NAIC NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

Date: 4/5/22

Virtual Meeting

LIFE RISK-BASED CAPITAL (E) WORKING GROUP
Thursday, April 7, 2022
12:00 – 1:00 p.m. ET / 11:00 a.m. – 12:00 p.m. CT / 10:00 – 11:00 a.m. MT / 9:00 – 10:00 a.m. PT

ROLL CALL

Philip Barlow, Chair	District of Columbia	William Leung	Missouri
Jennifer Li	Alabama	Derek Wallman	Nebraska
Thomas Reedy	California	Seong-min Eom	New Jersey
Wanchin Chou	Connecticut	Bill Carmello	New York
Sean Collins	Florida	Andrew Schallhorn	Oklahoma
Vincent Tsang	Illinois	Mike Boerner/Rachel Hemphill	Texas
Mike Yanacheak/Carrie Mears	Iowa	Tomasz Serbinowski	Utah
Fred Andersen	Minnesota		

NAIC Support Staff: Dave Fleming

AGENDA

1. Discuss the American Academy of Actuaries' (Academy) C2 Mortality Work Group Recommendation—*Philip Barlow (DC)*

    - Academy Analysis and Response to Comments — Attachment 1
    - Proposed Structural Changes — Attachment 2

2. Discuss Any Other Matters Brought Before the Working Group—*Philip Barlow (DC)*

3. Adjournment

https://naiconline.sharepoint.com/:f:/r/teams/FRSRBC/LRBC/2022Materials/4_7_22Call

April 4, 2022

Mr. Philip Barlow
Chair, Life Risk-Based Capital (E) Working Group
National Association of Insurance Commissioners (NAIC)

Via email: Dave Fleming (dfleming@naic.org)

Re: Analyses Requested at the January 20, 2022, Life RBC Meeting and Response to ACLI Comment Letter and Regulator Comments Discussed at the March 10, 2022, Life RBC Meeting

Dear Philip,

On behalf of the C-2 Mortality Work Group of the American Academy of Actuaries,[1] we are providing the analysis requested at the January 20, 2022, Life Risk-Based Capital (E) Working Group meeting. This includes the following and is discussed in the attached report.

1. Impact on C-2 factors of assuming zero expected mortality improvement
2. Sensitivities on the catastrophe component of the C-2 factors
    a. Unknown sustained risk likelihood and severity
    b. Pandemic risk likelihood and severity
3. Support for the five-year risk exposure period for products with pricing flexibility

Overall, the additional analysis related to C-2 factors reinforces the factors and structure recommended by the work group. The C-2 Mortality Work Group maintains its recommended factors made in November 2021 and its structural change options recommended in January 2022.

The report also includes commentary on the ACLI comment letter and regulator comments discussed at the March 10, 2022, Life RBC Working Group meeting. The response addresses the following topics.

1. Tiered charges
2. Clarification of definitions
3. Improved annual statement tie-out
4. Non-participating whole life and default category
5. Group permanent life

Sincerely,

Chris Trost, MAAA, FSA
Chairperson, C-2 Mortality Work Group

Ryan Fleming, MAAA, FSA
Vice Chairperson, C-2 Mortality Work Group

American Academy of Actuaries

Life RBC – C-2 Mortality Risk

Regarding analysis requested at the January 20, 2022, Life Risk-Based Capital (RBC) (E) Working Group meeting and ACLI Comment Letter and Regulator Comments Discussed at the March 10, 2022, Life RBC (E) Working Group Meeting

To: NAIC Life RBC (E) Working Group

From: American Academy of Actuaries C-2 Mortality Work Group

Date: April 4, 2022

Contents

LIFE RBC – C-2 MORTALITY RISK

Zero Expected Mortality Improvement

Assumptions From November 2021 Recommendation

Experience mortality improvement is set equal to the 2017 Society of Actuaries (SOA) mortality improvement scale for use with Actuarial Guideline (AG) 38 and VM-20. The rates vary by age and gender and are converted to lognormal rates for input in the model.

Trend risk is modeled to assess the risk that future mortality improvement is different than assumed. Historically, both mortality improvement (MI) and MI volatility have differed by historical period, gender, and age, among others. While average MI over long periods tends to stabilize, period-to-period MI can be quite different. An improvement distribution that captures these characteristics was developed while balancing the desire for simplicity. Deviation in mortality improvement is modeled across male/female and young/middle/old ages as correlated normally distributed random variables. An MI deviation is generated for each cohort in each year of each scenario. This allows for large differences year-to-year, consistent with historical data.

Sensitivity Test

An Academy C-2 Mortality Work Group sensitivity test was performed to assess the impact of assuming zero expected mortality improvement. The trend risk component remained included in the model and was assessed versus the zero expected mortality improvement. In the absence of the trend risk component, the recommended factors would be lower.

The results of this sensitivity test are shown below for the large size factors for individual life. Zeroing expected mortality improvement led to a slight increase in the factors for the longer projection periods due to the slightly higher risk associated with higher experience mortality rates. Group life factors would not be impacted consistent with the five-year individual life result.

The C-2 Mortality Work Group continues with its suggestions, which include expected mortality improvement based on the SOA 2017 mortality improvement scale and the evaluation of trend risk versus this expectation.

Sensitivity - Impact of Zero Expected Mortality Improvement						
Pre-Tax RBC C-2 Factors - Large Size	Individual & Industrial Life			Change vs Baseline		
Per $1,000 of Inforce NAR	20 Year	10 Year	5 Year	20 Year	10 Year	5 Year
Baseline - 2017 Mortality Improvement Scale	1.10	0.75	0.50			
Zero Expected Mortality Improvement	1.20	0.80	0.50	0.10	0.05	0.00

Unknown Sustained Risk Likelihood and Severity

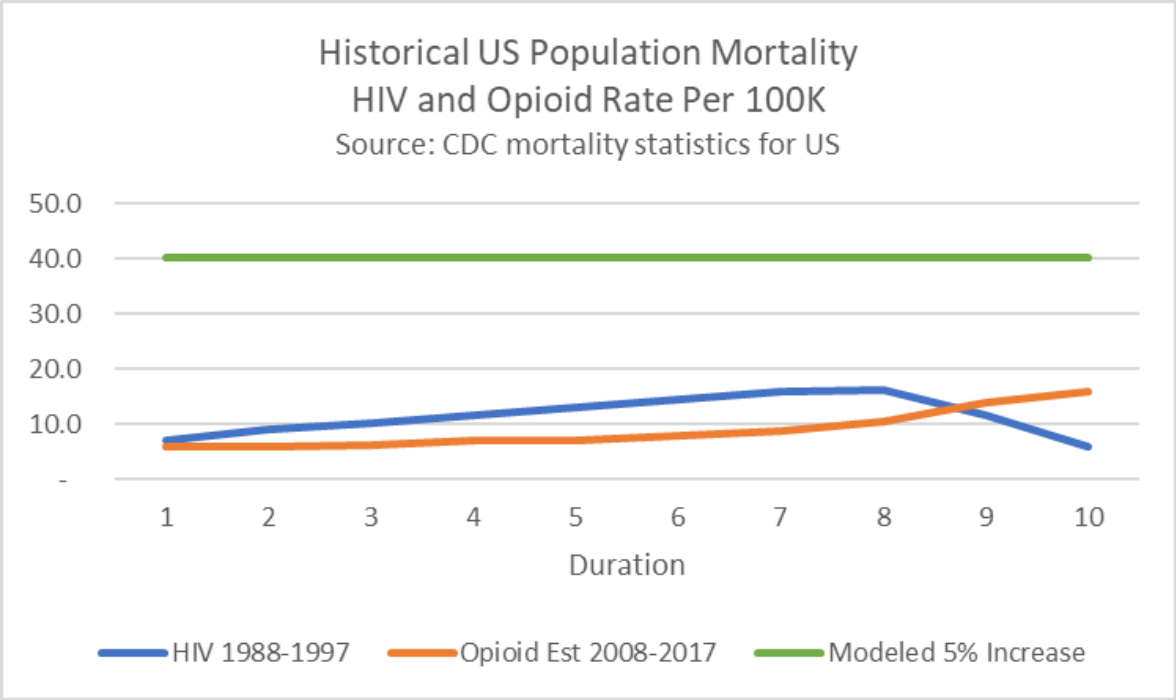
Assumptions From November 2021 Recommendation

The catastrophe risk component of the model assesses the risk of a short-term spike in mortality or a longer-term increase in mortality from a currently unknown health event. This risk includes three components: a pandemic risk distribution, a terrorism risk distribution, and an unknown sustained risk distribution.

LIFE RBC – C-2 MORTALITY RISK

The unknown sustained risk assumes a sustained increase in mortality from an unknown health event. The discrete distribution was calibrated from two historical health events impacting the U.S. population: HIV and opioid abuse. The mortality increase is defined as a 5% increase applied across all ages if triggered. The annual likelihood of the event occurring is 2.5%. If the event is triggered in the scenario, it continues for the lesser of the maximum duration assumption and remainder of the projection period. A 10-year period was selected for the maximum duration based on the historical events and to provide for an event lasting up to a decade. The maximum duration assumption is relevant only when modeling projection periods longer than this assumption. Given the sustained nature of the event, it can only occur once per scenario.

As highlighted in the chart below, the modeled catastrophe provides for deaths in excess of similar historical events due to assuming experience from the worst age band category. The worst age band category was selected to conservatively set the severity as life insurers could have exposure concentrated at certain ages impacted by this type of event.



Sensitivity Testing

Sensitivity tests were performed to assess the impact of increasing the likelihood and/or severity of an unknown sustained risk event.

The results of these sensitivity tests are shown below for the large size factors. The impact of increased likelihood and/or severity is more significant for the longer risk exposure periods. The impact to group life would be similar to the five-year individual life category. The impact to the small and medium size categories would be comparable on an absolute add-on basis. Increasing the impact of this component would provide for safety beyond the level to identify weakly capitalized companies, which may be misaligned with RBC objectives.

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The C-2 Mortality Work Group maintains its recommendation, which includes conservatively setting both the likelihood and impact of an unknown sustained risk event.

Sensitivity - Impact of Alternative Unknown Sustained Risk Assumptions						
Pre-Tax RBC C-2 Factors - Large Size	Individual & Industrial Life			Change vs Baseline		
Per $1,000 of Inforce NAR	20 Year	10 Year	5 Year	20 Year	10 Year	5 Year
Baseline - 2.5% Annual Probability, 5% Increase	1.10	0.75	0.50			
5% Annual Probability, 5% Increase	1.25	0.85	0.55	0.15	0.10	0.05
2.5% Annual Probability, 10% Increase	1.40	1.05	0.60	0.30	0.30	0.10
5% Annual Probability, 10% Increase	1.65	1.25	0.75	0.55	0.50	0.25

Pandemic Risk Likelihood and Severity

Assumptions From November 2021 Recommendation

The pandemic risk component assesses the risk of a one-year increase in mortality from a new pandemic, such a new flu strain. The distribution is discrete and was calibrated from historical observations and multiple sources: current RBC, Swiss Re's model, Solvency II, U.S. Centers for Disease Control and Prevention (CDC)/Department of Health and Human Services Pandemic Severity Assessment Framework (PSAF). Rates are expressed as deaths per 1,000 lives and are applied as an add-on across all ages if triggered. Multiple pandemics may occur in a given scenario. The table of annual likelihood and severity is shown below. The excess mortality from a pandemic may occur over multiple years. For modeling pandemics, the cumulative excess mortality is assumed to occur in a one-year period, which is a more conservative assumption than assuming that the same cumulative excess mortality occurs over multiple years.

Annual Probability	Excess Deaths Per 1K
0.50%	**1.5**
0.50%	**0.7**
0.50%	**0.55**
0.50%	**0.35**
0.50%	**0.2**
0.50%	**0.1**
0.50%	**0.05**
96.50%	**0**

While the pandemic distribution was developed prior to the COVID-19 pandemic, the emerging experience from COVID-19 for group and individual life insurers has been assessed. ***Early indications are that the COVID-19 experience for the life insurance industry falls within the distribution of pandemic severities above.*** The SOA is conducting ongoing research for both individual and group life insurers. The links to the latest reports are shown below.

Individual Life: https://www.soa.org/globalassets/assets/files/resources/research-report/2022/us-ind-life-covid-19-reported-claims.pdf

LIFE RBC – C-2 MORTALITY RISK

Group Life: https://www.soa.org/globalassets/assets/files/resources/research-report/2022/group-life-covid-19-mortality.pdf

For individual life, the average reported excess mortality by amount (adjusted for trend) from the second quarter of 2020 through the third quarter of 2021 was 10% for the 1.5-year period. Assuming the pandemic lasts from two to three years at that average rate, the estimated cumulative excess mortality ranges from 20%-30%. Based on modeled mortality rates, this translates to estimated excess deaths of 0.5-0.7 per thousand.

For group life, the average reported excess mortality by amount from the second quarter of 2020 through the third quarter of 2021 was 29% for the 1.5-year period. Assuming the pandemic lasts from two to three years at that average rate, the estimated cumulative excess mortality ranges from 60% to 90%. Based on modeled mortality rates, this translates to estimated excess deaths of 0.8-1.2 per thousand.

Note, these are industry-wide estimates to assess reported COVID-19 experience versus the RBC pandemic distribution. Estimates could change based on the course of the COVID-19 pandemic and further research on mortality experience during this period. Insurer experience may vary greatly by company.

Sensitivity Testing

Sensitivity tests were performed to assess the impact of increasing the likelihood and/or severity of a pandemic.

The results of these sensitivity tests are shown below for the large size factors. The impact to group life and to the small and medium size categories would be similar. Increasing the impact of this component would provide for safety beyond the level to identify weakly capitalized companies, which may be misaligned with RBC objectives. The likelihood of future pandemics, given the COVID-19 pandemic, is uncertain, and there is the possibility of overreacting to current events. If future research provides new expert judgment on pandemic outcomes that are significantly different than the distribution assumed in the recommended factors, this would be justification for a new review of the C-2 factors.

The C-2 Mortality Work Group maintains its suggestions, which includes a distribution of potential outcomes providing for excess mortality at least as severe as the COVID-19 pandemic.

Sensitivity - Impact of Alternative Pandemic Assumptions						
Pre-Tax RBC C-2 Factors - Large Size	Individual & Industrial Life			Change vs Baseline		
Per $1,000 of Inforce NAR	20 Year	10 Year	5 Year	20 Year	10 Year	5 Year
Baseline - 3.5% Aggregate Annual Probability, 0.05 - 1.50 Deaths / 1000	1.10	0.75	0.50			
Double Probability	1.30	1.00	0.75	0.20	0.25	0.25
Double Impact	1.50	1.10	0.90	0.40	0.35	0.40
Double Probability, Double Impact	2.00	1.75	1.55	0.90	1.00	1.05

Support for the Five-Year Risk Exposure Period for Products With Pricing Flexibility

Assumptions From November 2021 Recommendation

The five-year risk exposure period in the modeling is intended to represent inforce blocks where pricing may be adjusted following adverse mortality experience due to the presence of non-guaranteed elements,

LIFE RBC – C-2 MORTALITY RISK

which are not yet being charged at maximum levels. The five-year period represents a conservatively appropriate period where experience emerges, is subsequently studied, and implemented into inforce pricing through adjusting non-guaranteed elements. Examples of products with this flexibility are universal life products without secondary guarantees and participating whole life products.

Additional Support for the Five-Year Risk Exposure Period

The C-2 Mortality Work Group developed alternative versions of the model to directly simulate pricing flexibility to respond to emerging mortality experience. These versions of the model were run for 30 years, over which nearly 100% of the inforce business has run-off. Four versions of the model were developed as described below.

1. An actual-to-expected ratio is calculated for each projection year on a statutory loss/net amount at risk basis (death benefits minus reserves released). Pricing is adjusted on a five-year rolling average basis with a one-year lag for both positive and negative experience. Years prior to the projection start date have an actual-to-expected ratio of 100%.

2. Same as version 1 plus pricing adjustments don't occur unless outside of +/- 5% deviations on a rolling average basis. The 5% deviation aligns with the margin assumed in reserves to cover moderately adverse experience of 1 standard deviation.

3. Same as version 2 plus there are no pricing adjustments for the first five projection years.

4. Same as version 3 plus a 15% limit for the maximum margin available consistent with typical mortality loads applied in the loaded 2017 CSO table. Sensitivities with lower margins of 10% and 6% were also tested.

The results for a large inforce size are shown in the chart below. Versions 1 and 2 result in a capital factor lower than the recommendation for the five-year category. This is because pricing adjustments occur sooner than after five years. Versions 3 and 4 result in a capital factor consistent with the recommendation as the exposure periods are aligned at five years. These versions assume that there is sufficient margin available to offset changes in mortality experience beyond the five-year risk exposure period. With version 4 of the model, sensitivities performed at lower margins of 10% and 6% demonstrate that the capital factor increases to the extent margins are more limited.

The C-2 Mortality Work Group maintains its suggestions to assign products with inforce pricing flexibility to the five-year risk exposure period category.

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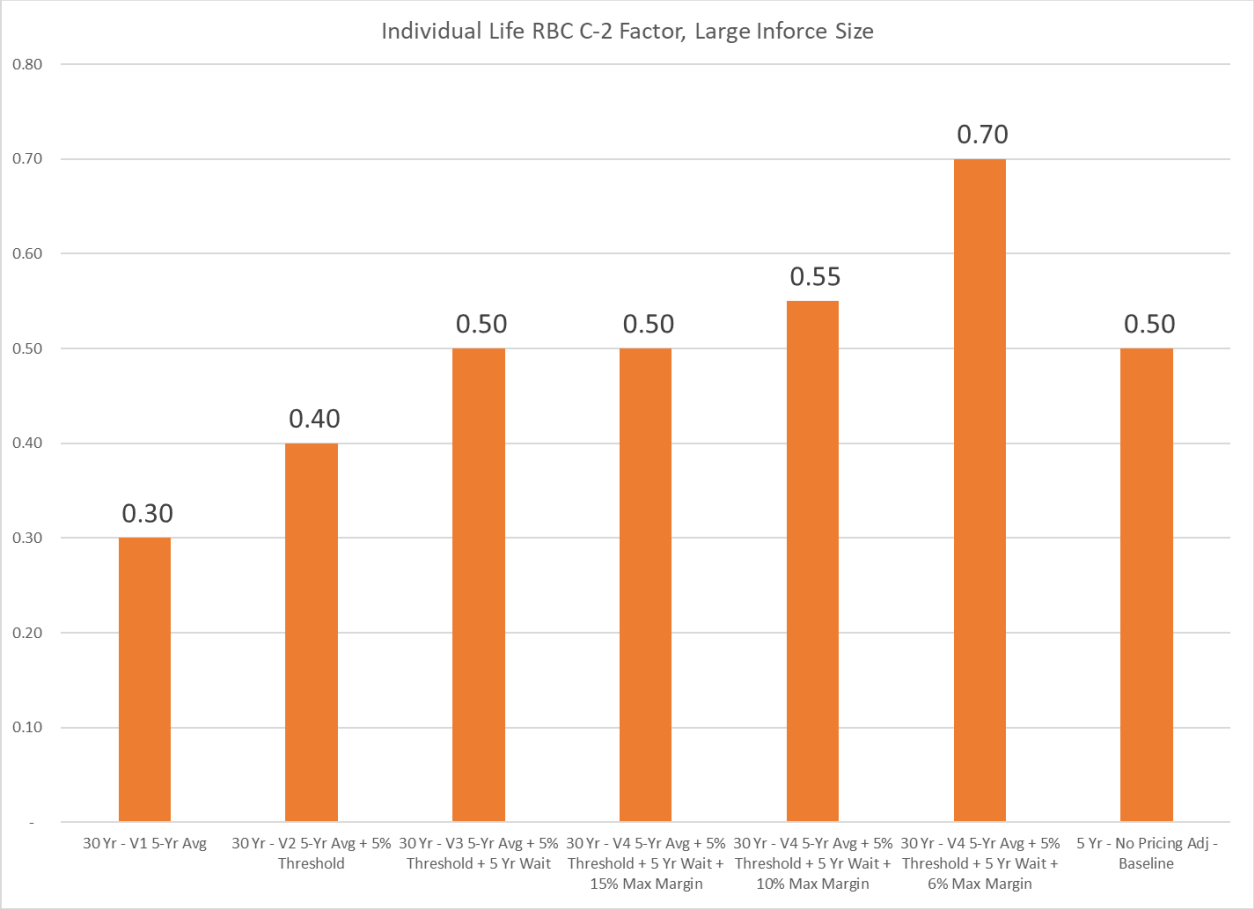

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Response to ACLI Comment Letter and Regulator Comments Discussed at the March 10, 2022, Meeting

Tiered Charges

The C-2 Mortality Work Group is supportive of tiering the factors applied to the net amount at risk based on the aggregate amounts for individual life and for group life. Either of the approaches suggested by the ACLI are acceptable solutions. The pro rata approach to the work group appears to be the logical approach because it spreads the tiering proportionately among the categories. The larger factors associated with smaller sizes are due to the volatility and level risk components. It makes sense that the aggregate volatility and level risks for a company are spread proportionately among the categories. The approach similar to the disability income factors would result in slightly more conservative capital amounts because the highest factor products are assigned first.

Clarification of Definitions

The categories in the recommended C-2 factors were developed broadly. The length of the risk exposure period was the distinguishing variable to differentiate risk through the factors. The practical implementation of the factors was to select product categories based on the existing annual statement reporting structure. Universal life with secondary guarantee products have the longest mortality guarantees on average. Term products fall in the middle on average. The all other life category represents products that have the ability to adjust current mortality rates for emerging experience. The C-2 Mortality Work Group recognizes that the categorization is not perfect in all instances but is intended to recognize differences in risk broadly based on the existing annual statement reporting structure. The categories are also intended to apply to all inforce business regardless of whether the reserving is pre- or post-principles-based reserving.

Improved Annual Statement Tie-Out

The C-2 Mortality Work Group is supportive of efforts to report net amounts at risk directly in the annual statement. This practice would simplify the necessary/required data sources to be retrieved for the RBC C-2 Life calculation. Reporting the net amount at risk for each company and by product line may also provide meaningful information to financial statement users.

Option 1—Annual Statement Updates

The information needed to calculate the net amount at risk by product would fit well in the Analysis of Increase in Reserves During the Year pages. The following lines could be added as a new section called Net Amount at Risk. All amounts would be as of December 31 of the current year and on a net of reinsurance basis.

- Line 18*: Amount of Insurance In Force*. This line should be equivalent to amounts reported on Line 23 of the Exhibit of Life Insurance.
- Line 19: *Aggregate Reserves*. This would simply be set equal to Line 15.
- Line 20: *Separate Accounts Reserves*. These amounts would be on the same basis as the Separate Accounts Exhibit 3.

LIFE RBC – C-2 MORTALITY RISK

- Line 21*: Modified Coinsurance Reserves*. These amounts would be on the same basis as Schedule S.
- Line 22: *Net Amount at Risk*. This would be calculated as Line 18 – Line 19 – Line 20 – Line 21

Furthermore, the Whole Life column 3 could be expanded into two lines of business to distinguish between participating and non-participating contracts.

Option 2—Annual Statement Updates

The information needed to calculate the net amount at risk for the three categories (Life Policies with Pricing Flexibility, Term Life Policies without Pricing Flexibility, and Permanent Life Policies without Pricing Flexibility) could be addressed through a table in a new note, line, or item within Notes to Financial Statements. The following lines would be included in the table with four columns for the three RBC categories and a total column. All amounts would be as of December 31 of the current year and on a net of reinsurance basis.

- Line 1: *Amount of Insurance In Force*. This line should be equivalent to amounts reported on Line 23 of the Exhibit of Life Insurance.
- Line 2: *Aggregate Reserves*. This would set equal to Line 15 of the Analysis of Increase in Reserves During the Year.
- Line 3: *Separate Accounts Reserves*. These amounts would be on the same basis as the Separate Accounts Exhibit 3.
- Line 4: Modified Coinsurance Reserves. These amounts would be on the same basis as Schedule S.
- Line 5: *Net Amount at Risk*. This would be calculated as Line 1 – Line 2 – Line 3 – Line 4

In order to populate the RBC categories, a principle-based assessment would need to be completed by each company. Pricing flexibility for life insurance is determined as the ability to materially adjust rates on in force contracts through changing premiums and/or non-guaranteed elements as of the valuation date and within the next 5 policy years. A material rate adjustment is defined as the ability to recover, on a present value basis, the difference in mortality provided for in the factors for contracts with and without pricing flexibility.

Group Life Annual Statement Updates Under Option 1 or Option 2

The information needed to calculate the net amount at risk for the two categories (Group & Credit Life with Remaining Rate Terms 36 Months and Under, Group & Credit Life with Remaining Rate Terms Over 36 Months) could be addressed through a table in a new note, line or item within Notes to Financial Statements. The following lines would be included in the table with three columns for the two RBC categories and a total column. All amounts would be as of December 31 of the current year and on a net of reinsurance basis.

- Line 1: *Amount of Insurance In Force*. This line should be equivalent to amounts reported on Line 23 of the Exhibit of Life Insurance.

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- Line 2: *Aggregate Reserves*. This would set equal to Line 15 of the Analysis of Increase in Reserves During the Year.
- Line 3: *Separate Accounts Reserves*. These amounts would be on the same basis as the Separate Accounts Exhibit 3.
- Line 4: *Modified Coinsurance Reserves*. These amounts would be on the same basis as Schedule S.
- Line 5: *Net Amount at Risk*. This would be calculated as Line 1 – Line 2 – Line 3 – Line 4

Non-Participating Whole Life and Default Category

New York (NY) and Minnesota (MN) regulators have expressed a determination to prefer to classify non-participating (or fully guaranteed) whole life with the highest individual life factor category along with universal life with secondary guarantees. There is also a preference under Option 1 of the structural updates that any products not assigned to one of the categories should conservatively default to the highest factor category. The C-2 Mortality Work Group is supportive of these updates to refine the product classifications as long as products that have pricing flexibility continue to be assigned to the lowest factor category.

Group Permanent Life

A regulator comment was made at the March 10, 2022, meeting suggesting that group permanent life should be categorized with the individual life factors. The C-2 Mortality Work Group is supportive of this update, as the individual life factors would be more appropriate for these types of products. The group factors were developed assuming a term life product, as the vast majority of industry exposure is group term life. Furthermore, the C-2 Mortality Work Group suggests assigning group credit life to the group category, and individual credit life to the individual life category. If this update is made, then the category names will need to be updated to make it clear that group permanent life business is being categorized along with individual life products.

January 20, 2022

Mr. Philip Barlow
Chair, Life Risk-Based Capital (E) Working Group
National Association of Insurance Commissioners (NAIC)

Via e-mail: Dave Fleming (dfleming@naic.org)

Re: Structural Updates to Life RBC C-2 Mortality

Dear Philip,

On behalf of the C-2 Mortality Work Group of the American Academy of Actuaries[1], we are providing two options for structural updates to the Life RBC C-2 Mortality factors for consideration to be exposed by 1/31/2022. Also included are draft instructions for informational purposes which are subject to a different exposure deadline of 4/30/2022.

Sincerely,

Chris Trost, MAAA, FSA
Chairperson, C-2 Mortality Work Group
Ryan Fleming, MAAA, FSA
Vice Chairperson, C-2 Mortality Work Group
American Academy of Actuaries

[1] The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

Capital Adequacy (E) Task Force

RBC Proposal Form

[ ] Capital Adequacy (E) Task Force [ ] Health RBC (E) Working Group [X] Life RBC (E) Working Group
[ ] Catastrophe Risk (E) Subgroup [ ] Investment RBC (E) Working Group [ ] Longevity Risk (A/E) Subgroup
[ ] C3 Phase II/ AG43 (E/A) Subgroup [ ] P/C RBC (E) Working Group

DATE: 1/20/22	**FOR NAIC USE ONLY**
CONTACT PERSON: Ryan Fleming, MAAA, FSA	Agenda Item #
TELEPHONE: (414) 665-5020	Year 2022
EMAIL ADDRESS: ryanfleming@northwesternmutual.com	**DISPOSITION**
ON BEHALF OF: AAA C-2 Mortality Work Group	[ ] ADOPTED
NAME: Ryan Fleming, MAAA, FSA	[ ] REJECTED
TITLE: Vice Chairperson	[ ] DEFERRED TO
AFFILIATION: American Academy of Actuaries	[ ] REFERRED TO OTHER NAIC GROUP
ADDRESS: 1850 M Street NW, Suite 300	[ ] EXPOSED
Washington, DC 20036	[ ] OTHER (SPECIFY)

IDENTIFICATION OF SOURCE AND FORM(S)/INSTRUCTIONS TO BE CHANGED

[ ] Health RBC Blanks [ ] Property/Casualty RBC Blanks [ ] Life and Fraternal RBC Instructions
[ ] Health RBC Instructions [ ] Property/Casualty RBC Instructions [X] Life and Fraternal RBC Blanks
[ ] OTHER _____

DESCRIPTION OF CHANGE(S)

Updated blank for C2 Life Mortality on LR025, LR030 and LR031. Draft instructions are included for informational purposes and are subject to a different exposure deadline of 4/30/22.

REASON OR JUSTIFICATION FOR CHANGE **

Structural changes necessary to facilitate the implementation of updated C2 life mortality factors and expanded categories.

Additional Staff Comments:

**** This section must be completed on all forms.** **Revised 2-2019**

LIFE INSURANCE
DRAFT - OPTION 1

		Annual Statement Source	(1) Statement Value		Factor		(2) RBC Requirement
	Individual & Industrial Life Net Amount at Risk						
(1)	Ordinary Life In Force	Exhibit of Life Insurance Column 4 Line 23 x 1000					
(2) ~~(3)~~	Plus Industrial Life In Force	Exhibit of Life Insurance Column 2 Line 23 x 1000					
(3)	**Total Individual & Industrial Life In Force**	**Lines (1) + (2)**					
(4) ~~(2)~~	~~Less~~ Ordinary Life Reserves	Exhibit 5 Column 4 Line 0199999					
(5) ~~(4)~~	~~Less~~ **Plus** Industrial Life Reserves	Exhibit 5 Column 3 Line 0199999					
(6) ~~(5)~~	~~Less~~ **Plus Ordinary Life** Separate Accounts	Separate Accounts Exhibit 3 Column 3 Line 0199999					
(7) ~~(6)~~	~~Less~~ **Plus Ordinary & Industrial Life** Modified Coinsurance Assumed Reserves	Schedule S Part 1 Section 1 Column 12, in part ‡					
(8) ~~(7)~~	~~Plus~~ **Less Ordinary & Industrial Life** Modified Coinsurance Ceded Reserves	Schedule S Part 3 Section 1 Column 14, in part ‡					
(9)	**Total Individual & Industrial Life Reserves**	**Lines (4) + (5) + (6) + (7) - (8)**					
(10) ~~(8)~~	Total Individual ~~and~~ & Industrial Life Net Amount at **Risk** ~~Risk~~	Lines ~~(1) + (3) + (7) - (2) - (4) - (5) - (6)~~ **(3) - (9)**		~~X~~	~~†~~	=	
(11)	**Universal Life with Secondary Guarantees In Force**	**Company Records***					
(12)	**Less Universal Life with Secondary Guarantees Reserves**	**Analysis of Increase in Reserves During the Year - Individual Life Insurance Column 7 Line 15**					
(13)	**Total Universal Life with Secondary Guarantees Net Amount at Risk**	**Lines (11) - (12)**		X	†	=	
(14)	**Term Life In Force**	**Company Records***					
(15)	**Less Term Life Reserves**	**Analysis of Increase in Reserves During the Year - Individual Life Insurance Column 4 Line 15**					
(16)	**Total Term Life Net Amount at Risk**	**Lines (14) - (15)**		X	†	=	
(17)	**All Other Life In Force**	**Lines (3) - (11) - (14)**					
(18)	**Less All Other Life Reserves**	**Lines (9) - (12) - (15)**					
(19)	**All Other Life Net Amount at Risk**	**Lines (17) - (18)**		X	†	=	
(20)	**Total Individual & Industrial Life**	**Lines (13) + (16) + (19)**					
	Group ~~and &~~ Credit Life Net Amount at Risk						
(21) ~~(9)~~	Group Life In Force	Exhibit of Life Insurance Column 9 Line 23 x 1000					
(22) ~~(13)~~	Plus Credit Life In Force	Exhibit of Life Insurance Column 6 Line 23 x 1000					
(23) ~~(10)~~	Less Group FEGLI **In Force**	Exhibit of Life Insurance Column 4 Line 43 x 1000					
(24) ~~(11)~~	Less Group SGLI **In Force**	Exhibit of Life Insurance Column 4 Line 44 x 1000					
(25) ~~(14)~~	Less Credit FEGLI **In Force**	Exhibit of Life Insurance Column 2 Line 43 x 1000					
(26) ~~(15)~~	Less Credit SGLI **In Force**	Exhibit of Life Insurance Column 2 Line 44 x 1000					
(27)	**Total Group & Credit Life In Force excluding FEGLI/SGLI**	**Lines (21) + (22) - (23) - (24) - (25) - (26)**					
(28) ~~(12)~~	~~Less~~ Group Life Reserves	Exhibit 5 Column 6 Line 0199999					
(29) ~~(12)~~	~~Less~~ **Plus** Credit Life Reserves	Exhibit 5 Column 5 Line 0199999					
(30) ~~(17)~~	~~Less~~ **Plus Group Life** Separate Accounts	Separate Accounts Exhibit 3 Column 4 Line 0199999					
(31) ~~(18)~~	~~Less~~ **Plus Group & Credit Life** Modified Coinsurance Assumed Reserves	Schedule S Part 1 Section 1 Column 12, in part ‡					
(32) ~~(19)~~	~~Plus~~ **Less Group & Credit Life** Modified Coinsurance Ceded Reserves	Schedule S Part 3 Section 1 Column 14, in part ‡					
(33)	**Total Group & Credit Life Reserves**	**Lines (28) + (29) + (30) + (31) - (32)**					
(34) ~~(20)~~	Total Group ~~and &~~ Credit **Life** Net Amount at Risk **excluding FEGLI/SGLI**	Lines ~~(9) + (13) + (19) - (10) - (11) - (12) - (14) - (15)~~ **(27) - (33) - (16) - (17) - (18)**		~~X~~	~~†~~	=	
(35)	**Group & Credit Life In Force with Remaining Rate Terms 36 Months and Under**	**Company Records***					
(36)	**Less Group & Credit Life Reserves with Remaining Rate Terms 36 Months and Under**	**Company Records***					
(37)	**Group & Credit Life Net Amount at Risk with Remaining Rate Terms 36 Months and Under**	**Lines (35) - (36)**		X	†	=	
(38)	**Group & Credit Life In Force with Remaining Rate Terms Over 36 Months**	**Lines (27) - (35)**					
(39)	**Less Group & Credit Life Reserves with Remaining Rate Terms Over 36 Months**	**Lines (33) - (36)**					
(40)	**Group & Credit Life Net Amount at Risk with Remaining Rate Terms Over 36 Months**	**Lines (38) - (39)**		X	†	=	
(41) ~~(21)~~	FEGLI/SGLI In Force	Exhibit of Life Insurance **Sum of** Column 2 and 4 Line 43 **and 44 x 1000** ~~44 x 1000~~		X	0.0008	=	
(42)	**Total Group & Credit Life**	**Lines (37) + (40) + (41)**					
(43) ~~(22)~~	**Total Life**	Lines ~~(8) + (20) + (21)~~ **(20) + (42)**					

* **The definitions are specified in the Life Insurance section of the risk-based capital instructions**
† The tiered calculation is illustrated in the Life Insurance section of the risk-based capital instructions.
‡ Include only the portion which relates to policy reserves that, if written on a direct basis, would be included on Exhibit 5.

Denotes items that must be manually entered on the filing software.

LIFE INSURANCE
DRAFT - OPTION 2

		Annual Statement Source	(1) Statement Value		Factor		(2) RBC Requirement
	Individual & Industrial Life Net Amount at Risk						
(1)	Ordinary Life In Force	Exhibit of Life Insurance Column 4 Line 23 x 1000					
(2) ~~(3)~~	Plus Industrial Life In Force	Exhibit of Life Insurance Column 2 Line 23 x 1000					
(3)	**Total Individual & Industrial Life In Force**	**Lines (1) + (2)**					
(4) ~~(2)~~	~~Less~~ Ordinary Life Reserves	Exhibit 5 Column 4 Line 0199999					
(5) ~~(4)~~	~~Less~~ **Plus** Industrial Life Reserves	Exhibit 5 Column 3 Line 0199999					
(6) ~~(5)~~	~~Less~~ **Plus Ordinary Life** Separate Accounts	Separate Accounts Exhibit 3 Column 3 Line 0199999					
(7) ~~(6)~~	~~Less~~ **Plus Ordinary & Industrial Life** Modified Coinsurance Assumed Reserves	Schedule S Part 1 Section 1 Column 12, in part ‡					
(8) ~~(7)~~	~~Plus~~ **Less Ordinary & Industrial Life** Modified Coinsurance Ceded Reserves	Schedule S Part 3 Section 1 Column 14, in part ‡					
(9)	**Total Individual & Industrial Life Reserves**	**Lines (4) + (5) + (6) + (7) - (8)**					
(10) ~~(8)~~	Total Individual ~~and~~ & Industrial Life Net Amount at **Risk** ~~Risk~~	Lines ~~(1) + (3) + (7) - (2) - (4) - (5) - (6)~~ (3) - (9)		~~X~~	~~†~~	=	
(11)	**Life Policies with Pricing Flexibility In Force**	**Company Records***					
(12)	**Less Life Policies with Pricing Flexibility In Force Reserves**	**Company Records***					
(13)	**Total Life Policies with Pricing Flexibility Net Amount at Risk**	**Lines (11) - (12)**		X	†	=	
(14)	**Term Life Policies without Pricing Flexibility In Force**	**Company Records***					
(15)	**Less Term Life Policies without Pricing Flexibility Reserves**	**Company Records***					
(16)	**Total Term Life Policies without Pricing Flexibility Net Amount at Risk**	**Lines (14) - (15)**		X	†	=	
(17)	**Permanent Life Policies without Pricing Flexibility In Force**	**Lines (3) - (11) - (14)**					
(18)	**Less Permanent Life Policies without Pricing Flexibility Reserves**	**Lines (9) - (12) - (15)**					
(19)	**Permanent Life Policies without Pricing Flexibility Net Amount at Risk**	**Lines (17) - (18)**		X	†	=	
(20)	**Total Individual & Industrial Life**	**Lines (13) + (16) + (19)**					
	Group ~~and &~~ Credit Life Net Amount at Risk						
(21) ~~(9)~~	Group Life In Force	Exhibit of Life Insurance Column 9 Line 23 x 1000					
(22) ~~(13)~~	Plus Credit Life In Force	Exhibit of Life Insurance Column 6 Line 23 x 1000					
(23) ~~(10)~~	Less Group FEGLI **In Force**	Exhibit of Life Insurance Column 4 Line 43 x 1000					
(24) ~~(11)~~	Less Group SGLI **In Force**	Exhibit of Life Insurance Column 4 Line 44 x 1000					
(25) ~~(14)~~	Less Credit FEGLI **In Force**	Exhibit of Life Insurance Column 2 Line 43 x 1000					
(26) ~~(15)~~	Less Credit SGLI **In Force**	Exhibit of Life Insurance Column 2 Line 44 x 1000					
(27)	**Total Group & Credit Life In Force excluding FEGLI/SGLI**	**Lines (21) + (22) - (23) - (24) - (25) - (26)**					
(28) ~~(12)~~	~~Less~~ Group Life Reserves	Exhibit 5 Column 6 Line 0199999					
(29) ~~(12)~~	~~Less~~ **Plus** Credit Life Reserves	Exhibit 5 Column 5 Line 0199999					
(30) ~~(17)~~	~~Less~~ **Plus Group Life** Separate Accounts	Separate Accounts Exhibit 3 Column 4 Line 0199999					
(31) ~~(18)~~	~~Less~~ **Plus Group & Credit Life** Modified Coinsurance Assumed Reserves	Schedule S Part 1 Section 1 Column 12, in part ‡					
(32) ~~(19)~~	~~Plus~~ **Less Group & Credit Life** Modified Coinsurance Ceded Reserves	Schedule S Part 3 Section 1 Column 14, in part ‡					
(33)	**Total Group & Credit Life Reserves**	**Lines (28) + (29) + (30) + (31) - (32)**					
(34) ~~(20)~~	Total Group ~~and &~~ Credit **Life** Net Amount at Risk **excluding FEGLI/SGLI**	Lines ~~(9) + (13) + (19) - (10) - (11) - (12) - (14) - (15)~~ (27) - (33) ~~- (16) - (17) - (18)~~		~~X~~	~~†~~	=	
(35)	**Group & Credit Life In Force with Remaining Rate Terms 36 Months and Under**	**Company Records***					
(36)	**Less Group & Credit Life Reserves with Remaining Rate Terms 36 Months and Under**	**Company Records***					
(37)	**Group & Credit Life Net Amount at Risk with Remaining Rate Terms 36 Months and Under**	**Lines (35) - (36)**		X	†	=	
(38)	**Group & Credit Life In Force with Remaining Rate Terms Over 36 Months**	**Lines (27) - (35)**					
(39)	**Less Group & Credit Life Reserves with Remaining Rate Terms Over 36 Months**	**Lines (33) - (36)**					
(40)	**Group & Credit Life Net Amount at Risk with Remaining Rate Terms Over 36 Months**	**Lines (38) - (39)**		X	†	=	
(41) ~~(21)~~	FEGLI/SGLI In Force	Exhibit of Life Insurance **Sum of** Column 2 and 4 Line 43 **and 44 x 1000** ~~44 x 1000~~		X	0.0008	=	
(42)	**Total Group & Credit Life**	**Lines (37) + (40) + (41)**					
(43) ~~(22)~~	**Total Life**	Lines ~~(8) + (20) + (21)~~ (20) + (42)					

* **The definitions are specified in the Life Insurance section of the risk-based capital instructions**
† The tiered calculation is illustrated in the Life Insurance section of the risk-based capital instructions.
‡ Include only the portion which relates to policy reserves that, if written on a direct basis, would be included on Exhibit 5.

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CALCULATION OF TAX EFFECT FOR LIFE AND FRATERNAL RISK-BASED CAPITAL

		Source	(1) RBC Amount		Tax Factor		(2) RBC Tax Effect	
	ASSET RISKS							
	Bonds							
(001)	Long-term Bonds – NAIC 1	LR002 Bonds Column (2) Line (2.8) + LR018 Off-Balance Sheet Collateral Column (3) Line (2.8)		X	0.1680	=		
(002)	Long-term Bonds – NAIC 2	LR002 Bonds Column (2) Line (3.4) + LR018 Off-Balance Sheet Collateral Column (3) Line (3.4)		X	0.1680	=		
(003)	Long-term Bonds – NAIC 3	LR002 Bonds Column (2) Line (4.4) + LR018 Off-Balance Sheet Collateral Column (3) Line (4.4)		X	0.1680	=		
(004)	Long-term Bonds – NAIC 4	LR002 Bonds Column (2) Line (5.4) + LR018 Off-Balance Sheet Collateral Column (3) Line (5.4)		X	0.1680	=		
(005)	Long-term Bonds – NAIC 5	LR002 Bonds Column (2) Line (6.4) + LR018 Off-Balance Sheet Collateral Column (3) Line (6.4)		X	0.1680	=		
(006)	Long-term Bonds – NAIC 6	LR002 Bonds Column (2) Line (7) + LR018 Off-Balance Sheet Collateral Column (3) Line (7)		X	0.2100	=		
(007)	Short-term Bonds – NAIC 1	LR002 Bonds Column (2) Line (10.8)		X	0.1680	=		
(008)	Short-term Bonds – NAIC 2	LR002 Bonds Column (2) Line (11.4)		X	0.1680	=		
(009)	Short-term Bonds – NAIC 3	LR002 Bonds Column (2) Line (12.4)		X	0.1680	=		
(010)	Short-term Bonds – NAIC 4	LR002 Bonds Column (2) Line (13.4)		X	0.1680	=		
(011)	Short-term Bonds – NAIC 5	LR002 Bonds Column (2) Line (14.4)		X	0.1680	=		
(012)	Short-term Bonds – NAIC 6	LR002 Bonds Column (2) Line (15)		X	0.2100	=		
(013)	Credit for Hedging - NAIC 1 Through 5 Bonds	LR014 Hedged Asset Bond Schedule Column (13) Line (0199999)		X	0.1680	=		†
(014)	Credit for Hedging - NAIC 6 Bonds	LR014 Hedged Asset Bond Schedule Column (13) Line (0299999)		X	0.2100	=		†
(015)	Bond Reduction - Reinsurance	LR002 Bonds Column (2) Line (19)		X	0.2100	=		†
(016)	Bond Increase - Reinsurance	LR002 Bonds Column (2) Line (20)		X	0.2100	=		
(017)	Non-Exempt NAIC 1 U.S. Government Agency	LR002 Bonds Column (2) Line (22)		X	0.1680	=		
(018)	Bonds Size Factor	LR002 Bonds Column (2) Line (26) - LR002 Bonds Column (2) Line (21)		X	0.1680	=		
	Mortgages							
	In Good Standing							
(019)	Residential Mortgages - Insured	LR004 Mortgages Column (6) Line (1)		X	0.1575	=		
(020)	Residential Mortgages - Other	LR004 Mortgages Column (6) Line (2)		X	0.1575	=		
(021)	Commercial Mortgages - Insured	LR004 Mortgages Column (6) Line (3)		X	0.1575	=		
(022)	Total Commercial Mortgages - All Other	LR004 Mortgages Column (6) Line (9)		X	0.1575	=		
(023)	Total Farm Mortgages	LR004 Mortgages Column (6) Line (15)		X	0.1575	=		
	90 Days Overdue							
(024)	Farm Mortgages	LR004 Mortgages Column (6) Line (16)		X	0.1575	=		
(025)	Residential Mortgages - Insured	LR004 Mortgages Column (6) Line (17)		X	0.1575	=		
(026)	Residential Mortgages - Other	LR004 Mortgages Column (6) Line (18)		X	0.1575	=		
(027)	Commercial Mortgages - Insured	LR004 Mortgages Column (6) Line (19)		X	0.1575	=		
(028)	Commercial Mortgages - Other	LR004 Mortgages Column (6) Line (20)		X	0.1575	=		
	In Process of Foreclosure							
(029)	Farm Mortgages	LR004 Mortgages Column (6) Line (21)		X	0.1575	=		

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CALCULATION OF TAX EFFECT FOR LIFE AND FRATERNAL RISK-BASED CAPITAL (CONTINUED)

		Source	(1) RBC Amount		Tax Factor		(2) RBC Tax Effect	
(030)	Residential Mortgages - Insured	LR004 Mortgages Column (6) Line (22)		X	0.1575	=		
(031)	Residential Mortgages - Other	LR004 Mortgages Column (6) Line (23)		X	0.1575	=		
(032)	Commercial Mortgages - Insured	LR004 Mortgages Column (6) Line (24)		X	0.1575	=		
(033)	Commercial Mortgages - Other	LR004 Mortgages Column (6) Line (25)		X	0.1575	=		
(034)	Due & Unpaid Taxes Mortgages	LR004 Mortgages Column (6) Line (26)		X	0.1575	=		
(035)	Due & Unpaid Taxes - Foreclosures	LR004 Mortgages Column (6) Line (27)		X	0.1575	=		
(036)	Mortgage Reduction - Reinsurance	LR004 Mortgages Column (6) Line (29)		X	0.2100	=		†
(037)	Mortgage Increase - Reinsurance	LR004 Mortgages Column (6) Line (30)		X	0.2100	=		
	Preferred Stock							
(038)	Unaffiliated Preferred Stock NAIC 1	LR005 Unaffiliated Preferred and Common Stock Column (5) Line (1) + LR018 Off-Balance Sheet Collateral Column (3) Line (9)		X	0.1575	=		
(039)	Unaffiliated Preferred Stock NAIC 2	LR005 Unaffiliated Preferred and Common Stock Column (5) Line (2) + LR018 Off-Balance Sheet Collateral Column (3) Line (10)		X	0.1575	=		
(040)	Unaffiliated Preferred Stock-NAIC 3	LR005 Unaffiliated Preferred and Common Stock Column (5) Line (3) + LR018 Off-Balance Sheet Collateral Column (3) Line (11)		X	0.1575	=		
(041)	Unaffiliated Preferred Stock NAIC 4	LR005 Unaffiliated Preferred and Common Stock Column (5) Line (4) + LR018 Off-Balance Sheet Collateral Column (3) Line (12)		X	0.1575	=		
(042)	Unaffiliated Preferred Stock NAIC 5	LR005 Unaffiliated Preferred and Common Stock Column (5) Line (5) + LR018 Off-Balance Sheet Collateral Column (3) Line (13)		X	0.1575	=		
(043)	Unaffiliated Preferred Stock NAIC 6	LR005 Unaffiliated Preferred and Common Stock Column (5) Line (6) + LR018 Off-Balance Sheet Collateral Column (3) Line (14)		X	0.2100	=		
(044)	Preferred Stock Reduction-Reinsurance	LR005 Unaffiliated Preferred and Common Stock Column (5) Line (8)		X	0.2100	=		†
(045)	Preferred Stock Increase-Reinsurance	LR005 Unaffiliated Preferred and Common Stock Column (5) Line (9)		X	0.2100	=		
	Separate Accounts							
(046)	Guaranteed Index	LR006 Separate Accounts Column (3) Line (1)		X	0.1575	=		
(047)	Nonindex-Book Reserve	LR006 Separate Accounts Column (3) Line (2)		X	0.1575	=		
(048)	Separate Accounts Nonindex-Market Reserve	LR006 Separate Accounts Column (3) Line (3)		X	0.1575	=		
(049)	Separate Accounts Reduction-Reinsurance	LR006 Separate Accounts Column (3) Line (5)		X	0.2100	=		†
(050)	Separate Accounts Increase-Reinsurance	LR006 Separate Accounts Column (3) Line (6)		X	0.2100	=		
(051)	Synthetic GICs	LR006 Separate Accounts Column (3) Line (8)		X	0.1575	=		
(052)	Separate Account Surplus	LR006 Separate Accounts Column (3) Line (13)		X	0.1575	=		
	Real Estate							
(053)	Company Occupied Real Estate	LR007 Real Estate Column (3) Line (3)		X	0.2100	=		
(054)	Foreclosed Real Estate	LR007 Real Estate Column (3) Line (6)		X	0.2100	=		
(055)	Investment Real Estate	LR007 Real Estate Column (3) Line (9)		X	0.2100	=		
(056)	Real Estate Reduction - Reinsurance	LR007 Real Estate Column (3) Line (11)		X	0.2100	=		†
(057)	Real Estate Increase - Reinsurance	LR007 Real Estate Column (3) Line (12)		X	0.2100	=		
	Schedule BA							
(058)	Sch BA Real Estate Excluding Low Income Housing Tax Credits	LR007 Real Estate Column (3) Line (16)		X	0.2100	=		
(059)	Guaranteed Low Income Housing Tax Credits	LR007 Real Estate Column (3) Line (17) + Line (19)		X	0.0000	=		
(060)	Non-Guaranteed and All Other Low Income Housing Tax Credits	LR007 Real Estate Column (3) Line (18) + Line (20) + Line (21)		X	0.0000	=		
(061)	Sch BA Real Estate Reduction - Reinsurance	LR007 Real Estate Column (3) Line (23)		X	0.2100	=		†
(062)	Sch BA Real Estate Increase - Reinsurance	LR007 Real Estate Column (3) Line (24)		X	0.2100	=		

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CALCULATION OF TAX EFFECT FOR LIFE AND FRATERNAL RISK-BASED CAPITAL (CONTINUED)

		Source	(1) RBC Amount		Tax Factor		(2) RBC Tax Effect	
(063)	Sch BA Bond NAIC 1	LR008 Other Long-Term Assets Column (5) Line (2)		X	0.1575	=		
(064)	Sch BA Bond NAIC 2	LR008 Other Long-Term Assets Column (5) Line (3)		X	0.1575	=		
(065)	Sch BA Bond NAIC 3	LR008 Other Long-Term Assets Column (5) Line (4)		X	0.1575	=		
(066)	Sch BA Bond NAIC 4	LR008 Other Long-Term Assets Column (5) Line (5)		X	0.1575	=		
(067)	Sch BA Bond NAIC 5	LR008 Other Long-Term Assets Column (5) Line (6)		X	0.1575	=		
(068)	Sch BA Bond NAIC 6	LR008 Other Long-Term Assets Column (5) Line (7)		X	0.2100	=		
(069)	BA Bond Reduction - Reinsurance	LR008 Other Long-Term Assets Column (5) Line (9)		X	0.2100	=		†
(070)	BA Bond Increase - Reinsurance	LR008 Other Long-Term Assets Column (5) Line (10)		X	0.2100	=		
(071)	BA Preferred Stock NAIC 1	LR008 Other Long-Term Assets Column (5) Line (12.3)		X	0.1575	=		
(072)	BA Preferred Stock NAIC 2	LR008 Other Long-Term Assets Column (5) Line (13)		X	0.1575	=		
(073)	BA Preferred Stock NAIC 3	LR008 Other Long-Term Assets Column (5) Line (14)		X	0.1575	=		
(074)	BA Preferred Stock NAIC 4	LR008 Other Long-Term Assets Column (5) Line (15)		X	0.1575	=		
(075)	BA Preferred Stock NAIC 5	LR008 Other Long-Term Assets Column (5) Line (16)		X	0.1575	=		
(076)	BA Preferred Stock NAIC 6	LR008 Other Long-Term Assets Column (5) Line (17)		X	0.2100	=		
(077)	BA Preferred Stock Reduction-Reinsurance	LR008 Other Long-Term Assets Column (5) Line (19)		X	0.2100	=		†
(078)	BA Preferred Stock Increase - Reinsurance	LR008 Other Long-Term Assets Column (5) Line (20)		X	0.2100	=		
(079)	Rated Surplus Notes	LR008 Other Long-Term Assets Column (5) Line (31)		X	0.1575	=		
(080)	Rated Capital Notes	LR008 Other Long-Term Assets Column (5) Line (41)		X	0.1575	=		
(081)	BA Common Stock Affiliated	LR008 Other Long-Term Assets Column (5) Line (48.3)		X	0.2100	=		
(082)	BA Collateral Loans	LR008 Other Long-Term Assets Column (5) Line (50)		X	0.1575	=		
(083)	Other BA Assets	LR008 Other Long-Term Assets Column (5) Line (52.3) + LR018 Off-Balance Sheet Collateral Column (3) Line (17) + Line (18)		X	0.2100	=		
(084)	Other BA Assets Reduction-Reinsurance	LR008 Other Long-Term Assets Column (5) Line (54)		X	0.2100	=		†
(085)	Other BA Assets Increase - Reinsurance	LR008 Other Long-Term Assets Column (5) Line (55)		X	0.2100	=		
(086)	BA Mortgages - In Good Standing	LR009 Schedule BA Mortgages Column (6) Line (11)		X	0.1575	=		
(087)	BA Mortgages - 90 Days Overdue	LR009 Schedule BA Mortgages Column (6) Line (15)		X	0.1575	=		
(088)	BA Mortgages - In Process of Foreclosure	LR009 Schedule BA Mortgages Column (6) Line (19)		X	0.1575	=		
(089)	Reduction - Reinsurance	LR009 Schedule BA Mortgages Column (6) Line (21)		X	0.2100	=		†
(090)	Increase - Reinsurance	LR009 Schedule BA Mortgages Column (6) Line (22)		X	0.2100	=		
	Miscellaneous							
(091)	Asset Concentration Factor	LR010 Asset Concentration Factor Column (6) Line (62) Grand Total Page		X	0.1575	=		
(092)	Miscellaneous Assets	LR012 Miscellaneous Assets Column (2) Line (7)		X	0.1575	=		
(093)	Derivatives - Collateral and Exchange Traded	LR012 Miscellaneous Assets Column (2) Lines (8) + (9) + (10)		X	0.1575	=		
(094)	Derivatives NAIC 1	LR012 Miscellaneous Assets Column (2) Line (11)		X	0.1575	=		
(095)	Derivatives NAIC 2	LR012 Miscellaneous Assets Column (2) Line (12)		X	0.1575	=		
(096)	Derivatives NAIC 3	LR012 Miscellaneous Assets Column (2) Line (13)		X	0.1575	=		
(097)	Derivatives NAIC 4	LR012 Miscellaneous Assets Column (2) Line (14)		X	0.1575	=		
(098)	Derivatives NAIC 5	LR012 Miscellaneous Assets Column (2) Line (15)		X	0.1575	=		
(099)	Derivatives NAIC 6	LR012 Miscellaneous Assets Column (2) Line (16)		X	0.2100	=		
(100)	Miscellaneous Assets Reduction-Reinsurance	LR012 Miscellaneous Assets Column (2) Line (19)		X	0.2100	=		†
(101)	Miscellaneous Assets Increase-Reinsurance	LR012 Miscellaneous Assets Column (2) Line (20)		X	0.2100	=		

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CALCULATION OF TAX EFFECT FOR LIFE AND FRATERNAL RISK-BASED CAPITAL (CONTINUED)

		Source	(1) RBC Amount		Tax Factor		(2) RBC Tax Effect	
(102)	Replications	LR013 Replication (Synthetic Asset) Transactions and Mandatory Convertible Securities Column (7) Line (9999999)		X	0.1575	=		
(103)	Reinsurance	LR016 Reinsurance Column (4) Line (17)		X	0.2100	=		
(104)	Investment Affiliates	LR042 Summary for Affiliated Investments Column (4) Line (6)		X	0.2100	=		
(105)	Investment in Parent	LR042 Summary for Affiliated Investments Column (4) Line (10)		X	0.2100	=		
(106)	Other Affiliate: Property and Casualty Insurers not Subject to Risk-Based Capital	LR042 Summary for Affiliated Investments Column (4) Line (11)		X	0.2100	=		
(107)	Other Affiliate: Life Insurers not Subject to Risk-Based Capital	LR042 Summary for Affiliated Investments Column (4) Line (12)		X	0.2100	=		
(108)	Publicly Traded Insurance Affiliates	LR042 Summary for Affiliated Investments Column (4) Line (14)		X	0.2100	=		
(109)	Subtotal for C-1o Assets	Sum of Lines (001) through (108), Recognizing the Deduction of Lines (013), (014), (015), (036), (044), (049), (056), (061), (069), (077), (084), (089) and (100)						
	C-0 Affiliated Common Stock							
(110)	Off-Balance Sheet and Other Items	LR017 Off-Balance Sheet and Other Items Column (5) Line (27)		X	0.1575	=		
(111)	Off-Balance Sheet Items Reduction - Reinsurance	LR017 Off-Balance Sheet and Other Items Column (5) Line (28)		X	0.2100	=		†
(112)	Off-Balance Sheet Items Increase - Reinsurance	LR017 Off-Balance Sheet and Other Items Column (5) Line (29)		X	0.2100	=		
(113)	Affiliated US Property - Casualty Insurers Directly Owned	LR042 Summary for Affiliated Investments Column (4) Line (1)		X	0.2100	=		
(114)	Affiliated US Life Insurers Directly Owned	LR042 Summary for Affiliated Investments Column (4) Line (2)		X	0.2100	=		
(115)	Affiliated US Health Insurers Directly and Indirectly Owned	LR042 Summary for Affiliated Investments Column (4) Line (3)		X	0.2100	=		
(116)	Affiliated US Property - Casualty Insurers Indirectly Owned	LR042 Summary for Affiliated Investments Column (4) Line (4)		X	0.2100	=		
(117)	Affiliated US Life Insurers Indirectly Owned	LR042 Summary for Affiliated Investments Column (4) Line (5)		X	0.2100	=		
(118)	Affiliated Alien Life Insurers - Canadian	LR042 Summary for Affiliated Investments Column (4) Line (8)		X	0.2100	=		
(119)	Affiliated Alien Life Insurers - All Others	LR042 Summary for Affiliated Investments Column (4) Line (9)		X	0.0000	=		
(120)	Subtotal for C-0 Affiliated Common Stock	Lines (110)-(111)+(112)+(113)+(114)+(115)+(116)+(117)+(118)+(119)						
	Common Stock							
(121)	Unaffiliated Common Stock	LR005 Unaffiliated Preferred and Common Stock Column (5) Line (17) + LR018 Off-Balance Sheet Collateral Column (3) Line (16)		X	0.2100	=		
(122)	Credit for Hedging - Common Stock	LR015 Hedged Asset Common Stock Schedule Column (10) Line (0299999)		X	0.2100	=		†
(123)	Stock Reduction - Reinsurance	LR005 Unaffiliated Preferred and Common Stock Column (5) Line (19)		X	0.2100	=		†
(124)	Stock Increase - Reinsurance	LR005 Unaffiliated Preferred and Common Stock Column (5) Line (20)		X	0.2100	=		
(125)	BA Common Stock Unaffiliated	LR008 Other Long-Term Assets Column (5) Line (47)		X	0.2100	=		
(126)	BA Common Stock Affiliated - C-1cs	LR008 Other Long-Term Assets Column (5) Line (49.2)		X	0.2100	=		
(127)	Common Stock Concentration Factor	LR011 Common Stock Concentration Factor Column (6) Line (6)		X	0.2100	=		
(128)	NAIC 01 Working Capital Finance Notes	LR008 Other Long-Term Assets Column (5) Line (51.1)		X	0.1575	=		
(129)	NAIC 02 Working Capital Finance Notes	LR008 Other Long-Term Assets Column (5) Line (51.2)		X	0.1575	=		
(130)	Affiliated Preferred Stock and Common Stock - Holding Company in Excess of Indirect Subs	LR042 Summary for Affiliated Investments Column (4) Line (7)		X	0.2100	=		
(131)	Affiliated Preferred Stock and Common Stock - All Other	LR042 Summary for Affiliated Investments Column (4) Line (13)		X	0.2100	=		
(132)	Total for C-1cs Assets	Lines (121)-(122)-(123)+(124)+(125)+(126)+(127)+(128)+(129)+(130)+(131)						
	Insurance Risk							
(133)	Disability Income Premium	LR019 Health Premiums Column (2) Lines (21) through (27)		X	0.2100	=		

† Denotes lines that are deducted from the total rather than added.

Denotes items that must be manually entered on the filing software.

Company Name | Confidential when Completed | NAIC Company Code

CALCULATION OF TAX EFFECT FOR LIFE AND FRATERNAL RISK-BASED CAPITAL (CONTINUED)

		Source	(1) RBC Amount		Tax Factor		(2) RBC Tax Effect
(134)	Long-Term Care	LR019 Health Premiums Column (2) Line (28) + LR023 Long-Term Care Column (4) Line (7)		X	0.2100	=	
(135)	**Individual & Industrial** Life Insurance C-2 Risk	LR025 Life Insurance Column (2) Line **~~(8)~~ (20)**		X	0.2100	=	
(136)	Group **& Credit Life** Insurance C-2 Risk	LR025 Life Insurance Column (2) Line**s ~~(20) and (21)~~ (42)**		X	0.2100	=	
(136b)	Longevity C-2 Risk	LR025-A Longevity Risk Column (2) Line (5)		X	0.2100	=	
(137)	Disability and Long-Term Care Health Claim Reserves	LR024 Health Claim Reserves Column (4) Line (9) + Line (15)		X	0.2100	=	
(138)	Premium Stabilization Credit	LR026 Premium Stabilization Reserves Column (2) Line (10)		X	0.0000	=	
(139)	Total C-2 Risk	L(133) + L(134) + L(137) + L(138) + Greatest of [Guardrail Factor * (L(135)+L(136)), Guardrail Factor * L(136b), Square Root of [(L(135) + L(136))2 + L(136b)2 + 2 * (Correlation Factor) * (L(135) + L(136)) * L(136b)]]					
(140)	Interest Rate Risk	LR027 Interest Rate Risk Column (3) Line (36)		X	0.2100	=	
(141)	Health Credit Risk	LR028 Health Credit Risk Column (2) Line (7)		X	0.0000	=	
(142)	Market Risk	LR027 Interest Rate Risk Column (3) Line (37)		X	0.2100	=	
(143)	Business Risk	LR029 Business Risk Column (2) Line (40)		X	0.2100	=	
(144)	Health Administrative Expenses	LR029 Business Risk Column (2) Line (57)		X	0.0000	=	
(145)	Total Tax Effect	Lines (109) + (120) + (132) + (139) + (140) + (141) + (142) + (143) + (144)					

† Denotes lines that are deducted from the total rather than added.

Denotes items that must be manually entered on the filing software.

CALCULATION OF AUTHORIZED CONTROL LEVEL RISK-BASED CAPITAL

Company Name | Confidential when Completed | NAIC Company Code

		Source	(1) RBC Requirement
	Insurance Affiliates and Misc. Other Amounts (C-0)		
(1)	Affiliated US Property-Casualty Insurers Directly Owned	LR042 Summary for Affiliated Investments Column (4) Line (1)	
(2)	Affiliated US Life Insurers Directly Owned	LR042 Summary for Affiliated Investments Column (4) Line (2)	
(3)	Affiliated US Health Insurers Directly and Indirectly Owned	LR042 Summary for Affiliated Investments Column (4) Line (3)	
(4)	Affiliated US Property-Casualty Insurers Indirectly Owned	LR042 Summary for Affiliated Investments Column (4) Line (4)	
(5)	Affiliated US Life Insurers Indirectly Owned	LR042 Summary for Affiliated Investments Column (4) Line (5)	
(6)	Affiliated Alien Life Insurers - Canadian	LR042 Summary for Affiliated Investments Column (4) Line (8)	
(7)	Affiliated Alien Life Insurers - All Others	LR042 Summary for Affiliated Investments Column (4) Line (9)	
(8)	Off-Balance Sheet and Other Items	LR017 Off-Balance Sheet and Other Items Column (5) Line (34)	
(9)	Total (C-0) - Pre-Tax	Sum of Lines (1) through (8)	
(10)	(C-0) Tax Effect	LR030 Calculation of Tax Effect for Life and Fraternal Risk-Based Capital Column (2) Line (120)	
(11)	Net (C-0) - Post-Tax	Line (9) - Line (10)	
	Asset Risk – Unaffiliated Common Stock and Affiliated Non-Insurance Stock (C-1cs)		
(12)	Schedule D Unaffiliated Common Stock	LR005 Unaffiliated Common Stock Column (5) Line (21) + LR018 Off-Balance Sheet Collateral Column (3) Line (16)	
(13)	Schedule BA Unaffiliated Common Stock	LR008 Other Long-Term Assets Column (5) line (47)	
(14)	Schedule BA Affiliated Common Stock - C-1cs	LR008 Other Long-Term Assets Column (5) line (49.2)	
(15)	Common Stock Concentration Factor	LR011 Common Stock Concentration Factor Column (6) Line (6)	
(16)	Affiliated Preferred Stock and Common Stock - Holding Company in Excess of Indirect Subsidiaries	LR042 Summary for Affiliated Investments Column (4) Line (7)	
(17)	Affiliated Preferred Stock and Common Stock - All Other	LR042 Summary for Affiliated Investments Column (4) Line (13)	
(18)	Total (C-1cs) - Pre-Tax	Sum of Lines (12) through (17)	
(19)	(C-1cs) Tax Effect	LR030 Calculation of Tax Effect for Life and Fraternal Risk-Based Capital Column (2) Line (132)	
(20)	Net (C-1cs) - Post-Tax	Line (18) - Line (19)	
	Asset Risk - All Other (C-1o)		
(21)	Bonds after Size Factor	LR002 Bonds Column (2) Line (27) + LR018 Off-Balance Sheet Collateral Column (3) Line (8)	
(22)	Mortgages (including past due and unpaid taxes)	LR004 Mortgages Column (6) Line (31)	
(23)	Unaffiliated Preferred Stock	LR005 Unaffiliated Preferred and Common Stock Column (5) Line (10) + LR018 Off-Balance Sheet Collateral Column (3) Line (15)	
(24)	Affiliated Preferred Stock and Common Stock - Investment Subsidiaries	LR042 Summary for Affiliated Investments Column (4) Line (6)	
(25)	Affiliated Preferred Stock and Common Stock - Parent	LR042 Summary for Affiliated Investments Column (4) Line (10)	
(26)	Affiliated Preferred Stock and Common Stock - Property and Casualty Insurers not Subject to Risk-Based Capital	LR042 Summary for Affiliated Investments Column (4) Line (11)	
(27)	Affiliated Preferred Stock and Common Stock - Life Insurers not Subject to Risk-Based Capital	LR042 Summary for Affiliated Investments Column (4) Line (12)	
(28)	Affiliated Preferred Stock and Common Stock - Publicly Traded Insurers Held at Fair Value (excess of statement value over book value)	LR042 Summary for Affiliated Investments Column (4) Line (14)	
(29)	Separate Accounts with Guarantees	LR006 Separate Accounts Column (3) Line (7)	

Denotes items that must be manually entered on the filing software.

CALCULATION OF AUTHORIZED CONTROL LEVEL RISK-BASED CAPITAL (CONTINUED)

Company Name | Confidential when Completed | NAIC Company Code

		Source	(1) RBC Requirement
(30)	Synthetic GIC's (C-1o)	LR006 Separate Accounts Column (3) Line (8)	
(31)	Surplus in Non-Guaranteed Separate Accounts	LR006 Separate Accounts Column (3) Line (13)	
(32)	Real Estate (gross of encumbrances)	LR007 Real Estate Column (3) Line (13)	
(33)	Schedule BA Real Estate (gross of encumbrances)	LR007 Real Estate Column (3) Line (25)	
(34)	Other Long-Term Assets	LR008 Other Long-Term Assets Column (5) Line (56) + LR018 Off-Balance Sheet Collateral Column (3) Line (17) + Line (18)	
(35)	Schedule BA Mortgages	LR009 Schedule BA Mortgages Column (6) Line (23)	
(36)	Concentration Factor	LR010 Asset Concentration Factor Column (6) Line (62) Grand Total Page	
(37)	Miscellaneous	LR012 Miscellaneous Assets Column (2) Line (21)	
(38)	Replication Transactions and Mandatory Convertible Securities	LR013 Replication (Synthetic Asset) Transactions and Mandatory Convertible Securities Column (7) Line (9999999)	
(39)	Reinsurance	LR016 Reinsurance Column (4) Line (17)	
(40)	Total (C-1o) - Pre-Tax	Sum of Lines (21) through (39)	
(41)	(C-1o) Tax Effect	LR030 Calculation of Tax Effect for Life and Fraternal Risk-Based Capital Column (2) Line (109)	
(42)	Net (C-1o) - Post-Tax	Line (40) - Line (41)	
	Insurance Risk (C-2)		
(43)	Individual ~~and &~~ Industrial Life Insurance	LR025 Life Insurance Column (2) Line ~~(8) (20)~~	
(44)	Group ~~and~~ & Credit Life Insurance ~~and FEGLI/SGLI~~	LR025 Life Insurance Column (2) Lines ~~(20) and (21)~~ (42)	
(44b)	Longevity Risk	LR025-A Longevity Risk Column (2) Line (5)	
(45)	Total Health Insurance	LR024 Health Claim Reserves Column (4) Line (18)	
(46)	Premium Stabilization Reserve Credit	LR026 Premium Stabilization Reserves Column (2) Line (10)	
(47)	Total (C-2) - Pre-Tax	L(45) + L(46) + Greatest of [Guardrail Factor * (L(43)+L(44)), Guardrail Factor * L(44b), Square Root of [(L(43) + L(44))2 + L(44b)2 + 2 * (Correlation Factor) * (L(43) + L(44)) * L(44b)]]	
(48)	(C-2) Tax Effect	LR030 Calculation of Tax Effect for Life and Fraternal Risk-Based Capital Column (2) Line (139)	
(49)	Net (C-2) - Post-Tax	Line (47) - Line (48)	
	Interest Rate Risk (C-3a)		
(50)	Total Interest Rate Risk - Pre-Tax	LR027 Interest Rate Risk Column (3) Line (36)	
(51)	(C-3a) Tax Effect	LR030 Calculation of Tax Effect for Life and Fraternal Risk-Based Capital Column (2) Line (140)	
(52)	Net (C-3a) - Post-Tax	Line (50) - Line (51)	
	Health Credit Risk (C-3b)		
(53)	Total Health Credit Risk - Pre-Tax	LR028 Health Credit Risk Column (2) Line (7)	
(54)	(C-3b) Tax Effect	LR030 Calculation of Tax Effect for Life and Fraternal Risk-Based Capital Column (2) Line (141)	
(55)	Net (C-3b) - Post-Tax	Line (53) - Line (54)	
	Market Risk (C-3c)		
(56)	Total Market Risk - Pre-Tax	LR027 Interest Rate Risk Column (3) Line (37)	
(57)	(C-3c) Tax Effect	LR030 Calculation of Tax Effect for Life and Fraternal Risk-Based Capital Column (2) Line (142)	
(58)	Net (C-3c) - Post-Tax	Line (56) - Line (57)	

Denotes items that must be manually entered on the filing software.

CALCULATION OF AUTHORIZED CONTROL LEVEL RISK-BASED CAPITAL (CONTINUED)

Company Name | Confidential when Completed | NAIC Company Code

		Source	(1) RBC Requirement
	Business Risk (C-4a)		
(59)	Premium Component	LR029 Business Risk Column (2) Lines (12) + (24) + (36)	
(60)	Liability Component	LR029 Business Risk Column (2) Line (39)	
(61)	Subtotal Business Risk (C-4a) - Pre-Tax	Lines (59) + (60)	
(62)	(C-4a) Tax Effect	LR030 Calculation of Tax Effect for Life and Fraternal Risk-Based Capital Column (2) Line (143)	
(63)	Net (C-4a) - Post-Tax	Line (61) - Line (62)	
	Business Risk (C-4b)		
(64)	Health Administrative Expense Component of Business Risk (C-4b) - Pre-Tax	LR029 Business Risk Column (2) Line (57)	
(65)	(C-4b) Tax Effect	LR030 Calculation of Tax Effect for Life and Fraternal Risk-Based Capital Column (2) Line (144)	
(66)	Net (C-4b) - Post-Tax	Line (64) - Line (65)	
	Total Risk-Based Capital After Covariance Before Basic Operational Risk		
(67)	C-0 + C-4a + Square Root of [(C-1o + C-3a)² + (C-1cs + C-3c)² + (C-2)² + (C-3b)² + (C-4b)²]	REPORT AMOUNT ON PARENT COMPANY'S RBC IF APPLICABLE L(11)+L(63) + Square Root of [(L(42) + L(52))² + (L(20) + L(58))² + L(49)² + L(55)² + L(66)²]	
(68)	Gross Basic Operational Risk	0.03 x L(67)	
(69)	C-4a of U.S. Life Insurance Subsidiaries	Company Records	
(70)	Net Basic Operational Risk	Line (68) - (Line (63) + Line (69)) (Not less than zero)	
(71)	Primary Security Shortfall Calculated in Accordance With Actuarial Guideline XLVIII Multiplied by 2	LR036 XXX/AXXX Reinsurance Primary Security Shortfall by Cession Column (7) Line (9999999) Multiplied by 2	
(72)	Total Risk-Based Capital After Covariance (Including Basic Operational Risk and Primary Security Shortfall multiplied by 2)	Line (67) + Line (70) + Line (71)	
	Authorized Control Level Risk-Based Capital (After Covariance Adjustment and Shortfall)		
(73)	Total Risk-Based Capital After Covariance Times Fifty Percent	Line (72) x 0.50	
	Tax Sensitivity Test		
(74)	Tax Sensitivity Test: Total Risk-Based Capital After Covariance	L(9)+L(61) + Square Root of [(L(40) + L(50))² + (L(18) + L(56))² + L(47)² + L(53)² + L(64)²]	
(75)	Tax Sensitivity Test: Authorized Control Level Risk-Based Capital	Line (74) x 0.50	

Denotes items that must be manually entered on the filing software.

LIFE INSURANCE - OPTION 1 - DRAFT

LR025

Basis of Factors

The factors ~~chosen~~developed represent surplus needed to provide for ~~excess claims over~~ life insurance mortality risk, which is defined as adverse variance in life insurance deaths (i.e., insureds dying sooner than expected~~, both from random fluctuations and from inaccurate pricing for future levels~~) over the remaining lifetime of ~~claims. For~~ a ~~large number~~block of ~~trials, each insured either lives or dies based on a "roll of the dice"~~business while appropriately reflecting the ~~probability of death from both normal and excess claims.~~pricing flexibility to adjust current mortality rates for emerging experience. The ~~present value of~~ mortality risks included in the ~~claims generated by this process, less expected claims, will be the amount of surplus needed under that trial.~~development of the factors were volatility, level, trend, and catastrophe. The factors ~~chosen under~~were developed by stochastically simulating the ~~formula produce a level of surplus at least as much~~run-off of in force life insurance blocks typical of U.S. life insurers.

The capital need, expressed as ~~needed in 95 percent of~~ a dollar amount, is determined as the ~~trials.~~ greatest present value of accumulated deficiencies at the 95th percentile of the stochastic distribution of scenarios over the remaining lifetime of a block of business while appropriately reflecting the pricing flexibility to adjust current mortality rates. Statutory losses are defined as the after-tax quantification of gross death benefits minus reserves released minus mortality margin present in reserves. The after-tax statutory losses are discounted to the present by using 20-year averages for U.S. swap rates. By selecting the largest present value accumulated loss across all projection years, the solved for capital ensures non-negative capital at all projection periods. Earlier period losses are not allowed to be offset by later period gains to reduce capital. The 95th percentile is the commonly accepted statistical safety level used for Life RBC C-2 mortality risk to identify weakly capitalized companies. The after-tax capital needs are translated to a factor expressed as a percentage of the net amount at risk (NAR). The pre-tax factor is determined by taking the after-tax factor divided by (1 minus the tax rate).

~~The model was developed for portfolios of 10,000, 100,000 and one million lives, and it was found that the surplus needs decreased with larger portfolios, consistent with the law of large numbers.~~

~~Net amount at risk was chosen as a base because expected claims are difficult to calculate on a consistent basis from company to company.~~
The factors are differentiated between individual & industrial life and group & credit life, and by in force block size. Within individual & industrial life, the factors are differentiated into categories for universal life with secondary guarantees (ULSG), term life, and all other life. Within group & credit life, the factors are differentiated into categories by the remaining length of the premium rate term by group contract. There are distinct factors for contracts that have remaining premium rate terms 36 months and under and for contracts that have remaining premium rate terms over 36 months. The Federal Employees' Group Life Insurance (FEGLI) and Servicemembers' Group Life Insurance (SGLI) receive a separate factor applied to the amounts in force.

Specific Instructions for Application of the Formula

Lines ~~3, 4~~2, 5 and ~~9~~-21-41 are not applicable to Fraternal Benefit Societies.

~~Annual statement reference is for the total net amount at risk for the category (e.g., Individual & Industrial is one category). The net amount at risk is then further broken down by size as in a tax table to reflect the decrease in risk for larger blocks of life insurance. This breakdown will not appear on the RBC filing software or on the printed copy, as the application of factors to amounts in force is completed automatically. The calculation is as follows:~~

The NAR is derived for each of the factor categories using annual statement sources and company records. In Force and Reserves amounts are net of reinsurance throughout.

Line (11) ULSG In Force is derived from company records. The amount classified as ULSG needs to be consistent with the Exhibit of Life Insurance and the same block of policies as the ULSG reserves recorded in Line (12) which is sourced to the Analysis of Increase in Reserves During the Year – Individual Life Insurance Column 7 Line 15. The table below illustrates the RBC requirement calculation embedded in Line (13) for ULSG.

Line	~~Individual & Industrial~~ULSG	(1) Statement Value	Factor	(2) RBC Requirement

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First 500 Million		X 0.00223 00390 =	
Next 424,500 Million		X 0.00146 00165 =	
Next 20,000 Million		X 0.00116 =	
Over 25,000 Million		X 0.00087 00110 =	
Total Individual & Industrial ULSG Net Amount at Risk			

Line (20)	Group & Credit	Statement Value	Factor	RBC Requirement
	First 500 Million		X 0.00175 =	
	Next 4,500 Million		X 0.00116 =	
	Next 20,000 Million		X 0.00087 =	
	Over 25,000 Million		X 0.00078 =	

Line (14) Term Life In Force is derived from company records. The amount classified as Term Life needs to be consistent with the Exhibit of Life Insurance and the same block of policies as the Term reserves recorded in Line (15) which is sourced to the Analysis of Increase in Reserves During the Year – Individual Life Insurance Column 4 Line 15. The table below illustrates the RBC requirement calculation embedded in Line (16) for Term Life.

Line (16)	Term Life	(1) Statement Value	Factor	(2) RBC Requirement
	First 500 Million		X 0.00270 =	
	Next 24,500 Million		X 0.00110 =	
	Over 25,000 Million		X 0.00075 =	
	Total Group & Credit Term Life Net Amount at Risk (less FEGLI & SGLI in force)			

Lines (17) and (18) All Other Life In Force and Reserves are derived from the aggregate amounts derived in lines (1) to (10) minus the ULSG amounts in lines (11) to (12) and term life amounts in lines (14) to (15). In force business not classified as ULSG or term life is assigned to all other life. The table below illustrates the RBC requirement calculation embedded in Line (19) for All Other Life.

Line (19)	All Other Life	(1) Statement Value	Factor	(2) RBC Requirement
	First 500 Million		X 0.00190 =	
	Next 24,500 Million		X 0.00075 =	
	Over 25,000 Million		X 0.00050 =	
	Total All Other Life Net Amount at Risk			

Lines (35) and (36) Group & Credit Life In Force and Reserves with Remaining Rate Terms 36 Months and Under are derived from company records. This category includes group contracts where the premium terms have 36 months or fewer until expiration or renewal. The in force amount classified in this category needs to be consistent with the Exhibit of Life Insurance. The reserves amount classified in this category needs to be consistent with Exhibit 5 used for Lines (28) and (29), Separate Accounts Exhibit used for Line (30), and Schedule S used for Lines (31) and (32). Federal Employees' Group Life Insurance (FEGLI) and Servicemembers' Group Life Insurance (SGLI) contracts are

excluded. The table below illustrates the RBC requirement calculation embedded in Line (37) for Group & Credit Life Net Amount at Risk with Remaining Rate Terms 36 Months and Under.

		(1) Statement Value	Factor	(2) RBC Requirement
Line (37)	Group & Credit Life with Remaining Rate Terms 36 Months and Under			
	First 500 Million		X 0.00130 =	
	Next 24,500 Million		X 0.00045 =	
	Over 25,000 Million		X 0.00030 =	
	Total Group & Credit Life Net Amount at Risk with Remaining Rate Terms 36 Months and Under			

Lines (38) and (39) Group & Credit Life In Force and Reserves with Remaining Rate Terms Over 36 Months are derived from the aggregate amounts derived in lines (21) to (34) minus the Group & Credit Life In Force and Reserves with Remaining Rate Terms 36 Months and Under in lines (35) and (36). FEGLI and SGLI contracts are excluded. The table below illustrates the RBC requirement calculation embedded in Line (40) for Group & Credit Life Net Amount at Risk with Remaining Rate Terms Over 36 Months.

		(1) Statement Value	Factor	(2) RBC Requirement
Line (40)	Group & Credit Life with Remaining Rate Terms Over 36 Months			
	First 500 Million		X 0.00180 =	
	Next 24,500 Million		X 0.00070 =	
	Over 25,000 Million		X 0.00045 =	
	Total Group & Credit Life Net Amount at Risk with Remaining Rate Terms Over 36 Months			

Line (41) FEGLI/SGLI In Force amounts are retrieved from the Exhibit of Life Insurance. The capital factor assigned is the same as the largest size band for group & credit life contracts with remaining rate terms 36 months and under

		(1) Statement Value	Factor	(2) RBC Requirement
Line (41)	FEGLI/SGLI In Force		X 0.00030 =	

All amounts should be entered as required. The risk-based capital software will calculate the RBC requirement for individual and industrial and for group and credit.

LIFE INSURANCE - OPTION 2 - DRAFT
LR025

Basis of Factors

The factors ~~chosen~~developed represent surplus needed to provide for ~~excess claims over~~ life insurance mortality risk, which is defined as adverse variance in life insurance deaths (i.e., insureds dying sooner than expected~~, both from random fluctuations and from inaccurate pricing for future levels~~) over the remaining lifetime of ~~claims. For~~ a ~~large number~~block of ~~trials, each insured either lives or dies based on a "roll of the dice"~~business while appropriately reflecting the ~~probability of death from both normal and excess claims.~~pricing flexibility to adjust current mortality rates for emerging experience. The ~~present value of~~ mortality risks included in the ~~claims generated by this process, less expected claims, will be the amount of surplus needed under that trial.~~development of the factors were volatility, level, trend, and catastrophe. The factors ~~chosen under~~were developed by stochastically simulating the ~~formula produce a level of surplus at least as much~~run-off of in force life insurance blocks typical of U.S. life insurers.

The capital need, expressed as ~~needed in 95 percent of~~ a dollar amount, is determined as the ~~trials.~~ greatest present value of accumulated deficiencies at the 95th percentile of the stochastic distribution of scenarios over the remaining lifetime of a block of business while appropriately reflecting the pricing flexibility to adjust current mortality rates. Statutory losses are defined as the after-tax quantification of gross death benefits minus reserves released minus mortality margin present in reserves. The after-tax statutory losses are discounted to the present by using 20-year averages for U.S. swap rates. By selecting the largest present value accumulated loss across all projection years, the solved for capital ensures non-negative capital at all projection periods. Earlier period losses are not allowed to be offset by later period gains to reduce capital. The 95th percentile is the commonly accepted statistical safety level used for Life RBC C-2 mortality risk to identify weakly capitalized companies. The after-tax capital needs are translated to a factor expressed as a percentage of the net amount at risk (NAR). The pre-tax factor is determined by taking the after-tax factor divided by (1 minus the tax rate).

~~The model was developed for portfolios of 10,000, 100,000 and one million lives, and it was found that the surplus needs decreased with larger portfolios, consistent with the law of large numbers.~~

~~Net amount at risk was chosen as a base because expected claims are difficult to calculate on a consistent basis from company to company.~~
The factors are differentiated between individual & industrial life and group & credit life, and by in force block size. Within individual & industrial life, the factors are differentiated into categories by contract type depending on the degree of pricing flexibility. Within group & credit life, the factors are differentiated into categories by the remaining length of the premium rate term by group contract. There are distinct factors for contracts that have remaining premium rate terms 36 months and under and for contracts that have remaining premium rate terms over 36 months. The Federal Employees' Group Life Insurance (FEGLI) and Servicemembers' Group Life Insurance (SGLI) receive a separate factor applied to the amounts in force.

Specific Instructions for Application of the Formula

Lines ~~3, 4~~2, 5 and ~~9~~-21-41 are not applicable to Fraternal Benefit Societies.

~~Annual statement reference is for the total net amount at risk for the category (e.g., Individual & Industrial is one category). The net amount at risk is then further broken down by size as in a tax table to reflect the decrease in risk for larger blocks of life insurance. This breakdown will not appear on the RBC filing software or on the printed copy, as the application of factors to amounts in force is completed automatically. The calculation is as follows:~~

The NAR is derived for each of the factor categories using annual statement sources and company records. In Force and Reserves amounts are net of reinsurance throughout. The In Force amounts throughout derived from company records need to be consistent with the Exhibit of Life Insurance. The Reserves amounts throughout derived from company records need to be consistent with Exhibit 5, Separate Accounts Exhibit, and Schedule S.

Pricing Flexibility for Individual Life Insurance is defined as the ability to materially adjust rates on in force contracts through changing premiums and/or non-guaranteed elements as of the valuation date and within the next 5 policy years. A material rate adjustment is defined as the ability to recover, on a present value basis, the difference in mortality provided for in the factors below for contracts with and without pricing flexibility.

Lines (11) and (12) Life Policies with Pricing Flexibility In Force and Reserves are derived from company records. Examples of products intended for this category include, but aren't limited to, participating whole life insurance, universal life insurance without secondary guarantees, and yearly renewable term insurance where scheduled premiums may be changed. The table below illustrates the RBC requirement calculation embedded in Line (13) for Life Policies with Pricing Flexibility.

Line (~~8~~13)	~~Individual & Industrial~~Life Policies with Pricing Flexibility	(1) Statement Value	Factor	(2) RBC Requirement
	First 500 Million		X 0.~~0022~~300190 =	
	Next ~~4~~24,500 Million		X 0.~~0014~~600075 =	
	~~Next 20,000 Million~~		~~X 0.00116=~~	
	Over 25,000 Million		X 0.~~00087~~00050 =	
	Total ~~Individual & Industrial~~Life Policies with Pricing Flexibility Net Amount at Risk			

~~Line (20)~~	~~Group & Credit~~	~~Statement Value~~	~~Factor~~	~~RBC Requirement~~
	~~First 500 Million~~		~~X 0.00175 =~~	
	~~Next 4,500 Million~~		~~X 0.00116=~~	
	~~Next 20,000 Million~~		~~X 0.00087 =~~	
	~~Over 25,000 Million~~		~~X 0.00078=~~	

Lines (14) and (15) Term Life Policies without Pricing Flexibility In Force and Reserves are derived from company records. Examples of products intended for this category include, but aren't limited to, level term insurance with guaranteed level premiums and yearly renewable term insurance where scheduled premiums may not be changed. The table below illustrates the RBC requirement calculation embedded in Line (16) for Term Life Policies without Pricing Flexibility.

Line (16)	Term Life Policies without Pricing Flexibility	(1) Statement Value	Factor	(2) RBC Requirement
	First 500 Million		X 0.00270 =	
	Next 24,500 Million		X 0.00110 =	
	Over 25,000 Million		X 0.00075 =	
	Total ~~Group & Credit~~Term Life Policies without Pricing Flexibility Net Amount at Risk ~~(less FEGLI & SGLI in force)~~			

Lines (17) and (18) Permanent Life Policies without Pricing Flexibility In Force and Reserves are derived from the aggregate amounts derived in lines (1) to (10) minus the amounts recorded in the other individual life categories. Examples of products intended for this category include, but aren't limited to, universal life with secondary guarantees and non-participating whole life insurance. Policies that aren't recorded in the other individual life categories default to this category which has the highest factors. The table below illustrates the RBC requirement calculation embedded in Line (19) for Permanent Life Policies without Pricing Flexibility.

Line (19)	Permanent Life Policies without Pricing Flexibility	(1) Statement Value	Factor	(2) RBC Requirement
	First 500 Million		X 0.00390 =	

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	Next 24,500 Million		X 0.00165 =	
	Over 25,000 Million		X 0.00110 =	
	Total Permanent Life Policies without Pricing Flexibility Net Amount at Risk			

Lines (35) and (36) Group & Credit Life In Force and Reserves with Remaining Rate Terms 36 Months and Under are derived from company records. This category includes group contracts where the premium terms have 36 months or fewer until expiration or renewal. The in force amount classified in this category needs to be consistent with the Exhibit of Life Insurance. The reserves amount classified in this category needs to be consistent with Exhibit 5 used for Lines (28) and (29), Separate Accounts Exhibit used for Line (30), and Schedule S used for Lines (31) and (32). Federal Employees' Group Life Insurance (FEGLI) and Servicemembers' Group Life Insurance (SGLI) contracts are excluded. The table below illustrates the RBC requirement calculation embedded in Line (37) for Group & Credit Life Net Amount at Risk with Remaining Rate Terms 36 Months and Under.

		(1) Statement Value	Factor	(2) RBC Requirement
Line (37)	Group & Credit Life with Remaining Rate Terms 36 Months and Under			
	First 500 Million		X 0.00130 =	
	Next 24,500 Million		X 0.00045 =	
	Over 25,000 Million		X 0.00030 =	
	Total Group & Credit Life Net Amount at Risk with Remaining Rate Terms 36 Months and Under			

Lines (38) and (39) Group & Credit Life In Force and Reserves with Remaining Rate Terms Over 36 Months are derived from the aggregate amounts derived in lines (21) to (34) minus the Group & Credit Life In Force and Reserves with Remaining Rate Terms 36 Months and Under in lines (35) and (36). FEGLI and SGLI contracts are excluded. The table below illustrates the RBC requirement calculation embedded in Line (40) for Group & Credit Life Net Amount at Risk with Remaining Rate Terms Over 36 Months.

		(1) Statement Value	Factor	(2) RBC Requirement
Line (40)	Group & Credit Life with Remaining Rate Terms Over 36 Months			
	First 500 Million		X 0.00180 =	
	Next 24,500 Million		X 0.00070 =	
	Over 25,000 Million		X 0.00045 =	
	Total Group & Credit Life Net Amount at Risk with Remaining Rate Terms Over 36 Months			

Line (41) FEGLI/SGLI In Force amounts are retrieved from the Exhibit of Life Insurance. The capital factor assigned is the same as the largest size band for group & credit life contracts with remaining rate terms 36 months and under.

		(1) Statement Value	Factor	(2) RBC Requirement
Line (41)	FEGLI/SGLI In Force		X 0.00030 =	

All amounts should be entered as required. The risk-based capital software will calculate the RBC requirement for individual and industrial and for group and credit.