Actuarial Justification of Premium Rate Increase For Individual Long Term Care Policy Form Series 64028

1. PURPOSE OF FILING

This is a rate increase filing for American General Life Insurance Company's existing Long Term Care Policy Form Series 64028. The purpose of this filing is to demonstrate that the anticipated loss ratio for this form meets the minimum requirements of this state. This rate filing is not intended to be used for any other purposes.

2. SCOPE OF FILING

This filing applies to the Company's Long Term Care policy and rider forms summarized below:

Series LTC-1 Policy Form 64028-MD Non-Tax Qualified Policy Form C12271-MD Tax Qualified Rider Form 64031 (Inflation Benefit) Rider Form 64032 (Nonforfeiture Benefit)

The rate increase will apply to all insureds issued coverage under the above referenced forms in this state. The number of policyholders and average premiums before and after the rate increase are shown in Exhibit A.

The rate increase will apply to in-force business only as the company stopped selling Policy Form Series 64028 in 2001.

3. REASON FOR RATE INCREASE REQUEST

This rate filing is a request for a 15% increase. While a rate increase larger than 15% can be justified at this time, the company is currently not seeking a higher increase. Instead the company will continue to monitor emerging experience and review whether an additional rate increase is necessary.

The product was originally priced for a 61% lifetime loss ratio. Exhibit B provides the originally filed loss ratios for this policy by duration. This filing demonstrates that if future experience is consistent with our best estimates, and nationwide earned premiums are restated to the historical Maryland rate level, the actual lifetime loss ratio will be 96.8%. The requested rate increase is needed to mitigate future losses.

The proposed effective date after approval and fulfillment of all statutory and contractual requirements will not be sooner than February 1, 2018, which is more than one year from the implementation date of the previous rate increase.

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4. PROJECTION ASSUMPTIONS

Interest – The effective annual rate of interest assumed for accumulating historical experience and for discounting projected future experience ranges from 4.9% to 6.5% by claim incurral year.

Mortality – Current best estimate mortality assumptions were derived from a total termination study. Mortality is based on the Annuity 2000 Basic Table with mortality selection factors increasing from 0.65 to 1.35 based on attained age. No mortality improvement was assumed.

Voluntary Lapse Rates - Actual voluntary lapse rates have been considerably lower than pricing assumptions. Current best estimate lapse assumptions were derived from a total termination study based on actual experience.

Morbidity - Morbidity assumptions are based on American General Life Insurance Company's actual experience. Expected claim costs are developed as the product of incidence, utilization and claim continuance and vary by the place of care (home care, assisted living facility, or nursing home). The morbidity assumptions do not include morbidity improvement.

5. MINIMUM REQUIRED LIFETIME LOSS RATIO

The minimum required lifetime loss ratio for these forms is 60%.

6. PROJECTED FUTURE EXPERIENCE

Future experience, which has been projected for forty years using the best estimate assumptions described in Section 5, is shown in Exhibit C. The following table summarizes the nationwide anticipated future loss ratio without the requested rate increase:

Nationwide Future Experience Best Estimate Assumptions Without Rate Increase					
Earned Premium at Historical Maryland	Incurred				
Rate Level	Claims	Loss Ratio			
\$112,865,644	\$306,969,003	272.0%			

7. HISTORICAL EXPERIENCE

Nationwide experience from 4/1/1997 through 12/31/2016 is shown in Exhibit C. This data includes claim payments through 12/31/2016. The following table summarizes the nationwide historical loss ratio accumulated with interest to 12/31/2016:

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Nationwide Historical Actual Experience						
Earned Premium at						
Historical Maryland	Incurred					
Rate Level	Claims	Loss Ratio				
\$695,138,152	\$475,477,542	68.4%				

8. LIFETIME ANTICIPATED LOSS RATIO

The lifetime anticipated loss ratio is defined as the present value of the historical and projected future incurred claims divided by the present value of the historical and projected future earned premiums. Exhibit C also provides a projection of these values with a 15% rate increase implemented in calendar year 2017. Nationwide results are summarized below:

Anticipated Lifetime Loss Ratio Rate Increase = 15%				
	Earned Premium at Historical/Projected			
Time	Maryland	Incurred	Loss	
Period Future	Rate Level \$126,116,985	Claims \$306,969,003	Ratio 243.4%	
Lifetime	\$821,255,138	\$782,446,545	95.3%	

The above demonstrates that both the anticipated future loss ratio and the lifetime anticipated loss ratio are in compliance with the minimum loss ratio requirements after implementation of the 15% rate increase.

9. ACTUARIAL CERTIFICATION

I hereby certify to the best of my knowledge and judgment, the entire rate filing submitted herein is in compliance with all applicable laws of this state, the rules of the Department of Insurance, and Actuarial Standard of Practice Number 8 as adopted by the Actuarial Standards Board. In my opinion, the rates are not excessive or unfairly discriminatory. This filing will enhance premium adequacy, but it is likely that future rate action will be necessary. Therefore, benefits cannot be certified reasonable in relation to premium.

Respectfully submitted,

Carolyn Bittner

Carolyn Bittner, FSA, MAAA Consulting Actuary LTCG

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Attachments:

- Exhibit A Nationwide and Maryland Average Annualized Premiums
- Exhibit B Originally Filed Loss Ratios
- Exhibit C Lifetime Experience Without and With Rate Increase

Exhibit A

American General Life Insurance Company

Nationwide and Maryland Annualized Premiums

		Average Annualized Premiums ¹		
		Annualized Premium Per With a 159		
	Lives Inforce	Inforce	Rate Increase	
Nationwide	6,171	\$3,511	\$4,037	
Maryland	166	\$4,688	\$5,391	

Policies Inforce as of 12/31/2016

¹ Based on premium paying policyholders

American General Life Insurance Company Policy Form Series 64028 Long Term Care Plan - 30 Year Projection Original Filed Loss Ratios By Duration

				Present Values @ 5%		
Policy						
Year	Premiums	Claims	Loss Ratio	Premiums	Claims	Loss Ratio
1	1,646.00	357.87	21.7%	1,646.00	349.25	21.2%
2	1,174.80	352.43	30.0%	1,118.86	327.56	29.3%
3	881.09	348.16	39.5%	799.17	308.18	38.6%
4	710.18	337.80	47.6%	613.48	284.77	46.4%
5	597.83	325.02	54.4%	491.84	260.95	53.1%
6	512.55	315.77	61.6%	401.60	241.45	60.1%
7	442.14	319.93	72.4%	329.93	232.98	70.6%
8	383.65	323.33	84.3%	272.65	224.25	82.2%
9	334.78	326.36	97.5%	226.59	215.57	95.1%
10	290.39	316.20	108.9%	187.19	198.91	106.3%
11	250.59	302.63	120.8%	153.84	181.31	117.9%
12	217.55	296.93	136.5%	127.20	169.42	133.2%
13	187.75	287.79	153.3%	104.55	156.39	149.6%
14	161.02	275.73	171.2%	85.39	142.70	167.1%
15	137.20	261.28	190.4%	69.30	128.78	185.8%
16	116.34	245.33	210.9%	55.96	115.16	205.8%
17	98.10	232.24	236.7%	44.94	103.83	231.0%
18	82.21	217.65	264.7%	35.87	92.67	258.4%
19	68.41	201.91	295.1%	28.43	81.88	288.0%
20	56.50	185.40	328.1%	22.36	71.60	320.2%
21	46.38	168.79	363.9%	17.48	62.08	355.2%
22	37.81	151.94	401.9%	13.57	53.22	392.2%
23	30.57	135.31	442.6%	10.45	45.14	432.0%
24	24.48	119.13	486.6%	7.97	37.85	474.9%
25	19.40	103.60	534.0%	6.02	31.35	521.2%
26	15.25	89.21	585.0%	4.50	25.71	570.9%
27	11.87	75.26	634.0%	3.34	20.66	618.8%
28	9.15	62.71	685.4%	2.45	16.39	668.8%
29	6.99	51.56	737.6%	1.78	12.84	719.8%
30	5.27	41.79	793.0%	1.28	9.91	773.9%
Total	8,556.25	6,829.06	79.81%	6,883.98	4,202.77	61.05%

Policy Form 64028

Lifetime Experience (Nationwide)

	Results Without Rate Increase		Results With Rate Increase			
	Earned Premiums			Earned Premiums		
	at Historical	Incurred	Loss	at Historical/Projected	Incurred	Loss
Year	MD Rate Level	Claims ¹	Ratio	MD Rate Level	Claims ¹	Ratio
1997	114,262	0	0.0%	114,262	0	0.0%
1998	2,741,075	242,115	8.8%	2,741,075	242,115	8.8%
1999	8,897,299	1,603,695	18.0%	8,897,299	1,603,695	18.0%
2000	16,769,737	3,443,222	20.5%	16,769,737	3,443,222	20.5%
2001	25,249,863	9,796,415	38.8%	25,249,863	9,796,415	38.8%
2002	27,255,517	11,463,974	42.1%	27,255,517	11,463,974	42.1%
2003	25,899,360	11,784,664	45.5%	25,899,360	11,784,664	45.5%
2004	24,383,594	9,799,103	40.2%	24,383,594	9,799,103	40.2%
2005	23,440,825	15,165,846	64.7%	23,440,825	15,165,846	64.7%
2006	24,084,059	17,487,382	72.6%	24,084,059	17,487,382	72.6%
2007	22,459,007	17,111,330	76.2%	22,459,007	17,111,330	76.2%
2008	22,305,467	13,036,415	58.4%	22,305,467	13,036,415	58.4%
2009	23,366,947	20,465,013	87.6%	23,366,947	20,465,013	87.6%
2010	23,295,291	20,936,705	89.9%	23,295,291	20,936,705	89.9%
2011	21,794,715	20,997,759	96.3% 05.2%	21,794,715	20,997,759	96.3%
2012 2013	21,172,418 21,982,706	20,185,327	95.3% 134.2%	21,172,418	20,185,327 29,498,122	95.3% 134.2%
2013	22,025,877	29,498,122 26,461,825	134.2%	21,982,706 22,025,877	29,498,122 26,461,825	134.2% 120.1%
2014 2015	21,522,463	28,776,706	133.7%	21,522,463	28,776,706	120.1%
2015	20,523,123	33,044,462	155.7%	20,523,123	28,776,706 33,044,462	155.7%
Accumulated ²						
	695,138,152	475,477,542	68.4%	695,138,152	475,477,542 31,002,794	68.4%
2017	20,006,548	31,002,794	155.0%	20,006,548		155.0%
2018 2019	17,991,884 15,960,116	31,424,334 31,662,237	174.7% 198.4%	19,881,032 18,354,133	31,424,334 31,662,237	158.1% 172.5%
2019	14,070,769	31,571,041	224.4%	16,181,385	31,571,041	195.1%
2020	12,347,229	31,043,198	224.4%	14,199,313	31,043,198	218.6%
2021	10,785,174	30,077,335	278.9%	12,402,950	30,077,335	242.5%
2022	9,356,756	28,758,819	307.4%	10,760,269	28,758,819	267.3%
2024	8,067,608	27,241,379	337.7%	9,277,749	27,241,379	293.6%
2025	6,918,072	25,578,256	369.7%	7,955,783	25,578,256	321.5%
2026	5,890,293	23,801,011	404.1%	6,773,837	23,801,011	351.4%
2027	4,981,884	21,968,341	441.0%	5,729,167	21,968,341	383.4%
2028	4,178,822	20,104,865	481.1%	4,805,645	20,104,865	418.4%
2029	3,479,117	18,241,884	524.3%	4,000,984	18,241,884	455.9%
2030	2,874,783	16,391,140	570.2%	3,306,001	16,391,140	495.8%
2031	2,353,978	14,579,644	619.4%	2,707,075	14,579,644	538.6%
2032	1,909,302	12,841,259	672.6%	2,195,697	12,841,259	584.8%
2033	1,534,316	11,209,195	730.6%	1,764,464	11,209,195	635.3%
2034	1,221,336	9,699,001	794.1%	1,404,536	9,699,001	690.5%
2035	960,475	8,307,884	865.0%	1,104,546	8,307,884	752.2%
2036	742,985	7,045,052	948.2%	854,433	7,045,052	824.5%
2037	573,630	5,917,706	1031.6%	659,675	5,917,706	897.1%
2038	438,947	4,923,536	1121.7%	504,789	4,923,536	975.4%
2039	332,287	4,057,789	1221.2%	382,130	4,057,789	1061.9%
2040	249,355	3,312,398	1328.4%	286,758	3,312,398	1155.1%
2041	185,363	2,677,990	1444.7%	213,167	2,677,990	1256.3%
2042	136,261	2,144,156	1573.6%	156,700	2,144,156	1368.3%
2043	98,731	1,699,153	1721.0%	113,540	1,699,153	1496.5%
2044	70,987	1,332,671	1877.3%	81,636	1,332,671	1632.5%
2045	50,423	1,034,501	2051.7%	57,986	1,034,501	1784.0%
2046	35,433	794,310	2241.7%	40,748	794,310	1949.3%
2047	24,469	602,844	2463.7%	28,139	602,844	2142.4%
2048	16,474	452,163	2744.6%	18,946	452,163	2386.6%
2049	10,875	334,996	3080.5%	12,506	334,996	2678.7%
2050	7,002	245,052	3499.8%	8,052	245,052	3043.3%
2051	4,387	176,774	4029.2%	5,045	176,774	3503.7%
2052 2053	2,666 1,540	125,537 87,703	4709.0% 5694.1%	3,066 1,771	125,537 87,703	4094.8% 4951.4%
2053	835	60,171	7206.9%	960	60,171	4951.4% 6266.8%
2054	401	40,493	10109.1%	461	40,493	6266.8% 8790.5%
2055	148	26,705	10109.1% 18079.9%	170	26,705	8790.5% 15721.7%
Present Value ²						243.4%
	112,865,644	306,969,003	272.0%	 126,116,985	306,969,003	
Lifetime ²	808,003,796	782,446,545	96.8%	821,255,138	782,446,545	95.3%

¹ Projected future earned premiums and incurred claims are based on best estimate persistency and morbidity assumptions as shown in Section 5 of the actuarial memorandum.

 2 The interest rate used to accumulate the historical and future totals varies for each year. It ranges from 4.9% to 6.5%.