

Allianz Life Insurance Company of North America

**Home Office:
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Actuarial Memorandum Supporting 25% Aggregate Premium Rate Increase On Individual Long-Term Care Insurance Policy Forms

1. TYPE OF CHANGE

Allianz Life Insurance Company of North America (the Company) proposes the following rate revisions on the below long-term care (LTC) policy form. The company issued this policy form in Maryland between 2006 and 2010.

<u>Product Name</u>	<u>Form series (including associated riders)</u>
Generation Protector (GP2)	11-P-Q-MD

The premium rate increase request varies by benefit period. The table below provides the requested rate increase:

Policy Form Series	Benefit Period		
	2-4 Years	5-8 Years	Lifetime
GP2	15%	25%	45%

2. PURPOSE OF FILING

This memorandum has been prepared to provide actuarial information supporting a rate revision to premiums for the form series above. The rate revision meets the minimum requirements in the statutes of Maryland.

The Company is requesting a premium rate increase on the above-listed form, including all associated riders. This form is in need of a premium rate increase due to past and projected future experience that continues to be more adverse than previously expected and originally priced for.

3. LIMITATIONS AND EXCLUSIONS

This actuarial memorandum is intended to support the premium rate increase on the policy form described above and it is not appropriate to use for any other purposes.

4. HISTORY OF RATE REVISION

The table below provides the rate increase history in Maryland for the policy form series in this filing.

Rate Increase Round	Policy Form Series: GP2		
	Date of Approval	Rate Increase Amount	SERFF Tracking Number (if available)
First Rate Increase	5/19/2016	15.0%	ALLB-130163702
Second Rate Increase	7/2/2019	11.4%	ALLB-131810182

Exhibit 1 provides the rate increase history nationwide for the policy form series in this filing.

5. SCOPE AND APPLICABILITY

This filing applies to active premium paying policies issued in this state for the policy form listed above. This policy form is no longer being marketed. This policy form includes premium payment options and traditional level-pay-for-life. All premium paying policies are included in this filing and in the attached distribution of business Exhibits. Exhibit 1 provides a distribution of in-force policies and total annual premiums by issue state.

These rates when approved will be applied to policies delivered or issued for delivery in the state of Maryland, regardless of place of current residence.

6. DESCRIPTION OF BENEFITS

These plans are Guaranteed Renewable, Tax-Qualified, Individual Long Term Care Insurance plans. Plans cover facility care and home and community care where applicable. Premiums vary by issue age and are projected to be level for the duration of the policy, unless modified by the riders elected by the policyholder. Rider charges are factor based and are a multiplier of the base premium.

Several coverage options are available:

- ❖ Various Maximum Benefit Periods
- ❖ Various Daily Benefit Amounts
- ❖ Various Elimination Periods
- ❖ Facility Care Plan with various Home and Community Care Benefit levels
- ❖ Separate rates for different underwriting classes
- ❖ Separate rates for joint and single lives

7. POLICYHOLDER OPTIONS

Assuming that the proposed rate increase becomes effective, policyholders will have the following options upon notification of the rate increase:

Policyholder Options to Reduce Benefits:

Policyholders with benefits above the minimum coverage level have the option to modify their policy benefits to mitigate the impact of the proposed rate increase. As examples, the options include, but are not limited to the following:

1. Reduce their benefit period,
2. Lower their daily benefit,
3. Increase their elimination period,

4. Reduce or cancel cost of living accumulation (COLA) riders.

To further minimize the impact to policyholders: As a part of this rate increase, for a limited time policyholders who reduce or cancel their COLA benefit riders will maintain all of their past COLA benefit increase percentages. Future premiums and benefit increases will be based on the new coverage levels elected by the policyholder. If the policyholder reduces their daily benefit, then the past increase in daily benefit from COLA rider will be reduced by the same proportion.

Non-forfeiture Offers:

In addition, the Company will give the policyholder the option to accept a non-forfeiture benefit if they receive a premium increase at no charge. Acceptance of the non-forfeiture benefit will provide the policyholder with a reduced paid-up policy, with no future premiums required after the effective date of the policyholder's rate increase. Policyholders who elect this option will pay no additional premiums after the effective date of the rate increase, and their benefit pool will be their total premiums paid. In consideration of our policyholders, our company does not subtract past claims from the benefit pool prior to the election of this rider.

8. ISSUE YEAR

This form was sold from 2006 to 2010 in Maryland, and marketed nationally from 2006 through 2010. This form is no longer being issued in any state as Allianz stopped issuing all individual standalone long-term care insurance in 2010.

9. UNDERWRITING DESCRIPTION

All policies subject to this rate revision were subject to full underwriting in accordance with Company standards in place at the time of issue. Those underwriting standards were taken into consideration when projecting future experience.

10. MARKETING METHOD

Sales were conducted by individual agents, who sold primarily on an individual policy basis. The Company no longer sells long-term care insurance policies.

11. AREA FACTORS

The Company did not use area factors within the state.

12. AVERAGE ANNUAL PREMIUM PER INSURED

This section compares the average premiums of the Maryland policy form and nationwide policy form. The following table provides the average annual premium based on December 31, 2020 in-force policies for the policy form included in this filing, both without and with the requested increase.

Maryland Generation Protector II Policy Form:

Current Average Annual Premium:	\$2,556	(309 Premium Paying Policies)
Proposed (25% increase):	\$3,199	

National Generation Protector II Policy Form:

2020 Annual Premium:	\$2,379	(13,677 Premium Paying Policies)
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13. PREMIUM MODALIZATION RULES

The modal premium factors will remain unchanged from the current factors.

14. CLAIM RESERVE

At each valuation date, a claim reserve is computed for each active and pending claim case. For active claims, the claim reserve is calculated as the present value of future benefits from the valuation date to the end of the benefit period. Benefit amounts are discounted for interest and claim continuance. Claim reserves have been discounted and allocated to the appropriate incurred year.

15. BEST ESTIMATE ACTUARIAL ASSUMPTIONS

a. Morbidity:

Attained age claim costs and Waiver of Premium benefits used in projecting future experience for this form have been developed utilizing Company-specific policy experience enhanced with other industry data as needed. Claim costs vary by joint policy status (joint vs. single), gender and various levels of home health care with adjustments for elimination periods, benefit periods, and riders.

Claim costs are developed from first principle using company-specific historical claim experience. Allianz incidence rates are typically credible up to age 89. Allianz data was then graded towards industry data for ages 89 and above, ultimately equating with industry experience by age 100. Continuance and utilization rates from Allianz claim data were blended with industry data when experience lacked credibility (fewer than 1,000 beginning of month claim exposures). Allianz experience was generally in line with industry data.

Future claim costs are projected on a seriatim basis for each policyholder. These claim costs are adjusted according to each policy's benefit designs, such as COLA option, elimination periods and benefit periods.

Underwriting, claim management and product design were taken into consideration when setting the assumptions. Allianz historical experience includes the positive impact of underwriting selection. No scalar increases to the claim cost assumption are made within these projections to reflect future wear off from underwriting selection.

b. Mortality:

The projected future experience uses the gender-distinct 2012 Individual Annuitant Mortality (2012 IAM). This assumption is developed based on feedback from our consultants and is consistent with

industry practice. The mortality assumption balances our morbidity assumption as neither is projected to have future improvements.

c. Persistency:

The Company’s own experience was used in the development of the lapse assumption. The experience is determined to be credible through policy duration 11. The voluntary lapse assumption is split by duration, marital status and COLA option as follows:

Duration	Individual		Married	
	Non-COLA	COLA	Non-COLA	COLA
1	9.50%	7.00%	7.70%	3.50%
2	6.80%	4.50%	5.80%	2.50%
3	4.00%	2.20%	3.80%	1.50%
4	3.00%	1.50%	2.80%	1.25%
5	2.30%	1.30%	1.00%	0.50%
6	1.60%	0.90%	1.00%	0.50%
7+	1.40%	0.75%	1.00%	0.40%

Additional lapses caused by exhaustion of benefits are also modeled using claim incidence, continuance, and utilization rates.

Based on company experience, a 1% increase to lapse rate is assumed immediately after the implementation of the rate increase to account for the election of reduced paid up benefit.

d. Expected Benefit Reduction:

Based on company experience from previous rate increases, the cash flow projection for the proposed rate increase includes an expectation of policyholders lowering their lifetime maximum benefit.

Lifetime benefit period policies are projected to reduce to a 5 year benefit period 12% of the time and to a 3 year benefit period 4% of the time. Policyholders with a non-lifetime benefit period equal to or greater than 5 years are projected to reduce to a 3 year benefit period 6% of the time.

e. Interest and Investment Income:

The interest rate of 4.0% used in the original product filing is also used in these exhibits to calculate the loss ratio. Changes in interest rates and investment income are not used to justify the rate increase.

f. Expenses:

Changes in expense are not used to justify the rate increase and are not included in this analysis. It is assumed that original expense assumptions are still appropriate.

Exhibit 2 provides additional information and justification for the assumptions used in this filing.

16. DEMONSTRATION OF SATISFACTION OF REQUIREMENTS

The projections included in this filing are produced by applying “best estimate” actuarial assumptions that reasonably reflect actual experience. All policies other than traditional-level-pay-for-life are excluded from the historical and projected experience used to calculate loss ratios. The anticipated lifetime loss ratio for policies based on Maryland specific rate history and these assumptions before the requested rate increase is 104.1% nationwide and 108.6% in Maryland based on pooled experience (Exhibit 3 & 4). The lifetime loss ratio after the requested rate increase is 95.0% nationwide and 98.4% in Maryland based on pooled experience (Exhibits 5 & 6).

The requested rate increase is not calculated to achieve a targeted loss ratio or to maintain rate stability since that would require a significantly larger rate increase. The request is meant to find a balance between the poor performance of the business and the impact of rate increases on our policyholders.

The Company is aware of COMAR 31.14.01.04A(5) and that the requested rate increase would result in an increase greater than 15%. The company would also like to advise policyholders about future rate increases and therefore the company requests an opportunity to work with the Administration to obtain a current approval of the requested premium rate increase with the agreement that the approved increase will be implemented at no more than 15% per year.

A detailed demonstration of the 58/85 calculations justifying the rate increase can be found in Exhibit 7. The justifiable rate increases under moderately adverse conditions are over 150% on a nationwide basis based on pooled experience. Moderately adverse conditions for the 58/85 calculation are defined as a 10% increase in future claim cost over the current best estimate. Even though some of the policies in this filing may be subject to pre-rate stability minimum loss ratio requirements, we are showing justification of the rate increase by holding all policies to the more stringent 58/85 calculation.

17. ANALYSIS PERFORMED TO CONSIDER A RATE INCREASE

The initial premium schedules were based on pricing assumptions that reflected the Company’s best estimate utilizing the available information at the time. Recent experience studies performed show that experience is more unfavorable than previously assumed which resulted in assumptions being updated and has led to the Company requesting a rate increase on this product. This level is in line with our request nationwide on this policy form. The Maryland specific experience lacks credibility and was not considered on its own in determining the requested rate level compared to our nationwide requests. The original pricing assumptions compared to our current assumptions are included in Exhibit 8.

18. LOSS RATIOS

The lifetime loss ratios for the policy form series split by benefit period are provided in the table below both without and with the requested rate increase. To reflect Maryland specific rate history, nationwide loss ratios are restated to reflect rate increases implemented in Maryland. For actuarial modeling purposes the requested rate increase is assumed to be effective December, 2021.

Benefit Period	Before Increase	After Increase
Maryland		
2-4 Years	89.5%	85.4%
5-8 Years	108.6%	98.5%
Lifetime	142.8%	119.6%
All	108.6%	98.4%
Nationwide		
2-4 Years	88.1%	84.2%
5-8 Years	110.9%	101.2%
Lifetime	118.3%	100.1%
All	104.1%	95.0%

19. DISTRIBUTION OF BUSINESS

The historical experience reflects the actual distribution of policies during the experience period. We used the current distribution of business as of December 31, 2020 to project future experience.

Benefit period	Nationwide						
	5% Compound COLA	4% Compound COLA	3% Compound COLA	5% Simple COLA	Two Times COLA	No COLA	Grand Total
2-Year	0.5%	0.1%	0.5%	0.3%	0.2%	0.9%	2.5%
3-Year	6.1%	1.6%	4.2%	3.7%	1.9%	7.2%	24.7%
4-Year	4.1%	1.1%	2.4%	2.0%	1.0%	2.8%	13.4%
5-Year	10.0%	2.0%	6.1%	4.3%	2.7%	7.6%	32.7%
8-Year	4.4%	0.8%	2.5%	1.8%	0.7%	2.9%	13.1%
Lifetime	4.7%	0.7%	2.1%	1.9%	0.6%	3.6%	13.6%
Grand Total	29.7%	6.4%	17.7%	14.0%	7.1%	25.1%	100.0%

Benefit period	Maryland							Proposed Rate Increase	Policyholders Impacted
	5% Compound COLA	4% Compound COLA	3% Compound COLA	5% Simple COLA	Two Times COLA	No COLA	Grand Total		
2-Year	0.6%	0.0%	0.3%	0.0%	0.0%	1.6%	2.6%	15%	8
3-Year	12.0%	0.6%	1.6%	1.0%	2.6%	6.5%	24.3%	15%	75
4-Year	4.9%	2.6%	2.6%	1.0%	0.0%	2.3%	13.3%	15%	41
5-Year	8.7%	2.3%	3.2%	2.6%	5.5%	6.1%	28.5%	25%	88
8-Year	8.7%	1.6%	0.6%	3.6%	0.6%	1.9%	17.2%	25%	53
Lifetime	8.1%	0.6%	1.0%	1.6%	0.0%	2.9%	14.2%	45%	44
Grand Total	43.0%	7.8%	9.4%	9.7%	8.7%	21.4%	100.0%	25%	309

20. ACTUARIAL CERTIFICATION

I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries, and I meet the Academy's qualifications standards for preparing health rate filings.

Claims, reserves, and policyholder data are provided by our third party administrator and our valuation actuaries. Data was reviewed for reasonableness.

I hereby certify that, to the best of my knowledge and belief:

- a. It complies with Actuarial Standards of Practice No. 8 "Regulatory Filings for Rates and Financial Projections for Health Plans";
- b. The premiums charged after the proposed rate increase is not unfairly discriminatory and the premiums after the proposed rate increase are not excessive. The proposed premium rate increase is not sufficient to prevent future rate actions by the company and benefits currently are not reasonable in relation to the premiums charged.
- c. Assumptions within this filing are based on best estimate without provision for adverse deviation while interest rates used are based on original product filing.

Allianz Life Insurance of North America

By:  _____

Noelle Destrampe, FSA MAAA
Actuary
Its: Authorized Designee

July 2, 2021

Exhibit 1
Allianz Life Insurance Company of North America
Status of Filing as of 4/12/2021
Policy Form Series : 11-P-Q, et al.

State	First Rate Increase				First Rate Increase (Follow-up)				Second Rate Increase				Cumulative Approved Increase	As of December 31, 2020	
	Amount Requested	Date Filed	Date Approved	Amount Approved	Amount Requested	Date Filed	Date Approved	Amount Approved	Amount Requested	Date Filed	Date Approved	Amount Approved		Policy Count	Annualized Premium
Alabama	38.0%	10/16/2015	5/11/2016	24.1%					23.5%				24.1%	361	\$ 748,737
Alaska	38.0%	10/21/2015	10/21/2015	38.0%									38.0%	35	\$ 117,463
Arizona	60.0%	10/16/2015	6/21/2016	26.7%									26.7%	372	\$ 832,636
Arkansas	38.0%	6/14/2016	8/3/2016	10.0%	27.0%	2/7/2019	3/26/2019	8.2%					19.0%	114	\$ 248,155
Colorado	38.0%	12/27/2017	6/2/2017	9.8%					43.1%		TBD		9.8%	515	\$ 1,121,029
Connecticut	38.0%	5/5/2016	9/22/2016	15.0%	24.0%	2/7/2019	4/3/2019	12.3%					29.1%	152	\$ 611,925
Delaware	38.0%	12/27/2018	4/1/2019	38.0%									38.0%	34	\$ 87,342
Dist. of Columbia	38.0%	1/7/2019	9/13/2019	10.0%									10.0%	28	\$ 74,351
Florida	56.4%	12/31/2019	9/24/2020	93.6%									93.6%	508	\$ 1,216,236
Georgia	38.0%	10/16/2015	3/15/2016	12.0%	25.0%	2/7/2019	5/21/2019	9.6%					22.8%	603	\$ 1,421,510
Hawaii	38.0%	10/16/2015	11/15/2018	30.2%									30.2%	23	\$ 62,137
Idaho	38.0%	10/16/2015	12/24/2015	38.0%									38.0%	122	\$ 240,546
Illinois	60.0%	10/16/2015	12/11/2017	60.0%									60.0%	711	\$ 1,699,297
Indiana	38.0%	5/22/2019	Disapproved	0.0%	87.0%	6/26/2020	9/3/2020	9.6%					9.6%	98	\$ 248,228
Iowa	38.0%	10/16/2015	4/7/2016	17.9%	22.0%	2/7/2019	3/18/2019	12.0%					32.0%	376	\$ 863,396
Kansas	60.0%	10/16/2015	7/26/2016	60.0%									60.0%	342	\$ 723,237
Kentucky	38.0%	10/16/2015	1/18/2016	31.7%									31.7%	161	\$ 381,329
Louisiana	38.0%	12/27/2018	9/23/2019	17.7%									17.7%	181	\$ 332,205
Maine	38.0%	1/12/2016	8/18/2016	33.0%									33.0%	59	\$ 157,945
Maryland	38.0%	10/16/2015	5/19/2016	15.0%	12.0%	2/7/2019	7/2/2019	11.4%	25.1%		TBD		28.1%	309	\$ 789,828
Massachusetts	38.0%	7/28/2016	9/6/2017	16.0%					45.7%		TBD		16.0%	43	\$ 154,092
Michigan	38.0%	10/16/2015	11/6/2015	38.0%									38.0%	417	\$ 917,447
Minnesota	38.0%	7/28/2016	11/4/2016	33.1%									33.1%	1,512	\$ 3,688,519
Mississippi	38.0%	10/16/2015	12/16/2015	25.0%	8.0%	2/7/2019	10/22/2019	8.0%					35.0%	102	\$ 189,453
Missouri	38.0%	11/16/2015	1/29/2016	38.0%									38.0%	639	\$ 1,338,501
Montana	38.0%	10/16/2015	6/8/2017	27.1%	12.0%	2/7/2019	5/21/2019	11.6%					41.8%	110	\$ 293,233
Nebraska	38.0%	10/16/2015	12/10/2015	38.0%									38.0%	355	\$ 776,083
Nevada	38.0%	6/14/2016	7/5/2017	30.0%					35.3%		TBD		30.0%	79	\$ 184,700
New Hampshire	38.0%	10/16/2015	2/16/2016	38.0%									38.0%	61	\$ 159,397
New Jersey	38.0%	10/16/2015	10/27/2016	20.9%									20.9%	299	\$ 886,622
New Mexico	38.0%	12/27/2018	1/28/2019	12.0%									12.0%	113	\$ 244,188
North Carolina	38.0%	10/16/2015	5/10/2016	30.0%					25.8%		TBD		30.0%	336	\$ 775,099
North Dakota	38.0%	10/16/2015	12/14/2015	15.0%	17.0%	2/7/2019	3/11/2019	11.5%					28.2%	122	\$ 248,010
Ohio	38.0%	10/16/2015	5/20/2016	15.0%	22.0%	2/7/2019	7/24/2019	11.0%					27.7%	413	\$ 947,212
Oklahoma	38.0%	10/16/2015	2/22/2016	10.0%	24.0%	2/7/2019	3/14/2019	12.1%					23.3%	226	\$ 507,761
Oregon	38.0%	10/16/2015	1/28/2016	38.0%									38.0%	259	\$ 582,662
Pennsylvania	38.0%	10/16/2015	3/30/2016	31.5%					24.6%		TBD		31.5%	513	\$ 1,310,286
Rhode Island	38.0%	12/27/2018	1/21/2020	38.0%									38.0%	74	\$ 155,322
South Carolina	38.0%	10/16/2015	2/8/2016	20.0%	14.0%	2/7/2019	11/21/2019	8.7%					30.4%	212	\$ 453,487
South Dakota	38.0%	10/16/2015	11/13/2015	38.0%									38.0%	175	\$ 404,637
Tennessee	38.0%	10/16/2015	4/5/2016	38.0%					25.3%		TBD		38.0%	347	\$ 738,743
Texas	60.0%	2/17/2016	5/11/2016	60.0%									60.0%	817	\$ 1,924,494
Utah	38.0%	6/9/2016	8/17/2016	38.0%									38.0%	41	\$ 88,076
Vermont	38.0%	12/27/2018											0.0%	32	\$ 68,244
Virginia	60.0%	10/16/2015	6/8/2016	60.0%									60.0%	643	\$ 1,924,330
Washington	38.0%	10/19/2015	6/16/2016	23.9%									23.9%	245	\$ 636,018
West Virginia	38.0%	10/16/2015	2/26/2016	38.0%									38.0%	20	\$ 47,466
Wisconsin	38.0%	12/17/2015	9/19/2016	38.0%									38.0%	299	\$ 734,076
Wyoming	38.0%	10/16/2015	2/9/2016	38.0%									38.0%	69	\$ 184,148
Total													37.9%	13,677	\$ 32,539,837

Exhibit 3
Allianz Life Insurance Company of North America
Nationwide Experience
Policy Form Series: GP2
As of 12/31/2020
No Requested Rate Increase

<u>Year</u>	<u>Earned Premium</u>	<u>Incurred Claims</u>	<u>Loss Ratio</u>
2006	\$1,459,077	\$0	0.0%
2007	\$9,844,256	\$229,386	2.3%
2008	\$21,755,784	\$126,380	0.6%
2009	\$29,691,827	\$662,935	2.2%
2010	\$32,718,689	\$846,097	2.6%
2011	\$31,599,988	\$1,625,959	5.1%
2012	\$30,802,953	\$3,273,925	10.6%
2013	\$30,210,136	\$3,153,622	10.4%
2014	\$29,635,089	\$2,472,985	8.3%
2015	\$29,089,430	\$5,787,073	19.9%
2016	\$28,564,788	\$7,266,555	25.4%
2017	\$29,320,826	\$7,548,852	25.7%
2018	\$30,430,471	\$12,907,554	42.4%
2019	\$29,719,741	\$9,337,131	31.4%
2020	\$29,618,628	\$12,897,323	43.5%
2021	\$29,059,108	\$12,329,212	42.4%
2022	\$28,307,305	\$14,621,274	51.7%
2023	\$27,347,425	\$16,698,694	61.1%
2024	\$26,354,234	\$19,134,121	72.6%
2025	\$25,330,321	\$21,835,842	86.2%
2026	\$24,275,006	\$24,857,060	102.4%
2027	\$23,190,595	\$28,186,491	121.5%
2028	\$22,077,217	\$31,958,434	144.8%
2029	\$20,940,098	\$36,004,018	171.9%
2030	\$19,780,433	\$40,325,831	203.9%
2031	\$18,603,293	\$44,677,486	240.2%
2032	\$17,411,761	\$49,068,232	281.8%
2033	\$16,215,207	\$53,103,266	327.5%
2034	\$15,018,762	\$56,799,824	378.2%
2035	\$13,831,319	\$59,947,318	433.4%
2036	\$12,659,046	\$62,608,261	494.6%
2037	\$11,513,624	\$64,465,673	559.9%
2038	\$10,401,727	\$65,725,382	631.9%
2039	\$9,333,022	\$66,236,113	709.7%
2040	\$8,313,809	\$66,193,569	796.2%
2041	\$7,353,759	\$65,230,243	887.0%
2042	\$6,456,415	\$63,581,277	984.8%
2043	\$5,626,733	\$61,193,947	1087.6%
2044	\$4,866,094	\$58,380,151	1199.7%
2045	\$4,178,067	\$54,967,324	1315.6%
2046	\$3,561,208	\$51,267,332	1439.6%
2047	\$3,014,345	\$47,285,663	1568.7%
2048	\$2,533,239	\$43,245,799	1707.1%
2049	\$2,114,899	\$39,022,523	1845.1%
2050	\$1,753,766	\$34,904,131	1990.2%
2051	\$1,445,223	\$30,927,134	2140.0%
2052	\$1,183,534	\$27,241,310	2301.7%
2053	\$964,172	\$23,753,807	2463.6%
2054	\$781,402	\$20,591,444	2635.2%
2055	\$630,407	\$17,746,312	2815.1%
2056	\$506,328	\$15,269,154	3015.7%
2057	\$405,268	\$13,039,763	3217.6%
2058	\$323,167	\$11,083,657	3429.7%
2059	\$256,803	\$9,348,302	3640.3%
2060	\$203,275	\$7,857,504	3865.5%
2061	\$160,388	\$6,561,421	4091.0%
2062	\$126,077	\$5,463,289	4333.3%
2063	\$98,745	\$4,524,847	4582.4%
2064	\$76,992	\$3,737,649	4854.6%
2065	\$59,788	\$3,067,066	5129.9%
2066	\$46,209	\$2,509,142	5429.9%
2067	\$35,551	\$2,042,130	5744.2%
2068	\$27,205	\$1,653,640	6078.4%
2069	\$20,713	\$1,321,525	6380.3%
2070	\$15,677	\$1,042,562	6650.2%
2071	\$11,802	\$811,587	6876.6%
2072	\$8,836	\$624,812	7071.6%
2073	\$6,588	\$474,994	7210.0%
2074	\$4,893	\$358,246	7322.0%
2075+	\$13,151	\$1,003,523	7630.8%

Summary of Experience at 4.0%

	<u>Earned Premium</u>	<u>Incurred Claims</u>	<u>Loss Ratio</u>
Historical (YE2020)	\$517,557,363	\$79,068,515	15.3%
Projected Future (2021 +)	\$301,730,935	\$773,447,725	256.3%
Total Lifetime Anticipated	\$819,288,298	\$852,516,240	104.1%

Exhibit 4
Allianz Life Insurance Company of North America
Maryland Experience
Policy Form Series: GP2
As of 12/31/2020
No Requested Rate Increase

<u>Year</u>	<u>Earned Premium</u>	<u>Incurred Claims</u>	<u>Loss Ratio</u>
2006	\$6,595	\$0	0.0%
2007	\$234,302	\$0	0.0%
2008	\$533,726	\$0	0.0%
2009	\$760,250	\$0	0.0%
2010	\$855,860	\$8,356	1.0%
2011	\$819,510	\$102,084	12.5%
2012	\$809,243	\$199,372	24.6%
2013	\$795,811	\$158,246	19.9%
2014	\$784,520	\$1,734	0.2%
2015	\$768,509	\$0	0.0%
2016	\$746,026	\$0	0.0%
2017	\$757,799	\$537,410	70.9%
2018	\$792,648	\$162,257	20.5%
2019	\$771,368	\$433,434	56.2%
2020	\$776,488	\$0	0.0%
2021	\$766,434	\$275,325	35.9%
2022	\$749,477	\$329,901	44.0%
2023	\$725,920	\$381,301	52.5%
2024	\$701,544	\$441,338	62.9%
2025	\$676,394	\$508,920	75.2%
2026	\$650,448	\$586,716	90.2%
2027	\$623,766	\$674,720	108.2%
2028	\$596,353	\$775,190	130.0%
2029	\$568,303	\$884,075	155.6%
2030	\$539,614	\$1,003,863	186.0%
2031	\$510,368	\$1,129,624	221.3%
2032	\$480,611	\$1,262,510	262.7%
2033	\$450,529	\$1,388,828	308.3%
2034	\$420,209	\$1,507,755	358.8%
2035	\$389,841	\$1,613,852	414.0%
2036	\$359,580	\$1,710,029	475.6%
2037	\$329,715	\$1,786,403	541.8%
2038	\$300,422	\$1,846,500	614.6%
2039	\$271,951	\$1,886,771	693.8%
2040	\$244,492	\$1,910,587	781.5%
2041	\$218,338	\$1,909,587	874.6%
2042	\$193,636	\$1,887,252	974.6%
2043	\$170,572	\$1,842,092	1080.0%
2044	\$149,226	\$1,785,887	1196.8%
2045	\$129,719	\$1,713,764	1321.1%
2046	\$112,043	\$1,629,617	1454.5%
2047	\$96,187	\$1,530,252	1590.9%
2048	\$82,042	\$1,426,425	1738.6%
2049	\$69,544	\$1,311,054	1885.2%
2050	\$58,562	\$1,196,783	2043.6%
2051	\$48,989	\$1,082,255	2209.2%
2052	\$40,692	\$968,578	2380.3%
2053	\$33,570	\$856,180	2550.4%
2054	\$27,489	\$751,903	2735.3%
2055	\$22,336	\$655,049	2932.7%
2056	\$17,999	\$567,262	3151.7%
2057	\$14,388	\$483,898	3363.3%
2058	\$11,399	\$409,141	3589.2%
2059	\$8,947	\$340,712	3808.3%
2060	\$6,951	\$281,106	4044.0%
2061	\$5,350	\$228,715	4275.0%
2062	\$4,078	\$184,115	4515.0%
2063	\$3,078	\$147,078	4778.5%
2064	\$2,298	\$116,954	5090.4%
2065	\$1,694	\$91,858	5421.1%
2066	\$1,234	\$71,723	5813.0%
2067	\$887	\$55,900	6305.1%
2068	\$628	\$43,273	6890.3%
2069	\$437	\$32,783	7499.5%
2070	\$298	\$24,371	8171.1%
2071	\$199	\$17,616	8838.9%
2072	\$130	\$12,213	9376.9%
2073	\$83	\$8,260	9932.2%
2074	\$52	\$5,462	10526.7%
2075+	\$75	\$9,606	12771.7%

Summary of Experience at 4.0%

	<u>Earned Premium</u>	<u>Incurred Claims</u>	<u>Loss Ratio</u>
Historical (YE2020)	\$13,362,851	\$1,908,806	14.3%
Projected Future (2021 +)	\$8,251,127	\$21,561,456	261.3%
Total Lifetime Anticipated	\$21,613,978	\$23,470,261	108.6%

Exhibit 5
Allianz Life Insurance Company of North America
Nationwide Experience
Policy Form Series: GP2
As of 12/31/2020
With Average 25% Rate Increase

<u>Year</u>	<u>Earned Premium</u>	<u>Incurred Claims</u>	<u>Loss Ratio</u>
2006	\$1,459,077	\$0	0.0%
2007	\$9,844,256	\$229,386	2.3%
2008	\$21,755,784	\$126,380	0.6%
2009	\$29,691,827	\$662,935	2.2%
2010	\$32,718,689	\$846,097	2.6%
2011	\$31,599,988	\$1,625,959	5.1%
2012	\$30,802,953	\$3,273,925	10.6%
2013	\$30,210,136	\$3,153,622	10.4%
2014	\$29,635,089	\$2,472,985	8.3%
2015	\$29,089,430	\$5,787,073	19.9%
2016	\$28,564,788	\$7,266,555	25.4%
2017	\$29,320,826	\$7,548,852	25.7%
2018	\$30,430,471	\$12,907,554	42.4%
2019	\$29,719,741	\$9,337,131	31.4%
2020	\$29,618,628	\$12,897,323	43.5%
2021	\$29,075,296	\$12,329,212	42.4%
2022	\$32,657,597	\$14,408,495	44.1%
2023	\$33,143,346	\$16,361,036	49.4%
2024	\$31,948,903	\$18,732,009	58.6%
2025	\$30,717,099	\$21,361,670	69.5%
2026	\$29,447,045	\$24,301,411	82.5%
2027	\$28,141,435	\$27,539,707	97.9%
2028	\$26,800,336	\$31,207,231	116.4%
2029	\$25,429,956	\$35,139,489	138.2%
2030	\$24,031,655	\$39,340,021	163.7%
2031	\$22,611,474	\$43,570,159	192.7%
2032	\$21,173,066	\$47,840,222	225.9%
2033	\$19,727,678	\$51,766,074	262.4%
2034	\$18,281,489	\$55,363,484	302.8%
2035	\$16,845,223	\$58,424,881	346.8%
2036	\$15,426,347	\$61,011,428	395.5%
2037	\$14,038,999	\$62,814,142	447.4%
2038	\$12,691,294	\$64,032,913	504.5%
2039	\$11,395,005	\$64,520,072	566.2%
2040	\$10,157,832	\$64,466,208	634.6%
2041	\$8,991,580	\$63,514,093	706.4%
2042	\$7,900,638	\$61,894,097	783.4%
2043	\$6,891,115	\$59,555,534	864.2%
2044	\$5,964,796	\$56,802,230	952.3%
2045	\$5,126,124	\$53,467,506	1043.0%
2046	\$4,373,455	\$49,855,597	1140.0%
2047	\$3,705,488	\$45,971,949	1240.6%
2048	\$3,117,199	\$42,033,044	1348.4%
2049	\$2,605,097	\$37,916,917	1455.5%
2050	\$2,162,534	\$33,903,893	1567.8%
2051	\$1,783,999	\$30,028,957	1683.2%
2052	\$1,462,579	\$26,437,922	1807.6%
2053	\$1,192,828	\$23,040,647	1931.6%
2054	\$967,800	\$19,960,853	2062.5%
2055	\$781,662	\$17,190,827	2199.3%
2056	\$628,509	\$14,779,914	2351.6%
2057	\$503,606	\$12,612,640	2504.5%
2058	\$402,001	\$10,713,536	2665.1%
2059	\$319,762	\$9,031,553	2824.5%
2060	\$253,347	\$7,588,836	2995.4%
2061	\$200,071	\$6,335,956	3166.9%
2062	\$157,397	\$5,275,118	3351.5%
2063	\$123,364	\$4,368,601	3541.2%
2064	\$96,248	\$3,607,778	3748.4%
2065	\$74,782	\$2,959,460	3957.4%
2066	\$57,824	\$2,419,736	4184.6%
2067	\$44,503	\$1,967,840	4421.8%
2068	\$34,066	\$1,592,172	4673.8%
2069	\$25,942	\$1,271,640	4901.9%
2070	\$19,638	\$1,003,018	5107.4%
2071	\$14,786	\$781,114	5282.9%
2072	\$11,069	\$601,947	5437.9%
2073	\$8,254	\$458,283	5552.6%
2074	\$6,129	\$346,180	5647.8%
2075+	\$16,483	\$973,121	5903.6%

Summary of Experience at 4.0%

	<u>Earned Premium</u>	<u>Incurred Claims</u>	<u>Loss Ratio</u>
Historical (YE2020)	\$517,557,363	\$79,068,515	15.3%
Projected Future (2021 +)	\$359,007,601	\$754,004,463	210.0%
Total Lifetime Anticipated	\$876,564,964	\$833,072,978	95.0%

Exhibit 6
Allianz Life Insurance Company of North America
Maryland Experience
Policy Form Series: GP2
As of 12/31/2020
With Average 25% Rate Increase

<u>Year</u>	<u>Earned Premium</u>	<u>Incurred Claims</u>	<u>Loss Ratio</u>
2006	\$6,595	\$0	0.0%
2007	\$234,302	\$0	0.0%
2008	\$533,726	\$0	0.0%
2009	\$760,250	\$0	0.0%
2010	\$855,860	\$8,356	1.0%
2011	\$819,510	\$102,084	12.5%
2012	\$809,243	\$199,372	24.6%
2013	\$795,811	\$158,246	19.9%
2014	\$784,520	\$1,734	0.2%
2015	\$768,509	\$0	0.0%
2016	\$746,026	\$0	0.0%
2017	\$757,799	\$537,410	70.9%
2018	\$792,648	\$162,257	20.5%
2019	\$771,368	\$433,434	56.2%
2020	\$776,488	\$0	0.0%
2021	\$766,487	\$275,325	35.9%
2022	\$854,334	\$325,010	38.0%
2023	\$881,893	\$374,257	42.4%
2024	\$852,685	\$432,671	50.7%
2025	\$822,528	\$498,358	60.6%
2026	\$791,393	\$573,898	72.5%
2027	\$759,348	\$659,273	86.8%
2028	\$726,395	\$756,694	104.2%
2029	\$692,646	\$862,178	124.5%
2030	\$658,096	\$978,240	148.6%
2031	\$622,845	\$1,100,052	176.6%
2032	\$586,946	\$1,228,792	209.4%
2033	\$550,621	\$1,351,163	245.4%
2034	\$513,979	\$1,466,264	285.3%
2035	\$477,247	\$1,568,798	328.7%
2036	\$440,612	\$1,661,454	377.1%
2037	\$404,420	\$1,734,733	428.9%
2038	\$368,885	\$1,792,110	485.8%
2039	\$334,312	\$1,830,059	547.4%
2040	\$300,930	\$1,851,928	615.4%
2041	\$269,097	\$1,849,574	687.3%
2042	\$238,992	\$1,826,396	764.2%
2043	\$210,842	\$1,781,184	844.8%
2044	\$184,749	\$1,725,363	933.9%
2045	\$160,862	\$1,654,261	1028.4%
2046	\$139,177	\$1,571,850	1129.4%
2047	\$119,685	\$1,475,121	1232.5%
2048	\$102,260	\$1,374,307	1343.9%
2049	\$86,828	\$1,262,543	1454.1%
2050	\$73,238	\$1,151,927	1572.9%
2051	\$61,367	\$1,041,161	1696.6%
2052	\$51,056	\$931,360	1824.2%
2053	\$42,188	\$822,788	1950.3%
2054	\$34,599	\$721,974	2086.7%
2055	\$28,156	\$628,378	2231.8%
2056	\$22,722	\$543,661	2392.6%
2057	\$18,188	\$463,421	2547.9%
2058	\$14,429	\$391,543	2713.5%
2059	\$11,339	\$325,825	2873.6%
2060	\$8,819	\$268,709	3046.8%
2061	\$6,794	\$218,595	3217.7%
2062	\$5,181	\$175,967	3396.3%
2063	\$3,912	\$140,564	3593.3%
2064	\$2,920	\$111,759	3827.6%
2065	\$2,152	\$87,752	4077.1%
2066	\$1,566	\$68,483	4373.5%
2067	\$1,124	\$53,331	4745.3%
2068	\$795	\$41,241	5187.5%
2069	\$552	\$31,219	5650.6%
2070	\$376	\$23,204	6166.6%
2071	\$251	\$16,779	6685.9%
2072	\$164	\$11,641	7112.9%
2073	\$104	\$7,881	7559.2%
2074	\$65	\$5,219	8041.0%
2075+	\$94	\$9,193	9823.6%

Summary of Experience at 4.0%

	<u>Earned Premium</u>	<u>Incurred Claims</u>	<u>Loss Ratio</u>
Historical (YE2020)	\$13,362,851	\$1,908,806	14.3%
Projected Future (2021 +)	\$9,852,079	\$20,924,599	212.4%
Total Lifetime Anticipated	\$23,214,931	\$22,833,404	98.4%

Exhibit 7
58/85 Calculations
Allianz Life Insurance of North America
Nationwide Experience
Policy Form Series: GP2

a)	The accumulated value of the initial earned premium is 58% of this value:	506 293
b)	The accumulated value of prior premium rate schedule increases is 85% of this value:	12 10
c)	The present value of future projected initial earned premiums is 58% of this value:	257 149
d)	The present value of future projected earned premium from prior premium rate schedule increases is PV of future projected EP from 25% increase: Combined: 85% of this value:	45 57 102 87
e)	The accumulated value of past incurred claims is The present value of future projected incurred claims* is sum of these 2 values:	79 829 908
f)	The sum of a,b,c and d is This amount is less than e)	539 908

*Projected incurred claims contain a 10% margin for moderately adverse experience.