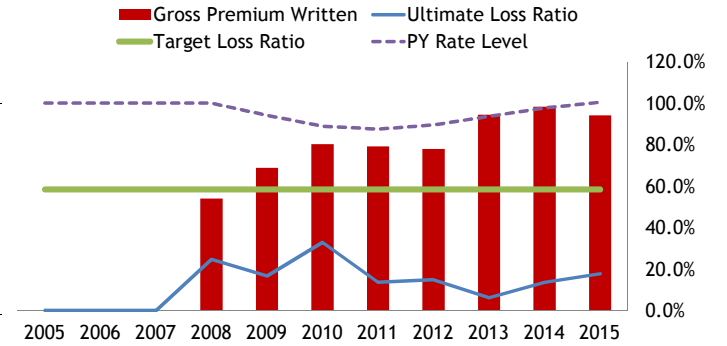


\* Target Ratio = 1 - (Expense Ratio) - (AAL) - (XOL) - (Corporate Cat Reinsurance) - (ULE) - (Claim Fees) - (Risk Load)

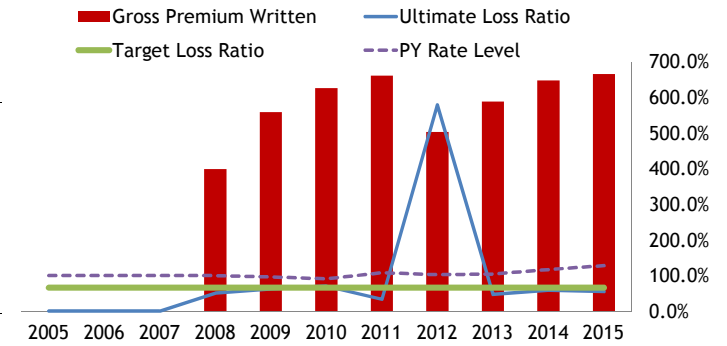
\* Ultimate Loss Ratios exclude modeled cats, ULE, non-machine claims fees and the impact of XOL/corporate cat reinsurance

Program Summary by LOB - Property Lines

Property	PY	GWP	Loss Ratio			Combined Ratio		Normalized RAP Dollars	Rt Chg	Rt Lvl	Commission
			Reported	Ultimate	Target *	Ultimate	BECR				
2005	0	0	0.0%	0.0%	58.4%	38.4%	96.8%	0	0.0%	1.00	20.0%
2006	0	0	0.0%	0.0%	58.4%	38.4%	96.8%	0	0.0%	1.00	20.0%
2007	0	0	0.0%	0.0%	58.4%	38.4%	96.8%	0	0.0%	1.00	20.0%
2008	316	316	24.9%	24.7%	58.4%	63.2%	96.8%	71	0.0%	1.00	20.0%
2009	401	401	16.9%	16.8%	58.4%	55.2%	96.8%	112	-5.8%	0.94	20.0%
2010	468	468	32.9%	32.9%	58.4%	71.3%	96.8%	80	-5.6%	0.89	20.0%
2011	462	462	13.6%	13.6%	58.4%	52.1%	96.8%	139	-1.5%	0.88	20.0%
2012	455	455	14.8%	14.8%	58.4%	53.2%	96.8%	133	2.3%	0.90	20.0%
2013	552	552	6.3%	6.3%	58.4%	44.7%	96.8%	193	4.6%	0.94	20.0%
2014	574	574	5.3%	13.6%	58.4%	52.1%	96.8%	172	4.4%	0.98	20.0%
2015	549	549	0.0%	17.9%	58.4%	56.3%	96.8%	150	2.7%	1.00	20.0%
Total		3,778	13.1%	17.0%				1,051			



APD	PY	GWP	Loss Ratio			Combined Ratio		Normalized RAP Dollars	Rt Chg	Rt Lvl	Commission
			Reported	Ultimate	Target *	Ultimate	BECR				
2005	0	0	0.0%	0.0%	65.7%	32.2%	97.9%	0	0.0%	1.00	20.0%
2006	0	0	0.0%	0.0%	65.7%	32.2%	97.9%	0	0.0%	1.00	20.0%
2007	0	0	0.0%	0.0%	65.7%	32.2%	97.9%	0	0.0%	1.00	20.0%
2008	91	91	50.6%	50.4%	65.7%	82.6%	97.9%	9	0.0%	1.00	20.0%
2009	128	128	61.7%	62.1%	65.7%	94.3%	97.9%	3	-3.1%	0.97	20.0%
2010	143	143	70.5%	70.5%	65.7%	102.7%	97.9%	-5	-5.6%	0.91	20.0%
2011	151	151	33.8%	33.8%	65.7%	66.0%	97.9%	32	18.7%	1.09	20.0%
2012	115	115	573.8%	578.9%	65.7%	611.1%	97.9%	-392	-5.0%	1.03	20.0%
2013	135	135	46.6%	47.5%	65.7%	79.7%	97.9%	16	1.3%	1.04	20.0%
2014	148	148	26.8%	59.2%	65.7%	91.4%	97.9%	6	11.8%	1.17	20.0%
2015	152	152	0.0%	55.2%	65.7%	87.4%	97.9%	11	9.9%	1.28	20.0%
Total		1,063	97.8%	110.9%				-319			



\* Target Ratio = 1 - (Expense Ratio) - (AAL) - (XOL) - (Corporate Cat Reinsurance) - (ULE) - (Claim Fees) - (Risk Load)

\* Ultimate Loss Ratios exclude modeled cats, ULE, non-machine claims fees and the impact of XOL/corporate cat reinsurance

GL

Rate Need Indications

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Target	Target	Before 2015 Rate Change PY 2015 Ultimate ILAE Ratio	Before 2015 Rate Change PY 2015 Rate Need	PY 2015 Rate Achieved	After 2015 Rate Change PY 2015 Ultimate ILAE Ratio	PY 2016 Ultimate ILAE Ratio	PY 2016 Rate Need
RAP Neutral:	99.1%	67.2%	25.8%	-58.5%	3.3%	25.0%	25.9%	-58.4%

Expense Ratio calculated as follows:

Commission:	20.0%
Prem Tax:	3.2%
Other Acquisition Fees:	1.0%
Direct Expense:	3.5%
Indirect Expense:	4.2%
	<u>32.0%</u>

(1) = [1 - (Calculated RAP)]

(2) = [(1) - (Total Expense)]

(3) = (6) x [1 + (5)]

(4) = [(3) + (Direct Expense)] / [(2) + (Direct Expense)] - 1

(5) = Input

(6) = Exhibit 3

(7) = (6) x [1 + (Trend)]

(8) = [(7) + (Direct Expense)] / [(2) + (Direct Expense)] - 1



GL

Indexing - PY 2015 Ultimate Loss & LAE Selection

PY	GWP	Annual PY Rate Chg	Cumulative PY Rate Chg	On-Level GWP	Policy Limits			Capped @ 250k			Capped @ 100k			
					Ultimate ILAE Ratio	3.5% Trend to PY 2015	On-Level Ultimate ILAE Ratio	Ultimate ILAE Ratio	3.3% Trend to PY 2015	On-Level Ultimate ILAE Ratio	Ultimate ILAE Ratio	3.0% Trend to PY 2015	On-Level Ultimate ILAE Ratio	
2005	0	0.0%	1.000	-	-	1.411	-	-	1.377	-	-	-	1.344	-
2006	0	0.0%	1.000	-	-	1.363	-	-	1.334	-	-	-	1.305	-
2007	0	0.0%	1.000	-	-	1.317	-	-	1.292	-	-	-	1.267	-
2008	1,046	0.0%	1.000	961	50.7%	1.272	70.2%	40.1%	1.251	54.6%	25.7%	1.230	34.4%	
2009	1,378	-4.1%	0.959	1,320	6.2%	1.229	7.9%	6.2%	1.212	7.8%	6.1%	1.194	7.6%	
2010	1,413	-6.1%	0.901	1,441	22.1%	1.188	25.8%	21.6%	1.173	24.9%	18.9%	1.159	21.5%	
2011	1,261	-2.3%	0.880	1,316	13.5%	1.148	14.8%	12.9%	1.136	14.0%	12.5%	1.126	13.5%	
2012	1,070	-3.4%	0.850	1,156	13.2%	1.109	13.5%	10.3%	1.101	10.5%	9.4%	1.093	9.5%	
2013	1,160	0.4%	0.853	1,249	25.6%	1.071	25.5%	21.2%	1.066	21.0%	19.5%	1.061	19.2%	
2014	1,321	4.2%	0.889	1,365	20.7%	1.035	20.7%	15.9%	1.033	15.8%	13.4%	1.030	13.4%	
2015	1,236	3.3%	0.919	1,236	20.8%	1.000	20.8%	16.3%	1.000	16.3%	13.6%	1.000	13.6%	
		0.0%	0.919											
			All Yr Wtd excl 2015:				23.9%			20.1%			16.5%	
			Last 7 Wtd excl 2015:				23.9%			20.1%			16.5%	
			Last 5 Wtd excl 2015:				20.3%			17.5%			15.6%	
			Last 3 Wtd excl 2015:				20.1%			15.9%			14.1%	
			Selected Ultimate:				21.0%			18.0%			16.0%	
			ILF:				1.00			1.28			1.59	
			Policy Limits Ultimate:				21.0%			23.1%			25.5%	
			Weight:				11%			44%			44%	

\* Averages exclude PY 2015

Frequency/Severity Indication:	24.0%
Weighted Average:	23.9%
PY 2015 Selected:	24.0%
Adjustment:	0.0%
PY 2015:	24.0%
ULE:	1.0%
Claims Fees:	0.0%
PY 2015 Ultimate ILAE Ratio:	25.0%

GL

Large Losses - Incurred + Legal > 100k

PY	DSP	Policy #	Case #	DOL	Insured	Ind Paid	Ind OS	Legal	I+Legal	Acc State	Description
2008	2-2-50	5849519	6162	5/18/2009	Upper Cumberland G	355	0	11	366	Tennessee	Ironwood WAS Digging A Trench And Stru
2010	2-2-54	9659162	9377	5/25/2010	Martin GAS, Inc	100	0	35	135	Kentucky	Clmt Suffered Severly And Permanently

AL

Rate Need Indications

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Target	Target	Before 2015 Rate Change PY 2015 Ultimate ILAE Ratio	Before 2015 Rate Change PY 2015 Rate Need	PY 2015 Rate Achieved	After 2015 Rate Change PY 2015 Ultimate ILAE Ratio	PY 2016 Ultimate ILAE Ratio	PY 2016 Rate Need
RAP Neutral:	98.1%	66.2%	40.5%	-36.9%	6.6%	38.0%	39.5%	-38.3%

Expense Ratio calculated as follows:

Commission:	20.0%
Prem Tax:	3.2%
Other Acquisition Fees:	1.0%
Direct Expense:	3.4%
Indirect Expense:	4.2%
	<u>31.9%</u>

(1) = [1 - (Calculated RAP)]

(2) = [(1) - (Total Expense)]

(3) = (6) x [1 + (5)]

(4) = [(3) + (Direct Expense)] / [(2) + (Direct Expense)] - 1

(5) = Input

(6) = Exhibit 3

(7) = (6) x [1 + (Trend)]

(8) = [(7) + (Direct Expense)] / [(2) + (Direct Expense)] - 1





AL

Indexing - PY 2015 Ultimate Loss & LAE Selection

PY	GWP	Annual PY Rate Chg	Cumulative PY Rate Chg	On-Level GWP	Policy Limits			Capped @ 250k			Capped @ 100k			
					Ultimate ILAE Ratio	4.0% Trend to PY 2015	On-Level Ultimate ILAE Ratio	Ultimate ILAE Ratio	3.5% Trend to PY 2015	On-Level Ultimate ILAE Ratio	Ultimate ILAE Ratio	3.0% Trend to PY 2015	On-Level Ultimate ILAE Ratio	
2005	0	0.0%	1.000	-	-	1.480	-	-	1.411	-	-	-	1.344	-
2006	0	0.0%	1.000	-	-	1.423	-	-	1.363	-	-	-	1.305	-
2007	0	0.0%	1.000	-	-	1.369	-	-	1.317	-	-	-	1.267	-
2008	388	0.0%	1.000	411	29.9%	1.316	37.1%	29.4%	1.272	35.3%	29.4%	1.230	34.1%	34.1%
2009	496	-3.1%	0.969	543	11.5%	1.265	13.3%	11.1%	1.229	12.4%	11.1%	1.194	12.1%	12.1%
2010	635	-5.6%	0.915	737	27.6%	1.217	28.9%	26.9%	1.188	27.6%	26.9%	1.159	26.9%	26.9%
2011	586	-3.8%	0.880	706	44.7%	1.170	43.4%	41.8%	1.148	39.8%	33.3%	1.126	31.1%	31.1%
2012	538	4.2%	0.917	622	35.5%	1.125	34.5%	31.4%	1.109	30.1%	27.7%	1.093	26.2%	26.2%
2013	587	3.5%	0.949	657	29.7%	1.082	28.8%	26.3%	1.071	25.2%	21.2%	1.061	20.1%	20.1%
2014	609	4.9%	0.995	650	30.5%	1.040	29.7%	25.2%	1.035	24.4%	19.9%	1.030	19.2%	19.2%
2015	718	6.6%	1.061	718	36.8%	1.000	36.8%	30.6%	1.000	30.6%	24.5%	1.000	24.5%	24.5%
All Yr Wtd excl 2015:							31.0%			28.0%			24.1%	24.1%
Last 7 Wtd excl 2015:							31.0%			28.0%			24.1%	24.1%
Last 5 Wtd excl 2015:							33.1%			29.6%			24.9%	24.9%
Last 3 Wtd excl 2015:							31.0%			26.5%			21.8%	21.8%
Selected Ultimate:							31.0%			28.0%			24.0%	24.0%
ILF:							1.00			1.31			1.59	1.59
Policy Limits Ultimate:							31.0%			36.6%			38.2%	38.2%
Weight:							7%			47%			47%	47%

\* Averages Exclude PY 2015

Frequency/Severity Indication:	36.3%
Weighted Average:	37.0%
PY 2015 Selected:	37.0%
Adjustment:	0.0%
PY 2015:	37.0%
ULE:	1.0%
Claims Fees:	0.0%
PY 2015 Ultimate ILAE Ratio:	38.0%

AL

Large Losses - Incurred + Legal > 100k

PY	DSP	Policy #	Case #	DOL	Insured	Ind Paid	Ind OS	Legal	I+Legal	Acc State	Description
2011	2-2-50	5847344	580	6/20/2012	Sevier County Util	120	0	6	127	Tennessee	Employee Stopped Stop Sign Attempted T

Property

Rate Need Indications

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Target	Target	Before 2015 Rate Change PY 2015 Ultimate ILAE Ratio	Before 2015 Rate Change PY 2015 Rate Need	PY 2015 Rate Achieved	After 2015 Rate Change PY 2015 Ultimate ILAE Ratio	PY 2016 Ultimate ILAE Ratio	PY 2016 Rate Need
RAP Neutral:	96.8%	65.4%	24.2%	-60.4%	2.7%	23.5%	23.5%	-61.3%

Expense Ratio calculated as follows:

Commission:	20.0%
Prem Tax:	3.2%
Other Acquisition Fees:	1.0%
Reinsurance:	0.0%
Direct Expense:	2.9%
Indirect Expense:	4.2%
	31.4%

(1) = [1 - (Calculated RAP)]

(2) = [(1) - (Total Expense)]

(3) = (6) x [1 + (5)]

(4) = [(3) + (Direct Expense)] / [(2) + (Direct Expense)] - 1

(5) = Input

(6) = Exhibit 3

(7) = (6) x [1 + (Trend)]

(8) = [(7) + (Direct Expense)] / [(2) + (Direct Expense)] - 1

Property

Reported Incurred Loss & LAE Ratios

PY	GWP	3	15	27	39	51	63	75	87	99	111	123	@ 2015/1
2005	0	-	-	-	-	-	-	-	-	-	-	-	-
2006	0	-	-	-	-	-	-	-	-	-	-	-	-
2007	0	-	-	-	-	-	-	-	-	-	-	-	-
2008	316	0.0%	0.9%	24.9%	24.9%	24.9%	24.9%	24.9%	24.9%	-	-	-	24.9%
2009	401	0.0%	14.4%	16.9%	16.9%	16.9%	16.9%	16.9%	16.9%	-	-	-	16.9%
2010	468	0.0%	4.0%	32.9%	32.9%	32.9%	32.9%	32.9%	32.9%	-	-	-	32.9%
2011	462	0.0%	11.6%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%	-	-	-	13.6%
2012	455	0.0%	3.5%	13.9%	14.8%	14.8%	14.8%	14.8%	14.8%	-	-	-	14.8%
2013	552	0.0%	2.6%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	-	-	-	6.3%
2014	574	0.0%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	-	-	-	5.3%
2015	549	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	0.0%

Reported Incurred Loss & LAE Ratios - Including Modeled Cats

PY	GWP	3	15	27	39	51	63	75	87	99	111	123	@ 2015/1
2005	0	-	-	-	-	-	-	-	-	-	-	-	-
2006	0	-	-	-	-	-	-	-	-	-	-	-	-
2007	0	-	-	-	-	-	-	-	-	-	-	-	-
2008	316	0.0%	0.9%	24.9%	24.9%	24.9%	24.9%	24.9%	24.9%	-	-	-	24.9%
2009	401	0.0%	14.4%	16.9%	16.9%	16.9%	16.9%	16.9%	16.9%	-	-	-	16.9%
2010	468	0.0%	4.0%	32.9%	32.9%	32.9%	32.9%	32.9%	32.9%	-	-	-	32.9%
2011	462	0.0%	11.6%	20.3%	20.3%	20.3%	20.3%	20.3%	20.3%	-	-	-	20.3%
2012	455	0.0%	3.5%	13.9%	14.8%	14.8%	14.8%	14.8%	14.8%	-	-	-	14.8%
2013	552	0.0%	2.6%	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	-	-	-	6.3%
2014	574	0.0%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	-	-	-	5.3%
2015	549	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	0.0%

Property

Indexing - PY 2015 Ultimate Loss & LAE Selection

PY	GWP	Annual PY Rate Chg	Cumulative PY Rate Chg	On-Level GWP	Policy Limits			Capped @ 1M			Capped @ 250k			Capped @ 100k		
					Ultimate ILAE Ratio	0.0% Trend to PY 2015	On-Level Ultimate ILAE Ratio	Ultimate ILAE Ratio	0.0% Trend to PY Rate Chg	On-Level Ultimate ILAE Ratio	Ultimate ILAE Ratio	0.0% Trend to PY 2015	On-Level Ultimate ILAE Ratio	Ultimate ILAE Ratio	0.0% Trend to PY 2015	On-Level Ultimate ILAE Ratio
2005	0	0.0%	1.000	-	-	1.000	-	-	1.000	-	-	1.000	-	-	1.000	-
2006	0	0.0%	1.000	-	-	1.000	-	-	1.000	-	-	1.000	-	-	1.000	-
2007	0	0.0%	1.000	-	-	1.000	-	-	1.000	-	-	1.000	-	-	1.000	-
2008	316	0.0%	1.000	317	24.7%	1.000	24.6%	24.7%	1.000	24.6%	24.7%	1.000	24.6%	24.7%	1.000	24.6%
2009	401	-5.8%	0.942	428	16.8%	1.000	15.8%	16.8%	1.000	15.8%	16.8%	1.000	15.8%	16.8%	1.000	15.8%
2010	468	-5.6%	0.889	529	32.9%	1.000	29.1%	32.9%	1.000	29.1%	32.9%	1.000	29.1%	32.4%	1.000	28.7%
2011	462	-1.5%	0.876	530	13.6%	1.000	11.9%	13.6%	1.000	11.9%	13.6%	1.000	11.9%	13.6%	1.000	11.9%
2012	455	2.3%	0.896	510	14.8%	1.000	13.2%	14.8%	1.000	13.2%	14.8%	1.000	13.2%	14.8%	1.000	13.2%
2013	552	4.6%	0.937	592	6.3%	1.000	5.9%	6.3%	1.000	5.9%	6.3%	1.000	5.9%	6.3%	1.000	5.9%
2014	574	4.4%	0.978	589	13.6%	1.000	13.3%	11.8%	1.000	11.5%	11.8%	1.000	11.5%	10.0%	1.000	9.7%
2015	549	2.7%	1.004	549	17.9%	1.000	17.9%	15.9%	1.000	15.9%	13.9%	1.000	13.9%	9.9%	1.000	9.9%
		0.0%	1.004													
			All Yr Wtd excl 2015:				15.5%			15.2%			15.2%			14.9%
			Last 7 Wtd excl 2015:				15.5%			15.2%			15.2%			14.9%
			Last 5 Wtd excl 2015:				14.4%			14.1%			14.1%			13.6%
			Last 3 Wtd excl 2015:				10.7%			10.1%			10.1%			9.4%
			Selected Ultimate:				15.0%			14.0%			13.0%			11.0%
			ILF:				1.00			1.14			1.35			1.70
			Policy Limits Ultimate:				15.0%			17.6%			17.6%			18.7%
			Weight:				5%			32%			32%			32%

\* Averages exclude PY 2015

Frequency/Severity Indication:	14.8%
Weighted Average:	17.3%
PY 2015 Selected:	16.5%
Adjustment:	0.0%
PY 2015:	16.5%

All Year Avg Empirical Cat Load:	0.8%
Program Specific AAL Cat Load:	4.2%
Selected Cat Load:	4.2%
Corporate Cat Charge:	0.0%
XOL Loss Cost:	1.9%
Indicated XOL Cost:	0.0%
ULE:	1.0%
Claims Fees:	0.0%

PY 2015 Ultimate ILAE Ratio Including AAL Cat Load and Cost of Reinsurance: 23.5%

Property

Large Losses - Incurred + Legal > 100k

PY	DSP	Cat #	Policy #	Case #	DOL	Insured	Ind Paid	Ind OS	Legal	I+Legal	Acc State	Description
2010	2-2-50		5849650	1108	4/16/2011	Powell Clinch Util	100	0	4	105	Tennessee	Water Damage DUE To CUT Water Line

APD

Rate Need Indications

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Target	Target	Before 2015 Rate Change PY 2015 Ultimate ILAE Ratio	Before 2015 Rate Change PY 2015 Rate Need	PY 2015 Rate Achieved	After 2015 Rate Change PY 2015 Ultimate ILAE Ratio	PY 2016 Ultimate ILAE Ratio	PY 2016 Rate Need
RAP Neutral:	97.9%	66.7%	69.2%	3.6%	9.9%	63.0%	63.0%	-5.2%

Expense Ratio calculated as follows:

Commission:	20.0%
Prem Tax:	3.2%
Other Acquisition Fees:	1.0%
Direct Expense:	3.6%
Indirect Expense:	3.4%
	<u>31.2%</u>

(1) = [1 - (Calculated RAP)]

(2) = [(1) - (Total Expense)]

(3) = (6) x [1 + (5)]

(4) = [(3) + (Direct Expense)] / [(2) + (Direct Expense)] - 1

(5) = Input

(6) = Exhibit 3

(7) = (6) x [1 + (Trend)]

(8) = [(7) + (Direct Expense)] / [(2) + (Direct Expense)] - 1





APD

Indexing - PY 2015 Ultimate Loss & LAE Selection

PY	GWP	Annual PY Rate Chg	Cumulative PY Rate Chg	On-Level GWP
2005	0	0.0%	1.000	-
2006	0	0.0%	1.000	-
2007	0	0.0%	1.000	-
2008	91	0.0%	1.000	117
2009	128	-3.1%	0.969	169
2010	143	-5.6%	0.915	201
2011	151	18.7%	1.086	179
2012	115	-5.0%	1.031	143
2013	135	1.3%	1.044	165
2014	148	11.8%	1.168	163
2015	152	9.9%	1.283	152
		0.0%	1.283	
			All Yr Wtd excl 2015:	96.3%
			Last 7 Wtd excl 2015:	96.3%
			Last 5 Wtd excl 2015:	114.0%
			Last 3 Wtd excl 2015:	173.5%
			Frequency/Severity Indication:	65.0%

Policy Limits		
Ultimate ILAE Ratio	0.0% Trend to PY 2015	On-Level Ultimate ILAE Ratio
-	1.000	-
-	1.000	-
-	1.000	-
50.4%	1.000	39.3%
62.1%	1.000	46.9%
70.5%	1.000	50.3%
33.8%	1.000	28.6%
578.9%	1.000	465.0%
47.5%	1.000	38.6%
59.2%	1.000	53.8%
55.2%	1.000	55.2%
		96.3%
		96.3%
		114.0%
		173.5%
		65.0%

\* Averages Exclude PY 2015

PY 2015 Selected:

Adjustment:

PY 2015:

ULE: 1.0%

Claims Fees: 0.0%

PY 2015 Ultimate ILAE Ratio: 63.0%

APD

Large Losses - Incurred + Legal > 100k

PY	DSP	Cat #	Policy #	Case #	DOL	Insured	Ind Paid	Ind OS	Legal	I+Legal	Acc State	Description
2012	2-2-50		6144043	1888	4/11/2012	Austell Natural GA	500	0	67	567	Georgia	Insured Vehicle WAS Rear Ended By Othe

**Excess Liability**

Rate Need Indications

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Target	Target	Before 2015 Rate Change PY 2015 Ultimate ILAE Ratio	Before 2015 Rate Change PY 2015 Rate Need	PY 2015 Rate Achieved	After 2015 Rate Change PY 2015 Ultimate ILAE Ratio	PY 2016 Ultimate ILAE Ratio	PY 2016 Rate Need
RAP Neutral:	98.7%	67.3%	64.8%	-3.5%	3.7%	62.5%	65.6%	-2.4%

Expense Ratio calculated as follows:

Commission:	20.0%
Prem Tax:	3.2%
Other Acquisition Fees:	1.0%
Direct Expense:	3.0%
Indirect Expense:	4.2%
	<u>31.4%</u>

(1) = [1 - (Calculated RAP)]

(2) = [(1) - (Total Expense)]

(3) = (6) x [1 + (5)]

(4) = [(3) + (Direct Expense)] / [(2) + (Direct Expense)] - 1

(5) = Input

(6) = Exhibit 3

(7) = (6) x [1 + (Trend)]

(8) = [(7) + (Direct Expense)] / [(2) + (Direct Expense)] - 1



Excess Liability

Indexing - PY 2015 Ultimate Loss & LAE Selection

PY	GWP	Annual PY Rate Chg	Cumulative PY Rate Chg	On-Level GWP	Capped @ \$10M			Capped @ 2M			Capped @ 1M		
					Ultimate ILAE Ratio	5.0% Trend to PY 2015	On-Level Ultimate ILAE Ratio	Ultimate ILAE Ratio	4.5% Trend to PY 2015	On-Level Ultimate ILAE Ratio	Ultimate ILAE Ratio	4.0% Trend to PY 2015	On-Level Ultimate ILAE Ratio
2005	0	0.0%	1.000	-	-	1.629	-	-	1.553	-	-	1.480	-
2006	0	0.0%	1.000	-	-	1.551	-	-	1.486	-	-	1.423	-
2007	0	0.0%	1.000	-	-	1.477	-	-	1.422	-	-	1.369	-
2008	564	0.0%	1.000	563	12.4%	1.407	17.5%	7.1%	1.361	9.7%	3.5%	1.316	4.7%
2009	721	-6.2%	0.938	768	16.6%	1.340	20.9%	9.7%	1.302	11.9%	5.5%	1.265	6.6%
2010	841	-4.8%	0.892	941	23.8%	1.276	27.1%	13.1%	1.246	14.6%	7.1%	1.217	7.8%
2011	769	1.5%	0.906	848	31.2%	1.216	34.4%	16.9%	1.193	18.3%	10.4%	1.170	11.0%
2012	677	-1.5%	0.892	758	41.3%	1.158	42.8%	23.6%	1.141	24.1%	14.8%	1.125	14.8%
2013	747	2.3%	0.913	817	52.2%	1.103	52.6%	32.1%	1.092	32.1%	21.4%	1.082	21.2%
2014	777	5.4%	0.963	806	55.3%	1.050	56.0%	34.7%	1.045	35.0%	23.2%	1.040	23.2%
2015	765	3.7%	0.999	765	56.2%	1.000	56.2%	36.6%	1.000	36.6%	23.5%	1.000	23.5%
All Yr Wtd excl 2015:							36.6%			21.2%			13.0%
Last 7 Wtd excl 2015:							36.6%			21.2%			13.0%
Last 5 Wtd excl 2015:							42.0%			24.4%			15.3%
Last 3 Wtd excl 2015:							50.6%			30.5%			19.9%
Selected Ultimate:							50.0%			30.0%			20.0%
ILF:							1.00			1.67			2.53
Capped @ \$10M Ultimate:							50.0%			50.2%			50.7%
					Weight:		7%			46%			46%

\* Averages exclude PY 2015

Frequency/Severity Indication:	45.0%
Weighted Average:	50.4%
PY 2015 Selected - Capped @ \$10M:	48.0%
Adjustment:	0.0%
PY 2015 - Capped @ \$10M:	48.0%
ILF:	1.000
Catastrophe/Latency Load:	5.0%
ULE:	1.0%
PY 2015 Ultimate ILAE Ratio:	54.0%
Credibility:	8%
Complement of Credibility:	63.2%
Credibility Weighted PY 2015 Ultimate ILAE Ratio:	62.5%

Compliment of Credibility

Loss Ratio for total excess book relative to breakeven for total excess book

