LifeSecure Insurance Company

ACTUARIAL JUSTIFICATION OF PREMIUM RATES
Long Term Care Policies

1. Purpose of Filing

This is a rate increase filing for Long Term Care forms and attached options. The purpose of this rate increase filing actuarial memorandum is to demonstrate that the requirements for a rate increase are satisfied. This rate increase filing actuarial memorandum is not intended to be used for any other purpose.

A rate increase is being requested on the policy form LS-0002 due to higher than anticipated future and lifetime loss ratios.

2. Scope of Filing

This filing applies to the Company's Long Term Care policy form:

LS-0002, et al (LS-0002, LTC 1.0)	Tax Qualified Individual Long Term Care Insurance Policy

This form provide reimbursement for long term care services in various settings when the insured meets policy benefit qualification requirements. The form contains individual guaranteed renewable policies. These policies are subject to the rate stability regulation and were issued in Maryland from October 2010 to September 2014. This product is not currently being marketed in any state or district. The rate increase will apply to inforce policies only.

This policy form was marketed to individuals, members of employer-based groups that were list-billed and/or marketed together, and to members of associations through direct agents and brokers. Underwriting and/or premium rates varied among the applicant types.

The justified rate increase on this policy form is 52.1%. However, per the Maryland regulation COMAR 31.14.01.04A(5), the Company is limiting the request to 15.0% for this policy form.

The number of policyholders and annualized inforce premium as of 12/31/2020 are shown in the table below on a Nationwide and Maryland specific level. The table also shows the Nationwide and Maryland specific average annualized premium both before and after the rate increase of 15.0% is applied.

Nationwide Policies Inforce as of 12/31/2020			
		Average Annualized Premiums	
Annualized Premiums	Inforce	Before Rate Increase	After Rate Increase
13,395,607	8,895	1,506	1,732

Maryland Policies Inforce as of 12/31/2020			
		Average Annualized Premiums	
Annualized Premiums	Inforce	Before Rate Increase	After Rate Increase
242,000	133	1,820	2,092

3. Benefit Description

For all plans, the elimination period is 90 calendar days. The benefit period is administered on a "pool of money" or benefit bank basis. There are three possible monthly benefit/benefit bank configurations available: monthly benefit of 1%, 2%, and 3%. These three possible configurations result in inherent benefit periods of 100 months (8.3 years), 50 months (4.2 years), or 33 months (2.8 years), respectively.

Benefits are payable when the insured becomes disable in two out of six Activities of Daily Living (ADL's) for 90 days, or when they become severely cognitively impaired. The six ADL's are: bathing, dressing, continence, eating, toileting, and transferring. In order to be considered impaired in an ADL, a person must need substantial human assistance or supervision. Services must be provided pursuant to a Plan of Care.

The following describes the base benefits and optional benefits provided by the products:

Base Policy

- Pool of money approach: insured has lifetime benefit amount to use as needed.
- Maximum monthly benefit equals 1, 2, or 3% of lifetime benefit amount
- All nursing home, assisted living facility (ALF), and formal home care benefits are expense incurred subject to the monthly maximum. Bed reservation is included in the nursing home and ALF benefit.
- Informal caregiver benefits will also be paid, through a "Flexible Benefit", assuming the benefit triggers are met and that the benefits provided are contained in the person's Plan of Care. Usual and customary expenses will be paid. Informal caregiver benefits are paid with 50% of the remaining monthly benefit maximum, after formal care expenses have been paid. If no formal care was received and the benefit triggers have been met, the insured will have 50% of their monthly benefit maximum available for informal care.
- Caregiver training, home modification, and other ancillary benefits can be paid out of the Flexible Benefit, subject to the 50% of remaining monthly maximum limit.
- International benefit is provided which pays for 1-year of care, on an indemnity basis, at 100% of the monthly benefit for nursing facility care or at 50% of the monthly benefit for home care.
- Waiver of premium after the 90-day elimination period (not payable if international benefit is being paid)
- Contingent non-forfeiture benefit included (i.e. a shortened benefit period non-forfeiture option is provided if there is a substantial increase in premiums)
- Guaranteed future purchase endorsement is included if no other inflation is selected. An additional 15% of the current benefit will be offered every 3 years, until the insured reaches age 80, with the additional premium based on the person's attained age at the time.

Optional Riders

- Inflation benefit where monthly maximum and remaining lifetime benefit amount are both increased by 5% per year, compounded, for life
- Inflation benefit where monthly maximum and remaining lifetime benefit amount are both increased by 3% per year, compounded, for life
- Lapse protection benefit rider, which provides the NAIC mandated shortened benefit non-forfeiture option
- Money back promise rider, which provides a return of premiums paid on death. This return is 0% in the first four policy years, 25% in policy years 5-9, 50% in years 10-14, and 75% in years 15+. Cumulative premiums, less benefits paid, times the durational factor are returned on policyholder death. There is no age maximum.

4. Issue Ages, Premium Classes, and Modalization Rules

Policies were issued from ages 18 – 84 for this policy form.

The average issue age is for inforce policies as of 12/31/2020 is:

	Nationwide	Maryland
Average Issue Age	55.6	56.8

For policies marketed to individuals, policyholders were classified as preferred risks, standard risks or substandard risks. Preferred rates are 10% lower than standard, and substandard rates are 40% higher than standard. Employer group policies went through simplified underwriting and did not receive any factors applied to the standard rates.

No modal factors were used, except for monthly direct bill, where a $2/month surcharge is applied each month.

Factors were made available that converted the annual premiums into premiums which would be paid up after 10 years for all policy forms. There were also factors made available that converted the annual premiums into premiums which could be paid up at age 65. The number of limited pay policies inforce as of 12/31/2020 nationwide and for Maryland only is shown in the table below.

	Inforce Policies as of 12/31/2020	
Premium Pay Duration	**Nationwide**	**Maryland**
Lifetime Pay	8,507	122
10-Pay	319	9
Pay-to-65	69	2

5. **Active Life Reserves**

Statutory active life reserves are calculated using a mid-terminal one-year preliminary term methodology plus the net unearned premium reserves, but never less than the gross unearned premium reserve. Reserves are calculated using NAIC minimum reserve standards, using expected claim costs with selection, with no morbidity improvement. Lapses will be based on 80% of the assumed voluntary lapse rate up to 6% in the first policy year, 80% of the assumed voluntary lapse rate up to 4% in the second through fourth policy years, and 100% of the assumed voluntary lapse rate up to 2% for the fifth and later policy years. The mortality table specified in the NAIC minimum reserve standards for health insurance contracts is the 1994 GAM. The interest rate used is the maximum statutory valuation rate applicable to the year in which a policy is issued. While the active life reserves were used to determine whether or not the moderately adverse experience trigger for a rate increase had been met, they were not used when calculating the justified rate increase or lifetime loss ratio for this policy form.

6. **Trend Assumption**

Only insurance trend, due to the effect of underwriting wearing off, was assumed.

7. **Contingency and Risk Margins**

There are no explicit contingency and risk margins built into the assumptions. Gross premiums are computed to pay for benefits and expenses, while providing the desired profit. Any excess profit that is built into the gross premiums is the implicit contingency and risk margin.

8. **Moderately Adverse Assumptions and Trigger for this Rate Increase**

The following moderately adverse assumptions were tested at the time of original pricing:

- Morbidity increased by 10%
- Lapses reduced by 50%
- Mortality reduced by 20%
- Investment rate reduced by 50 basis points.

REDACTED

9. **New Moderately Adverse Experience Assumptions and Trigger**

REDACTED

10. **Reason for Rate Increase Request**

REDACTED

11. **Requested Rate Increase**

The rate increase LifeSecure is requesting on this policy form is 15.0%. This rate increase was calculated using all inforce policies for this policy form issued nationwide. LifeSecure has already filed or will be filing for a rate increase in all states.

This filing demonstrates that actual past experience combined with projected future experience results in a lifetime loss ratio of 79.3% without this rate increase. The justified rate increase of 52.1% was calculated such that the 58%/85% rate stability regulation test was passed, and the projections did not produce a loss ratio lower than the original pricing loss ratio of 60%.

The exhibits with best estimate assumptions showing the lifetime loss ratio projections for nationwide business, with and without rate increase, are shown in Exhibits II (without requested rate increase) and III (with requested rate increase) attached at the end of this memorandum.

Once the overall justified rate increase was calculated on a nationwide basis, we then applied the rate stability regulation new business rate cap to the inforce Maryland policies in order for no policy to have a rate higher than the product LifeSecure currently markets.

For projection purposes, the proposed effective date of the rate increase is January 1, 2022.

As an illustration, the table below shows what the justified rate increase will be if it is delayed for the specified number of years. LifeSecure is attempting to avoid an even higher rate increase for the policyholder by correcting the situation early. For instance, we would like to avoid the rate increase needing to be over 100% or double the amount requested now in less than seven years.

Impact of Delaying Rate Increase*		
Years	Rate Increase	Percent Increase in Rate Increase
0	52.1%	N/A
1	57.7%	10.7%
2	64.0%	22.8%
3	70.8%	35.9%
4	78.5%	50.7%
5	87.2%	67.4%
6	97.3%	86.8%
7	108.9%	109.0%

**Note: this illustration is calculated using the current best estimate assumptions and inforce policies as of 12/31/2020. The only change in the lifetime loss ratio calculation was the year of implementation.*

12. Rate Increase History

The Department approved a 5% rate increase, which was implemented on 6/2/2018.

13. Area Factors

Geographic area factors are not used in rating these policies.

14. Nationwide Distribution of Inforce Policies as of December 31, 2020 alongside Original Pricing Distribution Percentages

REDACTED

15. Projection Assumptions

REDACTED

16. Comparison of Original and Current Assumptions

The tables below show the assumptions that have changed from the original pricing assumptions to the current best estimate assumptions. Not all assumptions are used in the projection of loss ratios. Expenses, commissions, and investment income assumptions were not used in the calculation of the loss ratio or justified rate increase. However, they were used to calculate the pre-tax profit amount and determine whether or not the block exceeded the MAE trigger in order to request a rate increase.

A. Morbidity

The current morbidity assumption is based on the 2017 Milliman Long-Term Care Guidelines (the "Guidelines"), which consist of over 800,000 claims totaling nearly $50 billion in incurred claims and 49 million life years of exposure, using data collected from 10 of the top 15 long-term care insurance carriers. The Guidelines data distinguish between individual and worksite-sold business, and are comprised of comprehensive long term care ("LTC") policies with similar benefits, and sold in a similar manner, to LifeSecure's.

The morbidity assumption includes Milliman consultant adjustments to reflect the policy benefits and the expected policyholder behavior based on the degree of underwriting, the distribution method, and other factors. LifeSecure's morbidity experience is not credible, and we believe the Guidelines data is the most relevant data available. The Milliman consultant adjustments customize the morbidity assumption to LifeSecure's inforce policies. Although this is a unisex policy form, the morbidity assumption is sex-distinct.

The original morbidity assumption for this policy form was the 2002 Milliman Long-Term Care Guidelines. The 2011 Milliman Long-Term Care Guidelines were used to price our second generation LTC product. The previous rate increase request was based on the 2014 Milliman Long-Term Care Guidelines.

Sample incidence and continuance rates are included to illustrate the relationships between the Milliman LTC Guidelines:

Incidence Rate Assumption Comparison – REDACTED

Length of Stay (Years) Assumption Comparison – REDACTED

Claim Cost Assumption Comparison - REDACTED

B. Mortality and Interest

For non-claimant lives, mortality was assumed to be equal to the 1994 Group Annuity Mortality tale, with selection applied. Mortality selection was assumed to increase from 0.2 in the first policy year to 0.9 for the tenth and later years. The mortality of claimant lives was assumed to be equal to four times the 1979 – 1981 US Life Mortality Table.

Mortality Assumption Summary - REDACTED

The present value of future projected benefits is discounted at a weighted-average interest rate based on the statutory valuation interest rates in effect at the time the policies were issued, which is calculated as 3.7% for this policy form.

C. Lapse Rates

For purposes of projecting future earned premium and incurred claims, the voluntary lapse rates and a summary of original lapse assumptions are presented here:

Voluntary Lapse Assumption Summary - REDACTED

The 2011 updated voluntary lapse assumptions were derived from total termination studies on the LTC 1.0 policy form and Milliman industry lapse data. The 2006 version was based solely Milliman industry lapse data.

Lapse Assumptions – REDACTED

17. Historical Experience

The historical experience for the nationwide business since inception through 2020 is shown in Exhibit I. The following table summarizes the historical loss ratio:

Historical Loss Ratios Summary – REDACTED

Consistent with the original filing, incurred claims do not include active life reserves.

*Incurred Claims are calculated as Paid Claims plus Claim Reserves and IBNR for claims through 12/31/2020.

18. Projected Future Experience

Future experience which has been projected 60 years using the assumptions described in section 6 is shown in Exhibit II. These are the company's best estimate assumptions without any additional margin for moderately adverse experience included. The following summarizes the nationwide anticipated future loss ratio without the requested rate increase:

Future Loss Ratio Summary - REDACTED

19. 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. The nationwide value, without the requested rate increase or any factors for moderately adverse experience applied, is summarized below:

Lifetime Loss Ratio Summary - REDACTED

Exhibit III shows the actual historical and projected future lifetime loss ratio exhibit with the requested rate increases.

20. Rate Stability 58/85 Regulation Test

The loss ratio standard on rate stability policies is 58% of the original premium schedule, plus 85% of the premium increase and is summarized in the following table. This table is used for the rate stability analysis. These values include the currently requested rate increase and any previously approved rate increases applied to the policy form and demonstrates that the combined rate increase does fall within the rate stability guidelines.

58/85 Test – REDACTED

21. Actuarial Certification

I, Jason B. Bushey, am an Actuary at LifeSecure Insurance Company, a Fellow of the Society of Actuaries, and a member of the American Academy of Actuaries, and I meet the Academy's qualification standards for rendering this opinion. I am familiar with the requirements for filing long-term care insurance premiums.

I hereby certify that, to the best of my knowledge, this filing is in compliance with all applicable laws and regulations of Maryland, and Actuarial Standard of Practice Number 8, "Regulatory Filings for Rates and Financial Projections for Health Plans," as adopted by the Actuarial Standards Board.

In my opinion, if the justified rate increase of 52.1% was approved in full, then no further rate increases would be necessary as the revised premium rate schedules would be sufficient to cover anticipated costs under moderately adverse experience. However, the premium rate schedules after applying the limited rate increase of 15% in accordance with the Department's Regulation COMAR 31.14.01.04A(5), will not be sufficient to cover anticipated costs under moderately adverse experience. The margin for moderately adverse experience defined for this form is an increase in the lifetime loss ratio of 10%.

I have reviewed and taken into consideration the policy design and coverage provided and our current underwriting and claims adjudication processes.

The premium rate schedules that the information in this actuarial memorandum applies to is included in the filing and named "Exhibit V and VI Maryland Proposed Rate Sheets LS-0002 2021.08.24.pdf".

The premium rate schedules cap rate increases at currently marketed premium levels. Policies originally paying less than currently marketed premiums will receive a rate increase resulting in premiums that are not greater than the rate schedules for similar products currently being marketed.

The benefits are reasonable in relation to the premiums.

In forming my opinion, I have used actuarial assumptions, actuarial methods, and such tests of the actuarial calculations as I considered necessary. The assumptions present my best judgment and are consistent with LifeSecure's business plan at the time of the filing.

Respectfully Submitted,

Jay Bushey

Jason B. Bushey, FSA, MAAA
Senior Director of Actuarial & Risk Management
LifeSecure Insurance Company
8/24/2021

Exhibit I - Actual Historical Experience – REDACTED

Exhibit II – Best Estimate Assumptions with Approved Rate Increase Lifetime Loss Ratio Exhibit – REDACTED

Exhibit III – Best Estimate Assumptions with 15% Rate Increase Lifetime Loss Ratio Exhibit – REDACTED

Exhibit IV – Projection Assumptions - REDACTED