

## FINANCIAL REPORTING THROUGH THE LENS OF A PROPERTY/CASUALTY ACTUARY

## Part IV. Statutory Filings to Accompany the Annual Statement

TABLE 91

Reporting Entity Insurance Company (REIC)							
<u>Given the following data:</u>		<u>HO/FO</u>	<u>PPAL</u>	<u>WC</u>	<u>OL</u>	<u>Total All Lines</u>	<u>Source</u>
(1)	Industry Average Loss & LAE Ratio	0.687	0.806	0.744	0.633		Provided by NAIC
(2)	Company Average Loss & LAE Ratio for past 10 years	0.634	0.724	0.811	0.975		Company Schedule P, Part 1
(3)	Industry Loss & LAE Ratio	0.927	0.969	1.044	1.027		Provided by NAIC
(4)	Adjustment for Investment Income	0.954	0.925	0.839	0.816		Provided by NAIC
(5)	Company Current Year Net Written Premium	8,500,000	7,000,000	6,200,000	5,300,000	27,000,000	Company U/W & Inv Ex, Part 1B, Col 6
(6)	Company Underwriting Expense Ratio	0.271	0.271	0.271	0.271		Company Inc Stmt Line 4 divided by U/W & Inv Ex, Part 1B, Col 6
(7)	Portion of WP on Retro-Rated Plans:						
	(a) % Direct Loss Sensitive	0.0%	0.0%	13.0%	0.0%		Company Schedule P, Part 7A, Col 6
	(b) % Assumed Loss Sensitive	0.0%	0.0%	0.0%	0.0%		Company Schedule P, Part 7B, Col 6
<b>Calculation of Written Premium RBC:</b>		<b><u>HO/FO</u></b>	<b><u>PPAL</u></b>	<b><u>WC</u></b>	<b><u>OL</u></b>	<b><u>Total All Lines</u></b>	
<b>Step 1: Base Written Premium RBC</b>							
(8)	Ratio of Company Average Loss & LAE Ratio to Industry	0.923	0.898	1.090	1.540		= (2) / (1)
(9)	Company Loss & LAE Ratio	0.891	0.920	1.091	1.304		= 50% of (3) + 50% of (8)*(3)
(10)	Base Loss & LAE WP RBC Charge	1,030,584	852,112	1,155,406	1,777,725		= (5) * { [(9) * (4)] + (6) - 1 }
<b>Step 2: Net Written Premium RBC After Discount</b>							
(11)	Loss-sensitive Factor	–	–	0.039	–		= 30% of (7a) + 15% of (7b)
(12)	Loss-sensitive Discount	–	–	45,061	–		= (11) * (10)
(13)	Net Written Premium RBC After Discount	1,030,584	852,112	1,110,345	1,777,725	4,770,766	= (10) - (12)
<b>Step 3: Net Written Premium RBC</b>							
(14)	Distribution of WP by Line	31%	26%	23%	20%		= (5) by line / (5) total
(15)	Premium Concentration Factor					0.794	= 0.300 * Max of (14) + 0.700
(16)	<b>Net Written Premium RBC</b>					<b>3,790,109</b>	= (13) * (15)

As displayed in Table 91, the written premium RBC that is included in the R<sub>5</sub> charge for REIC is \$3,790,109. The company average loss and LAE ratio for the past 10 years (line 2) is better than the industry average loss and LAE ratio (line 1) for the personal lines (HO/FO and PPAL) and worse for the commercial lines (WC and OL). Thus, the company loss and LAE ratio in line 9 is lower than the industry ratio in line 3 for the personal lines and higher for the commercial lines. In fact, the ratio is substantially