Allianz Life Insurance Company of North America

Home Office: 5701 Golden Hills Drive Minneapolis, MN 55416-1297

Actuarial Memorandum Supporting 12% Aggregate Premium Rate Increase On Individual Long-Term Care Insurance Policy Forms

1. TYPE OF CHANGE

Allianz Life Insurance Company of North America (Company) proposes the following rate revisions for these riders (collectively referred to as COLA riders) attached to the following policy forms issued in Maryland.

Generation Protector Policy Form Series: 10-P-Q-MD et al.

10-R3 5% LIFETIME COMPOUND BENEFIT INCREASE RIDER – 15% rate increase

10-R2 4% LIFETIME COMPOUND BENEFIT INCREASE RIDER – 15% rate increase

10-R1 3% LIFETIME COMPOUND BENEFIT INCREASE RIDER – 10% rate increase

10-R4 TWO TIMES COMPOUND BENEFIT INCREASE RIDER - 10% rate increase

10-R5 SIMPLE BENEFIT INCREASE RIDER – 10% rate increase

10-R22 TWO TIMES COMPOUND PLUS RIDER - 10% rate increase

Base Premium Rates – no rate change

The result of this rate increase on the above COLA riders, if approved, is similar to a 12% aggregate rate increase on the base policy form and associated rider nationally. In order to comply with COMAR 31.14.01.04A(5), the requested rate increase is being capped at 15%.

2. PURPOSE OF FILING

This actuarial memorandum has been prepared for the purpose of demonstrating that a premium rate increase is justified under rate stabilization regulation based on the Long Term Care Model Regulation and meets the minimum requirements in the statues of Maryland.

3. LIMITATIONS AND EXCLUSIONS

This actuarial memorandum is intended to support a 12% aggregate premium rate increase described above on this plan of insurance and it is not appropriate to use for any other purposes.

4. HISTORY OF RATE REVISION

There have been two previous rate increases. The first was a 15% increase approved on 11/13/2012, SERFF Tracking Number ALLB-128730821. The second was a 15% increase

approved on 5/19/2016, SERFF Tracking Number ALLB-130163702. A history of rate revisions for this product is included in the Exhibit 1.

5. SCOPE AND APPLICABILITY

This filing applies to active premium paying policies issued in this state for the policy forms listed above. These policy forms are no longer being marketed. The rate changes will only apply to applicable riders and there are no changes to the base premium rates. 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 plan. Plans covers 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. Lower their lifetime maximum benefit,
- 2. Lower their daily benefit,
- 3. Increase their elimination period.
- 4. Reduce or cancel COLA riders.

To further minimize the impact to policyholders: As a part of this rate increase, 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.

Example of a COLA rider reduction:

Policyholder with a 5% compound inflation rider can minimize the size of the rate increase reducing to a 5% simple inflation protection rider. Unless policyholders reduce their daily benefit amounts, their current daily benefits will not change as the past COLA increases will be fully vested, and they will receive a 5% simple inflation protection going forward based on their original daily benefit amount. Policyholders who elect to reduce or cancel their COLA benefit riders will likely see an overall decrease in their premiums.

57 Single Female, \$150 Original Daily Benefit, 100% HCC, 5yr F 5% compound COLA, Preferred UW, 13 th Policy Duration	3P
Original Annual Premium (5% Compound COLA)	\$2,497
Annual Premium (15% rate increase, no COLA change)	\$2,872
Annual Premium (10% rate increase, change to 5% simple COLA)	\$2,152
Premium Reduction from COLA change	-\$719

57 Single Female, \$150 Original Daily Benefit, 100% HCC, Lifetim 5% compound COLA, Preferred UW, 13 th Policy Duration	e BP		
5% compound COLA, Preferred UW, 13 Policy Duration			
Original Annual Premium (5% Compound COLA)	\$3,358		
Annual Premium (15% rate increase, no COLA change)			
Annual Premium (10% rate increase, change to 5% simple COLA)	\$2,894		
Premium Reduction from COLA change	-\$967		

Example of a COLA Cancellation:

<u>T</u> · · · · · · · · · · · · · · · · · · ·	
57 Single Female, \$150 Original Daily Benefit, 100% HCC, 5yr E	3P
5% compound COLA, Preferred UW, 13 th Policy Duration	
Original Daily Benefit	\$150
Current Daily Benefit = 150 * 1.05^13	\$283
Daily Benefit after canceling COLA rider	
(cancelled within election window)	\$283

Example of Daily Benefit Reduction:

57 Single Female, \$150 Original Daily Benefit, 100% HCC, 5yr F 5% compound COLA, Preferred UW, 13 th Policy Duration	3P
Original Daily Benefit	\$150
Current Daily Benefit = 150 * 1.05^10	\$283
Reduced Daily benefit from 150 to 100 = 100 * 1.05^13	\$189

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

These forms were sold from 2004 to 2006 in Maryland, and marketed nationally from 2003 through 2009. These forms are 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

Maryland Generation Protector Policy Forms:

Current Average Annual Premium:	\$2,461	(700 Policies Inforce)	
Proposed (12% increase):	\$2,756		

National Generation Protector Policy Forms:

2017 Annual Premium: \$2,251 (31,213 Policies Inforce)	
--	--

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 reserve 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 88. Allianz data was then graded towards industry data for ages 88 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:

	Indiv	idual	Marı	ried
Duration	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 around a 7% reduction in COLA benefits and a 4% cancellation in COLA benefits with the assumption varying by COLA type. Past COLA benefit increases are modeled as 100% vested in the loss ratio projection.

e. Interest and Investment Income:

Interest rate of 4.5% 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. The anticipated lifetime loss ratio for policies based on these assumptions before the requested rate increase is 116.4% nationwide and 119.1% in Maryland (Exhibit 3 & 4). The lifetime loss ratio after the requested rate increase is 110.3% nationwide and 111.8% in Maryland (Exhibits 5 & 6). Loss ratios for Maryland policyholders are slightly higher than national policies mainly due to the difference in distribution of business mix.

The 12% rate increase is not calculated to achieve a targeted loss ratio or to maintain rate stability. The Company capped the rate increase requests for individual riders at 15% to be in

accordance with COMAR 31.14.01.04A(5). This rate increase is needed to help bring premiums to more adequate levels and closer to rate levels requested nationwide. Due to requesting a lower increase than is actuarially justified, the Company will consider filing additional future rate increases as long as it is actuarially justified. The Company will continue to monitor the experience for this policy form and incorporate that experience in future rate reviews.

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 125% on a nationwide basis. Moderately adverse conditions for the 58/85 calculation are defined as a 10% increase in future claim cost over the current best estimate.

The historical actual to expected loss ratio is well above 100% (Exhibit 3).

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. Experience studies performed this past year showed 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 to help bring premiums closer to rate levels requested nationwide. The original pricing assumptions compared to the assumptions used for the previous rate increase filing on this product and to our current assumptions are included in the Exhibit 8.

18. LOSS RATIOS

The analysis below breaks down the lifetime loss ratio by each assumption update to the original pricing assumption. Rate increases implemented in all states are removed from projected future experience. To reflect Maryland rate history, rate increases implemented in Maryland are added back to the projected future experience under the best estimate assumptions. For actuarial modeling purposes the requested rate increase of 12% is assumed to be effective July, 2019.

	Natio	onwide Experienc	e Without	Rate Increase						
	<u>Earned</u> <u>Premium</u>	Incurred Claims	<u>Loss</u> <u>ratio</u>	Marginal Increase to LR						
Original Loss Ratio			66.0%							
Updated Morbidity	1,510,912,378	1,467,599,850	97.1%	47.2%						
Updated Mortality & Morbidity	1,554,181,147	1,772,556,340	114.1%	17.4%						
Updated Lapse & Mortality & Morbidity	1,603,850,118	2,104,717,163	131.2%	15.1%						
Best Estimate Assumptions (with past MD rate increase):	1,807,530,500	2,104,717,163	116.4%	76.4%						
	Nationwide Experience After 12% Rate Increase									
	<u>Earned</u> <u>Premium</u>	<u>Incurred</u> <u>Claims</u>	<u>Loss</u> ratio	Marginal Increase to LR						
Best Estimate Assumptions:	1,841,924,269	2,031,481,715	110.3%	67.1%						

Premium reflects current rate level in Maryland.

Based on historical experience combined with projected future experience.

Premiums and Claims cash flows are discounted at original pricing interest rate (4.5%).

Loss Ratio by COLA riders prior to the rate increase:

	5%	4%	Other	No	Grand
National	Compound	Compound	COLA	COLA	Total
Proposed Rate Increase	15.0%	15.0%	10.0%	0.0%	12.0%
Lifetime LR No Rate Increase	140.0%	120.6%	109.8%	80.3%	116.4%
Lifetime LR After Increase	129.7%	112.5%	105.4%	80.3%	110.3%

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, 2017 to project future experience.

		Nationwide										
	5%	4%	Other	No	Grand							
Benefit period	Compound COLA	Compound COLA	COLA	COLA	Total							
2-Year	0.5%	0.1%	0.9%	1.0%	2.4%							
3-Year	5.7%	0.9%	7.1%	4.6%	18.3%							
4-Year	6.4%	1.2%	5.3%	2.4%	15.2%							
5-Year	11.9%	2.0%	8.7%	4.9%	27.4%							
8-Year	5.5%	0.9%	3.5%	1.7%	11.6%							
Lifetime	12.0%	1.4%	7.8%	3.8%	25.0%							
Grand Total	42.0%	6.4%	33.2%	18.4%	100.0%							

		Maryland									
Benefit period	5% Compound	4% Compound	Other COLA	No COLA	Grand Total						
2-Year	0.3%	0.0%	0.7%	2.4%	3.4%						
3-Year	8.1%	1.1%	4.3%	3.0%	16.6%						
4-Year	7.0%	2.0%	5.6%	1.4%	16.0%						
5-Year	12.1%	1.7%	9.1%	3.7%	26.7%						
8-Year	7.6%	0.4%	3.3%	0.1%	11.4%						
Lifetime	16.0%	1.7%	6.1%	2.0%	25.9%						
Grand Total	51.1%	7.0%	29.1%	12.7%	100.0%						
Proposed Rate Increase	15%	15%	10%	0%	12%						
Policyholder Impacted	358	49	204	89	700						

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.

Noelle Destrampe, FSA MAAA

Actuary

Allianz Life Insurance of North America

5701 Golden Hills Drive

Minneapolis, MN 55416-1297

Phone: (763) 765-7789

Email: Noelle.Destrampe@AllianzLife.com

February 7, 2019

Exhibit 1 Allianz Life Insurance Company of North America Status of Filings as of February 07, 2019 Policy Form Series : 10-P-Q, et al.

State AL Alabama AK Alaska AZ Arizona AR Arkansas CO Colorado CT Connectio DE Delaware DC Dist. of C L Florida Georgia H Hawaii D Idaho L Illinois Indiana A Iowa KS Kansas KA Louisiana ME-IR Maine - L ME-RS Maine - R MD Maryland MA Massach MI Michigan MM Missouni MS Missouni MG-RS Missouni MG-RS Missouni MT Montana	as as do do tre re Columbia	Amount Requested 25.0% 25.0% 25.0% 30.0% 25.0% 20.0% 25.0% 25.0% 25.0% 25.0% 25.0% 25.0% 25.0% 25.0% 25.0% 25.0%	Date Filed 10/29/2012 20/1/2013 10/16/2015 5/17/2013 5/20/2014 10/29/2012 6/3/2013 10/31/2012 10/31/2012	Date Approved 12/6/2012 11/16/2012 3/27/2013 12/17/2015 8/1/2013 Disapproved 3/15/2013 11/26/2013	Amount Approved 20.0% 25.0% 75.0% 25.0% 25.0% 0.0% 15.0%	Amount Requested 39.0% 39.0% Not Filing 39.0% 39.0% 39.0%	Date Filed 10/16/2015 10/21/2015 12/27/2017 5/5/2016	Date Approved 5/11/2016 10/21/2015	Amount Approved 18.3% 39.0%	Amount Requested	Date Filed	Date Approved	Amount Approved	Approved Increase 42.0% 73.8%	Policy Count 487 57	Pren	ıalized mium
AL Alabama AK Alaska AZ Arizona AR Arkansas CO Colorado ED Delaware CO Dist. of C ED Florida ABA Georgia HI Hawaii D Idaho L Illinois N Indiana A Iowa Kansas CY Kentucky A Louisiana ME-LR Maine - L Mayland MA Massach MI Michigan MN Minnesot MS Mississip MO-LR Missouni MO-RS Missouni	as as do do tre re Columbia	25.0% 25.0% 75.0% 30.0% 25.0% 25.0% 20.0% 25.0% 25.0% 25.0% 25.0% 25.0%	10/29/2012 10/25/2012 2/1/2013 10/16/2015 5/17/2013 5/20/2014 10/29/2012 6/3/2013 10/31/2012	12/6/2012 11/16/2012 3/27/2013 12/17/2015 8/1/2013 Disapproved 3/15/2013	20.0% 25.0% 75.0% 25.0% 25.0% 0.0% 15.0%	39.0% 39.0% Not Filing 39.0% 39.0%	10/16/2015 10/21/2015 12/27/2017	5/11/2016 10/21/2015	18.3%	Requested	Filed	Approved	Approved	42.0%	487	\$ 1,	
AK Alaska AZ Arizona AR Arkansas CO Colorado CT Connectio DE Delaware DC Dist. of C L Florida GA Georgia H Hawaii D Idaho L Illinois Indiana A Iowa KS Kansas KY Kentucky A Louisiana ME-LR Maine-L ME-RS Maryland MA Massach MI Michigan MM Mississipi MM Mississipi MO-LR Missouni MO-RS Missouni	as as do do tre re Columbia	25.0% 75.0% 30.0% 25.0% 25.0% 20.0% 25.0% 25.0% 25.0% 25.0% 25.0%	10/25/2012 2/1/2013 10/16/2015 5/17/2013 5/20/2014 10/29/2012 6/3/2013 10/31/2012	11/16/2012 3/27/2013 12/17/2015 8/1/2013 Disapproved 3/15/2013 11/26/2013	25.0% 75.0% 25.0% 25.0% 0.0% 15.0%	39.0% Not Filing 39.0% 39.0%	10/21/2015	10/21/2015									
AZ Arizona AR Arkansas CO Colorado CT Connectic DE Delaware CC Dist. of C L Florida GA Georgia H Hawaii D Idaho L Illinois N Indiana A Iowa AS Kansas CY Kentucky AA Louisiana ME-IR Maine - I ME-RS Maine - R MD Maryland MA Massach MI Michigan MN Mississipi MS Mississipi MO-IR Missouni MO-RS Missouni	as do tticut re Columbia	75.0% 30.0% 25.0% 25.0% 20.0% 25.0% 25.0% 25.0% 25.0% 25.0%	2/1/2013 10/16/2015 5/17/2013 5/20/2014 10/29/2012 6/3/2013 10/31/2012	3/27/2013 12/17/2015 8/1/2013 Disapproved 3/15/2013 11/26/2013	75.0% 25.0% 25.0% 0.0% 15.0%	Not Filing 39.0% 39.0%	12/27/2017		39.0%					73.8%	57		,042,498
AR Arkansas CO Colorado ET Connectic Delaware CC Dist. of C Florida AA Georgia HI Hawaii D Idaho L Illinois N Indiana AA Iowa CS Kansas CY Kentucky AA Louisiana ME-LR Maine - L ME-RS Maine - R MD Maryland MA Massach MI Michigan MN Mississipi MN Mississipi MN Mississipi MO-LR Missouni MO-RS Missouni	as do tticut re Columbia	30.0% 25.0% 25.0% 20.0% 25.0% 25.0% 25.0% 25.0%	10/16/2015 5/17/2013 5/20/2014 10/29/2012 6/3/2013 10/31/2012	12/17/2015 8/1/2013 Disapproved 3/15/2013 11/26/2013	25.0% 25.0% 0.0% 15.0%	39.0% 39.0%		6/2/2017						77.00/			186,829
CO Colorado CT Connectio DE Delaware DC Dist. of C L Florida Georgia H Hawaii D Idaho L Illinois N Indiana A Iowa Kansas KY Kansas KY Kentucky A Louisiana ME-LR Maine - R MD Maryland MA Massach MI Michigan MN Minnieson MS Mississipi MO-LR Missouni MO-RS Missouni	do eticut re Columbia	25.0% 25.0% 20.0% 25.0% 25.0% 25.0% 25.0%	5/17/2013 5/20/2014 10/29/2012 6/3/2013 10/31/2012	8/1/2013 Disapproved 3/15/2013 11/26/2013	25.0% 0.0% 15.0%	39.0%		6/2/2017			2.7.7242			75.0%	639		,748,509
CT Connectic DE Delaware DC Dist. of C L Florida GA Georgia H Hawaii D Idaho L Illinois N Indiana A Iowa KS Kansas CY Kentucky AA Louisiana ME-LR Maine - L ME-RS Maine - R MD Maryland MA Massach MI Michigan MN Minnesot MS Mississipi MO-LR Missouni MO-RS Missouni	eticut re Columbia	25.0% 20.0% 25.0% 25.0% 25.0% 25.0%	5/20/2014 10/29/2012 6/3/2013 10/31/2012	Disapproved 3/15/2013 11/26/2013	0.0% 15.0%	39.0%		6/2/2017		9.0%	2/7/2019			25.0%	294		540,293
DE Delaware DC Dist. of C T I Florida GA Georgia II Hawaii D Hawaii D Hamoi L Illinois N Indiana A Iowa SS Kansas KY Kentucky A Louisiana ME-IR Maine - I ME-RS Maine - R MD Maryland MA Massach MI Michigan MN Mississip MS Mississip MO-IR Missouni MO-RS Missouni	re Columbia	20.0% 25.0% 25.0% 25.0% 25.0%	10/29/2012 6/3/2013 10/31/2012	3/15/2013 11/26/2013	15.0%		5/5/2016		10.4%					38.0%			,294,562
DC Dist. of C L Florida Georgia HI Hawaii D Idaho L Illinois N Indiana A Iowa KS Kansas KY Kentucky A Louisiana ME-LR Maine - R MD Maryland MA Massach MI Michigan MN Minnesot MS Mississip MO-LR Missouni MO-RS Missouni	Columbia	25.0% 25.0% 25.0% 25.0%	6/3/2013 10/31/2012	11/26/2013		39.0%		9/22/2016	15.0%	29.0%	2/7/2019			15.0%	220		602,597
EL Florida Georgia H Hawaii D Hdaho L Illinois N Indiana N Iowa KS Kansas CY Kentucky AA Louisiana ME-LR Maine - L ME-RS Maine - R MD Maryland MA Massach MI Michigan MN Minnesot MS Mississipi MO-LR Missouni MO-RS Missouni	1	25.0% 25.0% 25.0%	10/31/2012				12/27/2018							15.0%	104		189,772
GA Georgia II Hawaii D Idaho L Illinois N Indiana A Iowa CS Kansas CY Kentucky A Louisiana ME-IR Maine - I ME-RS Maine - R MD Maryland MA Massach MI Michigan MN Minnesot MS Mississip MO-IR Missouni MO-RS Missouni		25.0% 25.0% 25.0%	10/31/2012			39.0%	1/7/2019							0.0%	49	\$	96,093
HI Hawaii D Idaho L Illinois N Indiana A Iowa KS Kansas YY Kentucky A Louisiana ME-LR Maine - R MD Maryland MA Massach MI Michigan MN Minnesot MS Mississip MO-LR Missouni MO-RS Missouni		25.0% 25.0%			7.3%	TBD								7.3%	1,238		,677,059
D Idaho L Illinois N Indiana A Iowa CS Kansas YY Kentucky A Louisiana ME-LR Maine - L ME-RS Maine - R MD Maryland MA Massach MI Michigan MN Minnesot MS Missisnii MO-LR Missouni MO-RS Missouni		25.0%	10/31/2012	2/8/2013	15.0%	39.0%	10/16/2015	3/15/2016	12.0%	27.0%	2/7/2019			28.8%	1,283		,831,248
L Illinois N Indiana A Iowa CS Kansas CY Kentucky A Louisiana ME-LR Maine - L ME-RS Maine - R MD Maryland MA Massach MI Michigan MN Minnesot MS Mississip MO-LR Missouni MO-RS Missouni				7/19/2013	9.5%	39.0%	10/16/2015	11/15/2018	38.8%					52.0%			920,449
N Indiana A Iowa CS Kansas CY Kentucky A Louisiana ME-LR Maine - L ME-RS Maine - R MD Maryland MA Massach MI Michigan MN Minnesot MS Mississip MO-LR Missouri MO-RS Missouri		100 00/-	11/2/2012	2/21/2013	10.0%	39.0%	10/16/2015	12/24/2015	39.0%					52.9%	177		423,773
A Iowa CS Kansas CY Kentucky A Louisiana ME-LR Maine - R MD Maryland MA Massach MI Michigan MN Minsissini MS Mississini MO-LR Missouri MO-RS Missouri		100.076	11/6/2012	12/8/2014	100.0%	Not Filing								100.0%	1,387		,475,148
CS Kansas CY Kentucky A Louisiana ME-LR Maine - L ME-RS Maine - R MD Maryland MA Massach MI Michigan MN Minnesot MS Mississip MO-LR Missouni MO-RS Missouni						39.0%								0.0%	300		561,267
XY Kentucky A Louisiana ME-LR Maine - L ME-RS Maine - R MD Maryland MA Massach MI Michigan MN Minnesot MS Mississip MO-LR Missoun MO-RS Missoun		25.0%	11/8/2012	9/10/2013	15.0%	39.0%	10/16/2015	4/7/2016	17.9%	21.0%	2/7/2019			35.6%	833		,729,886
A Louisiana ME-LR Maine - L ME-RS Maine - R MD Maryland MA Massach MI Michigan MN Minnesot MS Mississip MO-LR Missoun MO-RS Missoun		25.0%	10/29/2012	3/29/2013	10.0%	61.5%	10/16/2015	7/26/2016	61.5%					77.7%	635		,114,620
ME-LR Maine - L ME-RS Maine - R MD Maryland MA Massach MI Michigan MN Mississip MO-LR Missouri MO-RS Missouri		25.0%	11/7/2012	2/4/2013	18.3%	39.0%	10/16/2015	1/18/2016	35.9%					60.7%	348		781,559
ME-RS Maine - R MD Maryland MA Massach MI Michigan MN Minnesot MS Mississip MO-LR Missouri MO-RS Missouri						39.0%	12/27/2018							0.0%	330		496,544
MD Maryland MA Massach MI Michigan MN Minnesot MS Mississip MO-LR Missouri MO-RS Missouri		25.0%	12/19/2012	4/3/2013	23.5%	39.0%	1/12/2016	8/18/2016	36.1%					68.1%	133	\$	313,285
MA Massachi MI Michigan MN Minnesot MS Mississip MO-LR Missouri MO-RS Missouri		25.0%	11/16/2012	1/18/2013	25.0%	39.0%	1/12/2016	8/18/2016	45.5%					81.9%			419,685
MI Michigan MN Minnesot MS Mississip MO-LR Missouri MO-RS Missouri		15.0%	10/29/2012	11/13/2012	15.0%	39.0%	10/16/2015	5/19/2016	15.0%	12.0%	2/7/2019			32.3%	700		,722,515
MN Minnesot MS Mississip MO-LR Missouri MO-RS Missouri		30.0%	5/5/2016	9/6/2017	15.0%	TBD								15.0%	929		,221,960
MS Mississip MO-LR Missouri MO-RS Missouri		25.0%	10/25/2012	11/26/2012	25.0%	39.0%	10/16/2015	11/6/2015	39.0%					73.8%	589		,473,672
MO-LR Missouri MO-RS Missouri		30.0%	2/11/2015	1/22/2016	30.0%	Not Filing								30.0%			,566,966
MO-RS Missouri		25.0%	11/8/2012	3/11/2013	25.0%	39.0%	10/16/2015	12/16/2015	25.0%	6.0%	2/7/2019			56.3%	136		288,166
		25.0%	6/4/2013	7/16/2013	25.0%	39.0%	11/16/2015	1/29/2016	39.0%					73.8%	334		755,162
AT Montana		25.0%	5/17/2013	9/3/2013	25.0%	39.0%	10/16/2015	1/29/2016	39.0%					73.8%	500		,130,063
		25.0%	10/25/2012	12/3/2012	10.0%	39.0%	10/16/2015	6/8/2017	14.3%	23.0%	2/7/2019			25.7%			279,604
Nebraska	I .	25.0%	10/31/2012	6/19/2013	10.0%	39.0%	10/16/2015	12/10/2015	39.0%					52.9%	510		,194,551
Nevada	I .	30.0%	10/16/2015	2/8/2016	30.0%	Not Filing								30.0%	112		185,918
NH New Ham		25.0%	12/7/2012	2/12/2013	25.0%	39.0%	10/16/2015	2/16/2016	39.0%					73.8%			342,879
NJ New Jerse		25.0%	3/20/2013	3/13/2014	15.0%	39.0%	10/16/2015	10/27/2016	23.1%					41.6%	706		,002,354
NM New Mexi		25.0%	11/8/2012	Disapproved	0.0%	39.0%	12/27/2018	1/28/2019	15.0%					15.0%	256		460,805
NC North Car		25.0%	11/21/2012	6/18/2013	25.0%	39.0%	10/16/2015	5/10/2016	30.0%					62.5%			,603,634
ND North Dal	Dakota	25.0%	10/31/2012	1/9/2013	15.0%	39.0%	10/16/2015	12/14/2015	15.0%	17.0%	2/7/2019			32.3%	104		212,116
OH Ohio	- 1	25.0%	11/7/2012	4/23/2013	25.0%	39.0%	10/16/2015	5/20/2016	15.0%	25.0%	2/7/2019			43.8%	944		,106,557
OK Oklahoma		25.0%	11/8/2012	1/3/2013	25.0%	39.0%	10/16/2015	2/22/2016	10.0%	25.0%	2/7/2019			37.5%			711,580
OR Oregon		25.0%	11/7/2012	3/26/2014	25.0%	39.0%	10/16/2015	1/28/2016	39.0%					73.8%	522		,193,462
PA Pennsylva	Ivania	25.0%	11/16/2012	2/12/2013	20.0%	39.0%	10/16/2015	3/30/2016	31.5%					57.8%	1,541	\$ 3,	,711,363
II Rhode Isl	Island					39.0%	12/27/2018							0.0%	82	\$	159,538
C South Car	Carolina	25.0%	11/5/2012	2/22/2013	20.0%	39.0%	10/16/2015	2/8/2016	20.0%	16.0%	2/7/2019			44.0%	420		911,829
SD South Dal	Dakota	25.0%	11/7/2012	12/26/2012	25.0%	39.0%	10/16/2015	11/13/2015	39.0%					73.8%	237	\$	590,017
Tennesse	see	25.0%	11/7/2012	3/20/2013	25.0%	39.0%	10/16/2015	4/5/2016	39.0%					73.8%	670	\$ 1,	,395,262
TX Texas	- 1	75.0%	5/6/2013	9/23/2013	75.0%	Not Filing								75.0%	3,017	\$ 8,	,101,844
JT Utah	- 1	30.0%	10/19/2015	12/15/2015	30.0%	Not Filing								30.0%	166	\$	339,740
T Vermont	ıt					39.0%	12/27/2018							0.0%	146	\$	285,184
/A Virginia	ı	56.3%	11/8/2012	6/8/2016	56.3%	Not Filing								56.3%	1,813	\$ 3,	,467,896
VA Washingt		25.0%	11/8/2012	4/12/2013	25.0%	39.0%	10/19/2015	6/16/2016	25.8%					57.3%			,856,302
VV West Virg	irginia	25.0%	11/16/2012	1/30/2013	25.0%	39.0%	10/16/2015	2/26/2016	39.0%					73.8%	69	\$	169,515
VI Wisconsi		25.0%	11/7/2012	2/6/2013	25.0%	39.0%	12/17/2015	9/19/2016	39.0%					73.8%	517		,163,859
WY Wyoming	nsin	25.0%	10/23/2012	2/4/2013	25.0%	39.0%	10/16/2015		39.0%		l			73.8%	71		211,907
*LR = pc						39.070	10/10/2013	2/9/2016						13.670			

^{*} LR = policies issued prior to the effective date of rate stability in that state.

RS = policies issued on or after the effective date of rate stability in that state.

Exhibit 3 Allianz Life Insurance Company of North America Nationwide Experience Policy Form Series : 10-P-Q As of 12/31/2017 No Rate Increase

<u>Year</u>	Earned Premium		Loss Ratio	Pricing Expected	Pricing Expected Incurred Claims		Actual to Expected
2003	\$922.605	0.0	0.004	\$997.156	\$14.010	1 704	0.00
2003 2004	\$822,695 \$15,643,649	\$0 \$446,120	0.0% 2.9%	\$887,156 \$16,766,167	\$14,919 \$291,012	1.7% 1.7%	0.00 1.64
2005	\$37,016,974	\$801,099	2.2%	\$39,542,215	\$846,723	2.1%	1.01
2006	\$57,831,417	\$4,847,506	8.4%	\$61,475,073	\$1,652,078	2.7%	3.12
2007	\$66,155,118	\$4,082,197	6.2%	\$69,764,011	\$2,542,796	3.6%	1.69
2008	\$66,470,123	\$6,023,000	9.1%	\$69,359,046	\$3,534,203	5.1%	1.78
2009	\$64,900,708	\$7,995,795	12.3%	\$67,250,546	\$4,709,913	7.0%	1.76
2010 2011	\$63,167,319 \$61,705,268	\$8,115,639 \$9,700,557	12.8% 15.7%	\$64,912,298 \$62,554,366	\$6,065,235 \$7,536,324	9.3% 12.0%	1.38 1.30
2012	\$60,575,880	\$13,657,718	22.5%	\$60,183,760	\$9,090,123	15.1%	1.49
2013	\$59,497,380	\$13,878,904	23.3%	\$57,800,896	\$10,703,161	18.5%	1.26
2014	\$62,780,988	\$19,029,263	30.3%	\$55,412,608	\$12,390,421	22.4%	1.36
2015	\$65,841,467	\$24,075,646	36.6%	\$53,021,484	\$14,130,535	26.7%	1.37
2016	\$64,549,020	\$29,328,734	45.4%	\$50,629,810	\$15,940,956	31.5%	1.44
2017	\$67,473,710	\$36,888,091	54.7%	\$48,241,659	\$17,866,490	37.0%	1.48
2018 2019	\$68,575,488 \$67,057,285	\$27,105,035 \$31,350,418	39.5% 46.8%				
2020	\$64,891,408	\$35,420,260	54.6%				
2021	\$62,631,081	\$40,235,428	64.2%				
2022	\$60,356,331	\$46,021,404	76.2%				
2023	\$57,994,449	\$52,707,698	90.9%				
2024	\$55,580,030	\$60,470,730	108.8%				
2025	\$53,127,373	\$68,916,675	129.7%				
2026 2027	\$50,622,598 \$48,053,996	\$78,082,650 \$87,653,942	154.2% 182.4%				
2028	\$45,438,089	\$97,815,875	215.3%				
2029	\$42,806,350	\$107,990,751	252.3%				
2030	\$40,177,039	\$118,348,587	294.6%				
2031	\$37,553,923	\$128,437,662	342.0%				
2032	\$34,922,726	\$138,536,323	396.7%				
2033	\$32,325,715	\$147,719,354	457.0%				
2034 2035	\$29,763,813 \$27,257,601	\$156,261,859 \$163,558,425	525.0% 600.0%				
2036	\$24,808,351	\$169,933,972	685.0%				
2037	\$22,458,700	\$174,386,824	776.5%				
2038	\$20,201,800	\$177,391,747	878.1%				
2039	\$18,065,316	\$178,571,781	988.5%				
2040	\$16,052,142	\$178,448,748	1111.7%				
2041 2042	\$14,179,743	\$176,074,488 \$172,187,863	1241.7%				
2042	\$12,446,098 \$10,851,193	\$172,187,863 \$166,564,023	1383.5% 1535.0%				
2044	\$9,400,541	\$159,961,657	1701.6%				
2045	\$8,094,263	\$151,689,270	1874.0%				
2046	\$6,920,707	\$142,688,594	2061.8%				
2047	\$5,880,383	\$133,051,246	2262.6%				
2048	\$4,966,365	\$123,420,384	2485.1%				
2049 2050	\$4,170,180 \$3,481,142	\$113,300,843 \$103,305,751	2716.9% 2967.6%				
2051	\$2,889,036	\$93,418,450	3233.6%				
2052	\$2,384,958	\$84,088,946	3525.8%				
2053	\$1,958,712	\$74,879,600	3822.9%				
2054	\$1,600,745	\$66,199,160	4135.5%				
2055	\$1,302,402	\$58,019,166	4454.8%				
2056	\$1,054,477	\$50,603,027 \$43,724,846	4798.9%				
2057 2058	\$850,150 \$682,259	\$43,724,846	5143.2% 5513.8%				
2059	\$545,136	\$32,203,766	5907.5%				
2060	\$433,515	\$27,560,841	6357.5%				
2061	\$343,319	\$23,438,364	6827.0%				
2062	\$270,592	\$19,844,812	7333.9%				
2063	\$212,224	\$16,651,317	7846.1%				
2064	\$165,500	\$13,867,467	8379.1%				
2065 2066	\$128,398 \$99,005	\$11,386,660 \$9,227,269	8868.3% 9320.0%				
2067	\$75,865	\$7,358,059	9698.9%				
2068	\$57,728	\$5,794,282	10037.2%				
2069	\$43,644	\$4,490,583	10289.2%				
2070+	\$120,732	\$13,918,132	11528.2%				
c	om of Er	at 4 50/		Even4-4	Erros -t - d	Dung -4-3	A atual t-
Sumn	nary of Experience Earned Premium		Loss Retio	Expected Earned Premium	Expected Incurred Claims	Expected Loss Ratio	Actual to Expected
Historical (YE2017)	\$1,094,749,265		19.6%	\$1,064,415,470	\$129,636,405	12.2%	1.61
Projected Future (2018 +)			265.2%	, ,,	,,		
Total Lifetime Anticipated	\$1,807,530,500	\$2,104,717,163	116.4%				

Exhibit 4 Allianz Life Insurance Company of North America Maryland-specific Experience Policy Form Series : 10-P-Q-MD As of 12/31/2017 No Rate Increase

<u>Year</u>	Earned Premium	Incurred Claims	Loss Ratio
2003	\$0	\$0	0.0%
2004	\$178,832	\$0	0.0%
2005	\$740,316	\$0	0.0%
2006	\$1,383,127	\$1,540	0.1%
2007	\$1,638,098	\$337,510	20.6%
2008	\$1,608,979	\$171,533	10.7%
2009	\$1,568,807	\$111,938	7.1%
2010	\$1,528,328	\$4,042	0.3%
2011	\$1,497,908	\$132,428	8.8%
2012	\$1,479,844	\$142,642	9.6%
2013	\$1,447,525	\$0 \$433.043	0.0%
2014 2015	\$1,527,956 \$1,603,843	\$433,943 \$156,688	28.4% 9.8%
2016	\$1,579,940	\$541,226	34.3%
2017	\$1,655,848	\$438,279	26.5%
2018	\$1,665,006	\$572,289	34.4%
2019	\$1,640,887	\$682,456	41.6%
2020	\$1,593,339	\$786,306	49.3%
2021	\$1,544,105	\$903,874	58.5%
2022	\$1,493,117	\$1,041,488	69.8%
2023	\$1,440,433	\$1,199,769	83.3%
2024	\$1,386,022	\$1,384,966	99.9%
2025	\$1,330,112	\$1,588,981	119.5%
2026	\$1,272,714	\$1,814,652	142.6%
2027	\$1,213,984	\$2,056,557	169.4%
2028	\$1,153,921	\$2,318,653	200.9%
2029	\$1,092,868	\$2,586,846	236.7%
2030	\$1,030,971 \$968,556	\$2,866,530	278.0%
2031 2032	\$905,803	\$3,143,484 \$3,425,879	324.6% 378.2%
2032	\$843,223	\$3,687,910	437.4%
2034	\$781,102	\$3,936,366	504.0%
2035	\$719,915	\$4,156,802	577.4%
2036	\$660,007	\$4,358,425	660.4%
2037	\$601,951	\$4,515,000	750.1%
2038	\$546,050	\$4,640,418	849.8%
2039	\$492,711	\$4,722,319	958.4%
2040	\$442,124	\$4,773,325	1079.6%
2041	\$394,640	\$4,771,297	1209.0%
2042	\$350,303	\$4,727,303	1349.5%
2043	\$309,243	\$4,637,460	1499.6%
2044	\$271,410	\$4,523,827	1666.8%
2045	\$236,910	\$4,367,139	1843.4%
2046	\$205,608	\$4,185,546	2035.7%
2047	\$177,428	\$3,976,828	2241.4%
2048 2049	\$152,179 \$129,780	\$3,761,182 \$3,524,550	2471.6% 2715.8%
2050	\$110,021	\$3,278,856	2980.2%
2051	\$92,739	\$3,023,791	3260.6%
2052	\$77,685	\$2,773,027	3569.6%
2053	\$64,704	\$2,509,835	3878.9%
2054	\$53,568	\$2,253,553	4206.9%
2055	\$44,089	\$1,999,238	4534.5%
2056	\$36,066	\$1,763,806	4890.5%
2057	\$29,342	\$1,540,517	5250.2%
2058	\$23,738	\$1,339,250	5641.9%
2059	\$19,100	\$1,158,809	6067.1%
2060	\$15,274	\$996,729	6525.5%
2061	\$12,149	\$850,572	7001.1%
2062	\$9,610	\$722,730	7520.3%
2063	\$7,562	\$609,316	8057.8%
2064	\$5,920 \$4,618	\$508,952 \$415,787	8596.8%
2065	\$4,618	\$415,787	9004.4%
2066 2067	\$3,586 \$2,777	\$334,171 \$264,077	9318.9% 9510.1%
2068	\$2,777	\$205,218	9567.5%
2069	\$1,659	\$157,714	9508.6%
2070+	\$5,206	\$461,104	8856.7%
	. ,	,	
Summa	ary of Experience	at 4.5%	
		Incurred Claims	Loss Ratio
Historical (YE2017)	\$25,950,774	\$3,032,641	11.7%
Projected Future (2018 +)	\$18,018,409	\$49,348,995	273.9%
Total Lifetime Anticipated	\$43,969,184	\$52,381,636	119.1%

Exhibit 5 Allianz Life Insurance Company of North America Nationwide Experience Policy Form Series : 10-P-Q As of 12/31/2017 With Average 12% Rate Increase

Year	Earned Premium	Incurred Claims	Loss Ratio		
2003	\$822.605	\$0	0.0%		
2004	\$822,695 \$15,643,649	\$446,120	2.9%		
2005	\$37,016,974	\$801,099	2.2%		
2006	\$57,831,417	\$4,847,506	8.4%		
2007	\$66,155,118	\$4,082,197	6.2%		
2008	\$66,470,123	\$6,023,000	9.1%		
2009	\$64,900,708	\$7,995,795	12.3%		
2010 2011	\$63,167,319 \$61,705,268	\$8,115,639 \$9,700,557	12.8% 15.7%		
2012	\$60,575,880	\$13,657,718	22.5%		
2013	\$59,497,380	\$13,878,904	23.3%		
2014	\$62,780,988	\$19,029,263	30.3%		
2015	\$65,841,467	\$24,075,646	36.6%		
2016	\$64,549,020	\$29,328,734	45.4%		
2017	\$67,473,710 \$68,568,808	\$36,888,091	39.5%		
2018 2019	\$67,680,482	\$27,098,622 \$30,956,749	45.7%		
2020	\$68,367,814	\$35,001,614	51.2%		
2021	\$66,235,853	\$39,768,697	60.0%		
2022	\$63,841,472	\$45,410,129	71.1%		
2023	\$61,354,527	\$51,941,018	84.7%		
2024	\$58,810,953	\$59,538,158	101.2%		
2025 2026	\$56,225,717 \$53,584,027	\$67,805,912 \$76,760,088	120.6% 143.3%		
2027	\$50,873,752	\$76,760,988 \$86,069,758	169.2%		
2028	\$48,111,581	\$95,895,744	199.3%		
2029	\$45,331,541	\$105,667,386	233.1%		
2030	\$42,552,651	\$115,559,182	271.6%		
2031	\$39,778,573	\$125,141,631	314.6%		
2032	\$36,994,800	\$134,693,304	364.1%		
2033 2034	\$34,246,101 \$31,533,233	\$143,316,376 \$151,274,881	418.5% 479.7%		
2035	\$28,878,460	\$157,973,554	547.0%		
2036	\$26,283,279	\$163,719,612	622.9%		
2037	\$23,793,175	\$167,548,965	704.2%		
2038	\$21,401,005	\$169,933,763	794.0%		
2039	\$19,136,190	\$170,536,026	891.2%		
2040	\$17,001,897	\$169,882,068	999.2%		
2041 2042	\$15,016,734 \$13,178,718	\$167,095,563 \$162,901,737	1112.7% 1236.1%		
2042	\$11,487,999	\$157,103,076	1367.5%		
2044	\$9,950,204	\$150,427,876	1511.8%		
2045	\$8,565,664	\$142,236,006	1660.5%		
2046	\$7,321,997	\$133,419,144	1822.2%		
2047	\$6,219,758	\$124,065,558	1994.7%		
2048	\$5,251,574 \$4,408,426	\$114,780,024 \$105,104,737	2185.6% 2384.2%		
2049 2050	\$4,408,426 \$3,678,955	\$95,609,414	2598.8%		
2051	\$3,052,270	\$86,268,249	2826.4%		
2052	\$2,518,952	\$77,487,325	3076.2%		
2053	\$2,068,120	\$68,858,778	3329.5%		
2054	\$1,689,641	\$60,754,846	3595.7%		
2055	\$1,374,319	\$53,144,951	3867.0%		
2056 2057	\$1,112,376 \$896,574	\$46,265,678 \$39,905,883	4159.2% 4450.9%		
2058	\$719,314	\$34,273,982	4764.8%		
2059	\$574,589	\$29,292,925	5098.1%		
2060	\$456,818	\$25,030,067	5479.2%		
2061	\$361,684	\$21,253,876	5876.4%		
2062	\$284,999	\$17,969,202	6305.0%		
2063 2064	\$223,473 \$174,233	\$15,056,890 \$12,523,127	6737.7% 7187.6%		
2065	\$174,233	\$12,323,127	7599.3%		
2066	\$104,182	\$8,312,580	7978.9%		
2067	\$79,814	\$6,621,487	8296.2%		
2068	\$60,718	\$5,209,006	8579.1%		
2069	\$45,891	\$4,033,289	8788.8%		
2070+	\$126,725	\$12,460,144	9832.4%		
Summary of Experience at 4.5%					
Julili	Earned Premium		Loss Ratio		
Historical (YE2017)	\$1,094,749,265	\$214,129,390	19.6%		
Projected Future (2018 +)	\$747,175,004	\$1,817,352,325	243.2%		
Total Lifetime Anticipated	\$1,841,924,269	\$2,031,481,715	110.3%		

Exhibit 6 Allianz Life Insurance Company of North America Maryland-specific Experience Policy Form Series: 10-P-Q-MD As of 12/31/2017 With Average 12% Rate Increase

<u>Year</u>	Earned Premium	Incurred Claims	Loss Ratio
2003	\$0	\$0	0.0%
2004	\$178,832	\$0	0.0%
2005	\$740,316	\$0	0.0%
2006	\$1,383,127	\$1,540	0.1%
2007	\$1,638,098	\$337,510	20.6%
2008	\$1,608,979	\$171,533	10.7%
2009	\$1,568,807	\$111,938	7.1%
2010	\$1,528,328	\$4,042	0.3%
2011	\$1,497,908	\$132,428	8.8%
2012	\$1,479,844	\$142,642	9.6%
2013	\$1,447,525	\$0	0.0%
2014 2015	\$1,527,956 \$1,603,843	\$433,943	28.4%
2016	\$1,579,940	\$156,688 \$541,226	9.8% 34.3%
2017	\$1,655,848	\$438,279	26.5%
2018	\$1,665,006	\$572,289	34.4%
2019	\$1,668,064	\$675,586	40.5%
2020	\$1,688,931	\$778,519	46.1%
2021	\$1,642,920	\$892,983	54.4%
2022	\$1,588,747	\$1,026,628	64.6%
2023	\$1,532,758	\$1,180,655	77.0%
2024	\$1,474,919	\$1,361,441	92.3%
2025	\$1,415,468	\$1,560,819	110.3%
2026	\$1,354,416	\$1,781,019	131.5%
2027	\$1,291,925	\$2,016,068	156.1%
2028	\$1,227,997	\$2,269,342	184.8%
2029	\$1,162,996	\$2,526,810	217.3%
2030 2031	\$1,097,081	\$2,793,959 \$3,057,274	254.7% 296.6%
2031	\$1,030,600 \$963,749	\$3,057,274 \$3,324,908	345.0%
2032	\$897,077	\$3,571,806	398.2%
2034	\$830,891	\$3,804,341	457.9%
2035	\$765,700	\$4,008,235	523.5%
2036	\$701,875	\$4,192,127	597.3%
2037	\$640,030	\$4,330,761	676.6%
2038	\$580,486	\$4,437,774	764.5%
2039	\$523,680	\$4,501,843	859.7%
2040	\$469,813	\$4,535,799	965.4%
2041	\$419,260	\$4,519,310	1077.9%
2042	\$372,067	\$4,463,554	1199.7%
2043	\$328,372	\$4,365,191	1329.3%
2044	\$288,121	\$4,245,252	1473.4%
2045	\$251,425	\$4,086,025	1625.1%
2046	\$218,141	\$3,904,762	1790.0%
2047	\$188,184	\$3,699,497	1965.9% 2162.5%
2048 2049	\$161,350 \$137,552	\$3,489,196 \$3,261,057	2370.8%
2050	\$116,566	\$3,026,301	2596.2%
2051	\$98,218	\$2,784,388	2834.9%
2052	\$82,241	\$2,547,648	3097.8%
2053	\$68,470	\$2,300,706	3360.2%
2054	\$56,660	\$2,061,257	3637.9%
2055	\$46,612	\$1,824,766	3914.8%
2056	\$38,112	\$1,606,506	4215.3%
2057	\$30,991	\$1,400,225	4518.2%
2058	\$25,059	\$1,214,802	4847.8%
2059	\$20,152	\$1,049,035	5205.5%
2060	\$16,108	\$900,579	5590.9%
2061	\$12,805	\$767,086	5990.4%
2062 2063	\$10,124	\$650,595	6426.1% 6876.5%
	\$7,962 \$6,230	\$547,510 \$456.515	7327.2%
2064 2065	\$6,230 \$4,857	\$456,515 \$372,315	7665.3%
2066	\$3,770	\$298,736	7923.7%
2067	\$2,918	\$235,709	8077.3%
2068	\$2,253	\$182,907	8117.7%
2069	\$1,742	\$140,378	8060.1%
2070+	\$5,460	\$409,102	7492.3%
		-	
	ary of Experience		
		Incurred Claims	
Historical (YE2017)	\$25,950,774	\$3,032,641	11.7%
Projected Future (2018 +)	\$18,986,156	\$47,224,520	248.7%
Total Lifetime Anticipated	\$44,936,931	\$50,257,162	111.8%

Exhibit 7

58/85 Calculations

Allianz Life Insurance of North America

Nationwide Experience

Policy Form Series: 10-P-Q

Following the format of Section 20(C)(2) of Model 641 (Long-Term Care Insurance Model Regulation), the "58/85" calculation is as follows (all dollar values in millions):

a)	The accumulated value of the initial earned premium is 58% of this value:	1,058.24 613.78
b)	The accumulated value of prior premium rate schedule increases is 85% of this value:	36.51 31.03
c)	The present value of future projected initial earned premiums is 58% of this value:	545.61 316.45
d)	The present value of future projected earned premium from prior premium rate schedule increases is PV of future projected EP from 12% increase: Combined: 85% of this value:	167.17 34.39 201.57 171.33
e)	The accumulated value of past incurred claims is The present value of future projected incurred claims* is sum of these 2 values:	214.13 1,999.09 2,213.22
f)	The sum of a,b,c and d is This amount is less than e)	1,132.60 2,213.22

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

Exhibit 8 Allianz Life Insurance Company of North America Comparison of Assumptions Policy Form 10-P-Q, et al.

	Original Pricing Assumption	Prior Rate Increase Assumption	Current Best Estimate Assumption
Original Loss Ratio	65.50%	N/A	N/A
	1994 Group Annuity Reserving Table, with select factors of .5, .6, .7, .8, .9, 1.0	The projected future experience uses 80% of the gender-distinct 1994 GAM table for	The projected future experience uses the gender-distinct 2012 IAM table for mortality
Mortality	(years 6+), and with future mortality improvements that match morbidity	mortality without future improvements.	without any future improvement.
Mortanty	improvements: 1% per year for 8 years for ages 65 and younger. For ages 66 and		
	older, 1% per year for 5 years.		
	See table on next page	The Company's own experience was used for this study. The experience was determined to be	The Company's own experience was used for this study. The experience is determined to be
		credible and the voluntary lapses are provided on a subsequent page.	credible. See table on subsequent page
Lapse			
Lapse			Additional lapses caused by exhaustion of benefits are also modeled using claim incidence,
		continuance rates. The total terminations that are not caused by deaths are estimated to be	continuance, and utilization rates. A 2% shock lapse is assumed for policies that receive the
		around 1.75% annually as all policyholders are on duration 7+.	requested rate increase.
		Attained age claim costs and Waiver of Premium benefits used in projecting future experience	Attained age claim costs and Waiver of Premium benefits used in projecting future
	guidelines. These guidelines have been developed by several Milliman USA	for this form have been developed utilizing Company-specific policy experience enhanced	experience for this form have been developed utilizing Company-specific policy experience
		with other industry data as needed. Claim costs vary by joint policy status (joint vs. single),	enhanced with other industry data as needed. Claim costs vary by joint policy status (joint vs.
	insurance data and judgment.	gender and various level of home health care with adjustments for elimination periods and	single), gender and various level of home health care with adjustments for elimination
		riders.	periods, benefit periods, and riders.
	Claim costs are adjusted to reflect:		
		Claim costs are developed from first principle using company specific historical claim	Claim costs are developed from first principle using company-specific historical claim
	Reduced exposure for insureds already in the nursing home	experience. Allianz incidence rates are typically credible up to age 75. The incidence rates for	experience. Allianz incidence rates are typically credible up to age 88. Allianz data was then
	*	the older ages (75+) is developed based on actuarial judgment using our own experience along with data provided by our consultant in 2012 and the 2007 SOA LTC Intercompany Study.	graded towards industry data for ages 88 and above, ultimately equating with industry experience by age 100. Continuance and utilization rates from Allianz claim data were
	☐ Salvage ☐ Other additional and optional benefits	Allianz continuance rates were blended with industry data that was provided by our consultant	blended with industry data when experience lacked credibility (fewer than 1,000 beginning of
	Other additional and optional benefits	in 2012 using limited fluctuation credibility. Generally, Allianz continuance rates are lower	month claim exposures). Allianz experience was generally in line with industry data.
Morbidity		than industry experience.	infolial craim exposures). Afrianz experience was generally in line with industry data.
		than must y experience.	Future claim costs are projected on a seriatim basis for each policyholder. These claim costs
		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
		are adjusted according to each policy's benefit designs, such as COLA option, elimination	periods and benefit periods.
		periods and benefit periods. There is no morbidity load for anti-selection since this will be the	periods and benefit periods.
		first rate increase for these policies.	Underwriting, claim management and product design were taken into consideration when
		instruct increase for these porteies.	setting the assumptions. Allianz historical experience includes the positive impact of
		Underwriting, claim management and product design were taken into consideration when	underwriting selection. No scalar increases to the claim cost assumption are made within
		setting the assumptions. Allianz historical experience includes the positive impact of	these projections to reflect future wear off from underwriting selection.
		underwriting selection and these underwriting factors are expected to wear off in the future.	these projections to reflect ratine wear off from under wirting selection
		No scalar increases to the claim cost assumption are made within these projections to reflect	
		the wear off from underwriting selection.	
Interest	4.5%	4.5%	4.5%
_	Original Pricing Loss Ratio does not include expenses. Expenses are used to	Changes in expense are not used to justify the rate increase and are not included in this	Changes in expense are not used to justify the rate increase and are not included in this
Expense	calculate the company's profit margin.	analysis. It is assumed that original expense assumptions are still appropriate.	analysis. It is assumed that original expense assumptions are still appropriate.

Exhibit 8
Allianz Life Insurance Company of North America
Comparison of Assumptions
Original Pricing Lapse Rates
Policy Form 10-P-Q, et al.

For policies with no inflation protection

	Lifetime	Limited Pay	Accelerated
Duration	Premium	Premium	Premium
1	7.0%	7.0%	7.0%
2	5.0%	5.0%	5.0%
3	4.0%	4.0%	4.0%
4	3.0%	3.0%	3.0%
5 - 9	2.5%	2.5%	2.5%
10	2.5%	2.5%	2.0%
11	2.5%	2.0%	2.0%
12	2.5%	1.5%	2.0%
13	2.5%	1.0%	2.0%
14	2.5%	50.0%	2.0%
16+	2.5%	0.0%*	2.0%

For policies with 5% Lifetime Compound Benefit Increase Rider

	Lifetime	Limited Pay	Accelerated
Duration	Premium	Premium	Premium
1	5.0%	5.0%	5.0%
2	3.0%	3.0%	3.0%
3	2.0%	2.0%	2.0%
4	1.5%	1.5%	1.5%
5 - 9	1.5%	1.5%	1.5%
10	1.5%	1.5%	1.0%
11	1.5%	1.2%	1.0%
12	1.5%	0.9%	1.0%
13	1.5%	0.6%	1.0%
14	1.5%	0.3%	1.0%
16+	1.5%	0.0%*	1.0%

For policies with 3%, 4% Lifetime Compound Benefit Increase

Rider Or Simple Benefit Increase Rider

	Lifetime	Limited Pay	Accelerated
Duration	Premium	Premium	Premium
1	6.0%	6.0%	6.0%
2	4.0%	4.0%	4.0%
3	3.0%	3.0%	3.0%
4	2.0%	2.0%	2.0%
5 - 9	2.0%	2.0%	2.0%
10	2.0%	2.0%	1.5%
11	2.0%	1.6%	1.5%
12	2.0%	1.2%	1.5%
13	2.0%	0.8%	1.5%
14	2.0%	0.4%	1.5%
16+	2.0%	0.0%*	1.5%

^{*}Assume 0% beginning at the later of year 16 or age 81.

Exhibit 8 Allianz Life Insurance Company of North America Comparison of Assumptions

Prior Rate Increase and Current Assumption Voluntary Lapse Rates Policy Form 10-P-Q, et al.

	Prior Rate	Current Rate Filing			
Duration	Filing	Individual		Married	
	All Policies	Non-COLA	COLA	Non-COLA	COLA
1	7.00%	9.50%	7.00%	7.70%	3.50%
2	3.40%	6.80%	4.50%	5.80%	2.50%
3	2.20%	4.00%	2.20%	3.80%	1.50%
4	1.50%	3.00%	1.50%	2.80%	1.25%
5	1.00%	2.30%	1.30%	1.00%	0.50%
6	0.90%	1.60%	0.90%	1.00%	0.50%
7+	0.75%	1.40%	0.75%	1.00%	0.40%