May 10, 2017

Actuarial Memorandum Supporting Rate Revision for
CMFG Life Insurance Company
Individual Long-Term Care Insurance Plan
2002 Product

1. SCOPE AND PURPOSE

The purpose of this memorandum is to provide actuarial information supporting a rate revision to premiums for CMFG Life Insurance Company's (the Company) individual long-term care product form series 2002-LTC-FAC, 2002-LTCR-HCC and associated riders. This product is referred to as the 2002 Product. (Some riders may not be available in all states.)

This product was sold nationwide from 2002 to 2009 and is no longer being marketed in any state.

The Company is requesting a 15% rate increase. The rate increase is necessary because the current estimate of the nationwide lifetime loss ratio is in excess of expected. This rate filing is not intended to be used for other purposes.

The body of this actuarial memorandum was written to apply to each state where this product was issued. Any reference to information that is specific to a particular state is included in Appendix A.

Please refer to Section 27 for a description of the information contained in each Appendix.

2. DESCRIPTION OF BENEFITS

This product provides long-term care coverage on an expense reimbursement basis up to policy limits. Depending on the state, the product provides either facility only coverage with the option to add a home and community care service rider or comprehensive coverage (providing both facility coverage and home and community care coverage). A benefit period, elimination period, daily benefit, home health care percentage and inflation protection option were selected at issue. Several additional optional benefits were available such as nonforfeiture benefits, expanded spousal benefits and limited premium payment options. The benefit eligibility criteria are based on the insured's loss of the ability to perform Activities of Daily Living (ADLs) or having a severe cognitive impairment. The available benefit choices can be found in the rate tables that accompany this filing. A complete description of the benefit provisions and conditions for eligibility is contained in the policy forms and riders on file with the state.

3. RENEWABILITY CLAUSE

This product is a Guaranteed Renewable, Individual Long Term Care policy.

4. MARKETING METHOD

This product was marketed to individuals by licensed agents. This product is not currently being marketed.

5. UNDERWRITING

All policies subject to this rate revision were subject to full medical underwriting in accordance with

Company standards in place at the time of issue. Those underwriting standards were taken into consideration when projecting future experience.

6. APPLICABILITY

The revised rates will be applicable to the product described in Section 1.

7. MORBIDITY

The morbidity assumptions are based on a combination of the Company's historical claim experience from 2002 through December 31, 2016, the Milliman 2014 *Long Term Care Guidelines* (*Guidelines*) and judgment. The *Guidelines* reflect over $25 billion of insured data and the experience and judgment of Milliman actuaries. The claim cost assumptions reflect the Company's current best estimate of future morbidity, including future improvement of 1% per year through 2031. The assumptions do not include any adverse selection resulting from the rate increase or loads for moderately adverse experience.

8. MORTALITY

Mortality assumptions are based on Company experience from 2002 through December 31, 2016 and judgment. The best estimate mortality assumption is the Annuity 2000 Mortality Table on a sex distinct basis, projected forward with mortality improvement to 2031. Mortality improvement was based on 100% of Scale G for males and 50% of Scale G for females. The ultimate mortality table in 2031 was smoothed slightly to maintain a reasonable relationship of mortality rates between males and females. Mortality selection factors are also applied, starting at 0.20 in duration 1 and grading up to 0.95 in duration 14.

9. PERSISTENCY

Voluntary lapse assumptions are based on Company experience from 2002 through December 31, 2016 and judgment. Lapse rates are combined with mortality rates to derive the total termination rate. We assumed all remaining policies would terminate at attained age 120. The lapse assumptions represent the best estimate expectations of future experience and do not include any provisions for adverse experience. Lapse rates are shown below and vary by premium payment option and policy duration.

Policy	Premium Payment Option:	
Duration	Limited Pay	Lifetime Pay
1	2.0%	6.0%
2	2.0	4.0
3	2.0	3.0
4	1.0	2.0
5	1.0	2.0
6	1.0	1.5
7	0.0	1.5
8	0.0	1.5
9	0.0	1.0
10+	0.0	1.0

Appendix D contains a comparison of the actual total termination rates to both the original pricing assumptions and current assumptions.

10. EXPENSES

Expenses are not being projected. It is assumed that the originally filed expense assumptions are appropriate.

11. PREMIUM CLASSES

The rate revision will be applied as a consistent percentage to all premium classes.

12. ISSUE AGE RANGE

This product was available for issue ages 18 to 90. Premiums are based on issue age.

13. AREA FACTORS

The Company did not use area factors within the state in the premium scale for this product.

14. AVERAGE ANNUAL PREMIUM

The average annual premium for this product both prior to the impact of the requested rate increase(s), and after, is indicated in Appendix A to this memorandum.

15. MODAL PREMIUM FACTORS

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

16. CLAIM LIABILITY AND RESERVE

Claim reserves were calculated using appropriate actuarial methods for IBNR and for open claims on a disabled life basis. The claim reserves were discounted to the date of incurral for each claim and have been included in the historical incurred claims.

17. ACTIVE LIFE RESERVES

We have provided supporting evidence for the justification of the proposed increase based on the relationship of incurred claims divided by earned premium compared to the minimum loss ratio. Incurred claims are calculated without the impact of the change in active life reserves.

18. TREND ASSUMPTION

Benefits payable are equal to or less than the daily benefit limit. We have not included any medical trend in the projections.

19. MAXIMUM ALLOWABLE RATE INCREASE

The maximum allowable rate increase is shown in Appendix A under two different approaches. The first approach applies to policies sold prior to the rate stabilization regulation date and is based on a minimum loss ratio. The state's rate stabilization regulation date (if applicable) and minimum loss ratio are shown in Appendix A. The second approach applies to policies sold on or after the rate stabilization regulation date and is based on a 58% loss ratio on the initial premium and an 85% loss ratio on the increased premium. The requested rate increase is less than the maximum allowed increase under either approach.

20. DISTRIBUTION OF BUSINESS

The historical experience reflects the actual distribution of policies during the experience period. The projected future experience is based on a seriatim projection of the current inforce policies.

21. EXPERIENCE – PAST AND FUTURE

The historical and projected experience, both with and without the requested rate increase(s), is contained in Appendices B and C. The premium in Appendix B is shown on this state's rate basis (applying the level of this state's rate increase(s) to every state).

22. LIFETIME LOSS RATIO

The development of the anticipated nationwide lifetime loss ratio, both without a rate increase and with the requested rate increase(s), is shown in Appendix B. An annual interest rate of 4.22% was used to calculate the lifetime loss ratio in the supporting appendices and was determined based on a weighted average of statutory valuation rates by policies sold by issue year. The rate increase of 15% is assumed effective October 1, 2017 (for simplicity, in the projections only, the impact of any rate guarantee period has not been modeled and the rate increase is conservatively assumed to occur on October 1, 2017).

23. HISTORY OF RATE ADJUSTMENTS

Please refer to Appendix A for the history of any rate adjustments that have been approved in this state.

24. NUMBER OF POLICYHOLDERS

Please refer to Appendix A for the current number of policyholders as of December 31, 2016 in this state.

25. PROPOSED EFFECTIVE DATE

This rate will be implemented as soon as possible after approval has been granted as allowed based on regulation. For policies still inside a rate guarantee period, the rate increase will become effective after the rate guarantee period has expired.

26. RELATIONSHIP OF RENEWAL PREMIUM TO NEW BUSINESS PREMIUM

The Company is no longer selling any new proprietary long-term care products. Therefore, the comparison of renewal premium rates after the rate increases to the Company's current new business premium rate schedule is not applicable.

27. SUMMARY OF APPENDICES

Appendix A contains information that is specific to the state in which this filing is made, such as the average annual premium, the number of policyholders inforce, etc.

Appendix B contains historical and projected nationwide experience for all policies issued under this product. The appendix also includes the projected lifetime loss ratios both without and with the proposed increase.

Appendix C contains the historical and projected experience of only the policies issued in the state.

Appendix D contains a comparison of the actual total termination rates to both the original pricing assumptions and current assumptions.

28. ACTUARIAL CERTIFICATION

I, James Switzer, am 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 preparing health rate filings.

I, John Svedberg, am 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 preparing health rate filings.

To the best of our knowledge and judgment this rate filing is in compliance with the applicable laws and regulations of this State as they relate to premium rate developments and revisions. This memorandum complies with all applicable Actuarial Standards of Practice, including ASOP No. 8.

The projected experience shown in this Memorandum is based on best estimate assumptions and does not include any provision for moderately adverse experience. If the experience does not improve, the Company will need to file for future rate increases. In our opinions, the rates are not excessive or unfairly discriminatory.

James Switzer, FSA, MAAA, CERA
Actuary, Corporate Actuarial

John Svedberg, FSA, MAAA
Director and Actuary, Corporate Actuarial

CMFG Life Insurance Company
2002 Product
Appendix A
State-Specific Information

CMFG Life Insurance Company
2002 Product
Appendix B
Historical and Projected Experience
Nationwide

CMFG Life Insurance Company
2002 Product
Appendix C
Historical and Projected Experience
State-Specific

CMFG Life Insurance Company
2002 Product
Appendix D
Comparison of actual total termination rates
to original pricing and current assumptions