Griffith, Ballard & Company

Valuation Interest Rate Calculations For use during Valuation Year 2014

Danadan	1 -4/	Datas through	h June 30. 2014
Basen on a	VALUE	Railes Inmollin	1.IIIIA 311 /114

MOODY'S CORPORATE AV	/FRACE VIELDS
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Aug-13 Sep-13 Oct-13 Nov-13 Dec-13 Jan-14 Feb-14 Mar-14 Apr-14 May-14 4.76% 4.88% 4.95% 4.82% 4.91% 4.92% 4.76% 4.68% 4.65% 4.52% 4.38% 4.44% 12-Month Average: 2013: 4.15% 2012: 4.55% 2011: 5.37% 36-Month Average: 2013: 4.69%

CURRENT YEAR PROJECTED AVERAGES

		projected if future monthly average changes by						
<u>Average</u>		<u>-0.50%</u>	<u>+0.50%</u>	<u>-1.00%</u>	<u>+1.00%</u>	<u>-2.00%</u>	+2.40%	
4.72%	_	4.72%	4.72%	4.72%	4.72%	4.72%	4.72%	
4.47%		4.47%	4.47%	4.47%	4.47%	4.47%	4.47	
4.47%		4.47%	4.47%	4.47%	4.47%	4.47%	4.47	

PROJECTED VALUATION RATES, BASED ON ABOVE

			projected if future monthly average changes by								
	Rate Cha	nge from prior yr.	<u>-0.50%</u>	+0.50%	<u>-1.00%</u>	<u>+1.00%</u>	<u>-2.00%</u>	<u>+2.40%</u>			
Life Formula	3.50%	0.00%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%			
Life Reserve*	3.50%	0.00%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%			
Life Nonforf Fctr	4.50%	0.00%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%			
Flex Prem DA**	3.75%	0.25%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%			
Single Prem DA**	4.00%	0.25%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%			
Immed Annuity	4.50%	0.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%			
		_, ,,									

^{*} Minimum change from prior year rate is 0.50% ** for Type C, 10 years and fewer, issue-year basis

NOTE: To AVOID a drop in the Life Reserve rate for 2016 issues, the Moody's Corporate Average Yield must average at least 3.360% over the next 12 months.

SINGLE PREMIUM DEFERRED ANNUITY

CHASEL THE MICHIGAN DETERMINED THE										
ISSUE-YEAR BASIS	2014			2013						
<u>Duration</u>	Ref*	<u>A</u>	<u>B</u>	<u>C</u>	Ref*	<u>A</u>	<u>B</u>	<u>C</u>		
5 Years or Less	4.72%	4.50%	4.00%	4.00%	4.15%	4.00%	3.75%	3.75%		
5+ to 10 Years	4.72%	4.50%	4.00%	4.00%	4.15%	4.00%	3.75%	3.75%		
10+ to 20 Years	4.47%	4.00%	3.75%	3.75%	4.15%	3.75%	3.75%	3.50%		
Greater than 20 Years	4.47%	3.75%	3.50%	3.50%	4.15%	3.50%	3.50%	3.50%		

FLEXIBLE PREMIUM DEFERRED ANNUITY

ISSUE-YEAR BASIS	2014				2013			
<u>Duration</u>	Ref*	<u>A</u>	<u>B</u>	<u>C</u>	Ref*	<u>A</u>	<u>B</u>	<u>C</u>
5 Years or Less	4.72%	4.50%	4.00%	3.75%	4.15%	4.00%	3.75%	3.50%
5+ to 10 Years	4.72%	4.25%	4.00%	3.75%	4.15%	3.75%	3.75%	3.50%
10+ to 20 Years	4.47%	4.00%	3.75%	3.75%	4.15%	3.75%	3.50%	3.50%
Greater than 20 Years	4.47%	3.75%	3.50%	3.50%	4.15%	3.50%	3.50%	3.50%

^{* 12-} preceding month average (if greater than 10 years, use 36- preceding month average, if lower)

DYNAMIC MINIMUM ANNUITY NONFORFEITURE RATES

Five-Year Constant Maturity Treasury (Monthly Average)						and Related Minimum Guarantee Rates					
	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	
5-Yr CMT:	0.67%	0.70%	0.81%	0.85%	0.82%	0.71%	0.84%	1.20%	1.40%	1.52%	
Minimum Rate:	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	
	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	
5-Yr CMT:	1.60%	1.37%	1.37%	1.58%	1.65%	1.52%	1.64%	1.70%	1.59%	1.68%	
Minimum Rate:	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	
Applicable Federal * Note, use the maximu			•		': 2014: use:	1.79%	2013:	2.16% 3.50%	2012:	2.89% 4.00%	