NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

Draft date: 10/16/25

Virtual Meeting

JOINT MEETING OF THE PROPERTY AND CASUALTY RISK-BASED CAPITAL (E) WORKING GROUP AND CATASTROPHE RISK (E) SUBGROUP
Wednesday, November 12, 2025
11:00 a.m. – 12:00 p.m. ET / 10:00 – 11:00 a.m. CT / 9:00 – 10:00 a.m. MT / 8:00 – 9:00 a.m. PT

ROLL CALL

PROPERTY AND CASUALTY RISK-BASED CAPITAL (E) WORKING GROUP

Tom Botsko, Chair	Ohio	Melissa Robertson	New Mexico
Wanchin Chou, Vice Chair	Connecticut	Ni Qin	New York
Charles Hale	Alabama	Will Davis	South Carolina
Rolf Kaumann/Eric Unger	Colorado	Miriam Fisk	Texas
Jane Nelson	Florida	Adrian Jaramillo	Wisconsin
Sandra Darby	Maine		

NAIC Support Staff: Eva Yeung/Maggie Chang

CATASTROPHE RISK (E) SUBGROUP

Wanchin Chou, Chair	Connecticut	Alexander Vajda	New York
Jane Nelson, Vice Chair	Florida	Tom Botsko	Ohio
Rolf Kaumann/Eric Unger	Colorado	Andy Schallhorn	Oklahoma
Travis Grassel	Iowa	Will Davis	South Carolina
Sandra Darby	Maine	Miriam Fisk	Texas
Melissa Robertson/ Elouisa Macias	New Mexico		

NAIC Support Staff: Eva Yeung

AGENDA

1. Consider Adoption of the Working Group and Subgroup's Oct. 8 Minutes—*Tom Botsko (OH)* — Attachment 1

2. Consider Adoption of Proposal 2025-08-CR (Jan. 1 — Oct. 15 Cat Event List)—*Wanchin Chou (CT)* — Attachment 2

3. Consider Exposure of Proposal 2025-19-CR (Separating Earthquake and Hurricane Loss Experience Data in PR100s)—*Wanchin Chou (CT)* — Attachment 3

4. Consider Exposure of Proposal 2025-20-CR (Wildfire Rcat Implementation)—*Wanchin Chou (CT)* — Attachment 4

5. Discuss the Working Group and Subgroup's Working Agenda —*Tom Botsko (OH)* — Attachment 5

6. Discuss the Securities Valuation Office (SVO) Fund Risk-Based Capital (RBC) Alignment Project—*Tom Botsko (OH)* — Attachment 6

7. Receive an Update from the Health Risk-Based Capital (E) Working Group Regarding Proposal 2025-15-CA (A&H Underwriting Risk Structure Change)—*Steve Drutz (WA)* — Attachment 7

8. Hear a Presentation from the American Academy of Actuaries (Academy) Regarding the "Property and Casualty Risk-Based Capital Premium and Loss Concentration Factors" Report—*Ron Wilkins (Academy) and Allan Kaufman (Academy)* — Attachment 8

9. Discuss Any Other Matters Brought Before the Working Group and Subgroup—*Tom Botsko (OH) and Wanchin Chou (CT)*

10. Adjournment

Draft: 10/14/25

Property and Casualty Risk-Based Capital (E) Working Group
and the Catastrophe Risk (E) Subgroup
Virtual Meeting
October 8, 2025

The Property and Casualty Risk-Based Capital (E) Working Group of the Capital Adequacy (E) Task Force met Oct. 8, 2025, in joint session with the Catastrophe Risk (E) Subgroup of the Property and Casualty Risk-Based Capital (E) Working Group. The following Working Group members participated: Tom Botsko, Chair (OH); Wanchin Chou, Vice Chair (CT); Charles Hale (AL); Rolf Kaumann and Eric Unger (CO); Jane Nelson (FL); Sandra Darby (ME); Elouisa Macias (NM); Ni Qin and Alexander Vajda (NY); Will Davis (SC); and Rebecca Armon and Miriam Fisk (TX). The following Subgroup members participated: Wanchin Chou, Chair (CT); Jane Nelson, Vice Chair (FL); Rolf Kaumann and Eric Unger (CO); Travis Grassel (IA); Sandra Darby (ME); Elouisa Macias (NM); Tom Botsko (OH); Andy Schallhorn (OK); Will Davis (SC); and Rebecca Armon and Miriam Fisk (TX). Also participating were: Julie Lederer (MO).

1. Adopted the Joint Property and Casualty Risk-Based Capital (E) Working Group and Catastrophe Risk (E) Subgroup's June 30 minutes

Botsko said the Property and Casualty Risk-Based Capital (E) Working Group and Catastrophe Risk (E) Subgroup met June 30. During this meeting, the Working Group and Subgroup took the following action: 1) adopted their Spring National Meeting minutes; 2) adopted their June 11 minutes, which included the following action: a) adopted proposal 2025-09-P (Underwriting Risk Line 1 Factors, and proposal 2025-11-CR (Catastrophe Modeling Attestation); b) discussed 2024 property/casualty (P/C) RBC statistics; c) heard updates on the wildfire impact analysis; d) discussed climate impact disclosures; e) discussed flood peril; and f) discussed property claim services events list enhancement; and 3) adopted their May 2 minutes, which included the following action: a) adopted proposal 2025-06-CR (Disclosure Climate Condition Cat Exposure Instruction); b) exposed proposal 2025-09-P (Underwriting Risk Line 1 Factors), and proposal 2025-11-CR (Catastrophe Modeling Attestation) for a 30-day public comment period that ended June 1; c) heard updates on the wildfire impact analysis; d) discussed holding a summer panel discussion; e) discussed the process for updating the catastrophe event lists; f) discussed the Statutory Accounting Principles (E) Working Group referral for risk-based capital (RBC) assessment for capital notes and non-bond debt securities; g) discussed bond-like treatment for Securities Valuation Office (SVO)-designated mutual funds; and h) discussed the appointment of the Risk-Based Capital Model Governance (EX) Task Force.

Chou made a motion, seconded by Kaumann, to adopt the Joint Property and Casualty Risk-Based Capital (E) Working Group and Catastrophe Risk (E) Subgroup's June 30 minutes (*see NAIC Proceedings – Summer 2025, Capital Adequacy (E) Task Force, Attachment Five*). The motion passed unanimously.

2. Discussed Catastrophe Modeling Wildfire Review and Impact Analysis

Chou reported that a diverse group of catastrophe modelers, regulators, and NAIC staff are actively participating in the Catastrophe (CAT) Modeling Wildfire Review. As the Wildfire Review Ad Hoc Group approaches the final stages of its evaluation, Chou provided an update on the project's background, the convergence of exceedance probability (EP) curves, and the ongoing efforts to formalize the proposal plan and supporting documentation. He explained that, following the precedent set by the 2021 wildfire review, the Ad Hoc Group was re-established and commenced a new review cycle on March 18, guided by the Actuarial Standard of Practice (ASOP) No. 38—Catastrophe Modeling (for All Practice Areas). This process encompasses high-level analysis, confidential

assessments, and comprehensive impact analysis. In addition to the original three vendors—Moody Risk Management Solutions (RMS), Verisk Extreme Event Solutions, and KCC—CoreLogic joined as a new participant for this review.

Beginning in early June and July, the ad hoc group collaborated with all four vendors to conduct a second round of impact analysis using consistent exposure inputs. On Sept. 25, the group reconvened to address feedback from the impact analysis presentations. He presented a comparative analysis between the initial impact assessment conducted in 2022 and the current evaluation, noting that model outputs have become increasingly consistent. He emphasized that the group now has greater confidence in the models and their applicability to risk management.

Additionally, Chou outlined plans to work with committee support to formally document the review process, ensuring comprehensive records are maintained for future reference. In response to a question from Lederer regarding the difference in probable maximum loss (PML) between 2022 and 2025, Chou clarified that the variation was attributable to differences in exposure inputs provided to the catastrophe vendors. The latest results demonstrate a more converged 100-year aggregate PML.

3. Discussed the Possibility of Updating the Rcat Covariance Formula

Chou clarified that the Rcat covariance formula, integral to the RBC calculation, is designed to aggregate catastrophe risks while recognizing that such events are unlikely to occur simultaneously. This adjustment helps prevent the overestimation of total risk. Presently, the formula treats these risks as largely independent. However, with the increasing influence of climate change, there is an expectation that correlations between certain catastrophe risks, such as hurricanes and severe convective storms, will rise. Additionally, the recent inclusion of wildfire and severe convective storm risks in the RBC formula for informational purposes has prompted consideration of whether the covariance formula should be updated to reflect these positive correlations.

To ensure any future changes are based on robust evidence, Chou has requested the American Academy of Actuaries (Academy) to conduct a comprehensive study on this matter. The objective is to provide empirical support for any modifications to the Rcat covariance formula, ensuring that adjustments are grounded in thorough analysis and reliable data. Until the study is completed, the current formula will remain in use, allowing for a careful evaluation of climate change's impact on risk correlations before implementing changes to the RBC framework.

4. Discussed the Possibility of Separating the Earthquake and Hurricane Losses Experience PR100s

Chou noted that, whereas losses from wildfire and severe convective storms are reported separately in PR100s, the current formula combines hurricane and earthquake experience. He suggested that distinguishing hurricane and earthquake losses, similar to the approach used for wildfire and severe convective storms, could enable the Subgroup and Working Group to more effectively manage and address each peril, taking into account their distinct characteristics and impacts. Hearing no objection from the members and the interested parties, committee support will draft a proposal and expose for comment in the upcoming meeting.

5. Discussed the SVO-Funded RBC Alignment Project

   A. Exposed a Referral from the Risk-Based Capital Investment Risk and Evaluation (E) Working Group

Botsko reported that the Working Group received a referral from the Risk-Based Capital Investment Risk and Evaluation (E) Working Group concerning the SVO-funded RBC alignment project. The accompanying comment letter indicated that the Risk-Based Capital Investment Risk and Evaluation (E) Working Group had received nine comment letters regarding the American Council of Life Insurers' (ACLI) RBC principles for bond funds presentations, as well as the NAIC's memorandum on bond funds included in the 2023 annual statement filings. The Risk-Based Capital Investment Risk and Evaluation (E) Working Group agreed to expose the life proposal 2025-12-IRE for a 30-day public comment period ending July 23.

Additionally, Botsko noted that the Risk-Based Capital Investment Risk and Evaluation (E) Working Group requested the Property and Casualty Risk-Based Capital (E) Working Group to consider developing a similar proposal for the P/C RBC formula. He further stated that the life proposal and the associated comment letters are included in the meeting materials. All interested parties were encouraged to review these documents and continue the discussion at the upcoming meeting.

The Working Group and Subgroup concurred to expose this referral, along with the comment letters from the Risk-Based Capital Investment Risk and Evaluation (E) Working Group (Attachment XXX), for a 30-day public comment period ending Nov. 7.

B. Comments Received

Botsko reported that the Working Group has received four comment letters in recent months. Premera Blue Cross expressed support for developing a harmonized proposal that would assign bond-like treatment to SVO-designated funds, emphasizing that equitable RBC treatment for fixed income investments is essential to ensuring fair market access.

Helen Remeza (PineBridge Investments) also endorsed the RBC alignment initiative, noting that non-life insurers currently face more conservative RBC charges for funds. Remeza stated that harmonizing RBC treatment for funds with the SVO designation supports two NAIC guiding principles: (1) substance over form and (2) equal capital for equal risk. She further indicated that aligning these charges with those applied to life insurers would allow non-life insurers to utilize SVO designation for RBC relief at their discretion.

United Educators (UE) commented that harmonizing RBC treatment for non-life funds with the life insurance sector would enhance the consistency and accuracy of solvency assessments across all lines of insurance.

The Alternative Credit Council (ACC) added that implementing consistent, risk-based principles reflecting the underlying economic substance would enable the NAIC to reduce unnecessary capital charges, improve comparability, and strengthen the insurance investment framework.

Chou emphasized that while consistency across all lines of business is important, a cost-benefit analysis is necessary to determine applicability for P/C companies. Hale observed that the comment letters were largely similar in content and suggested that companies could collaborate and submit a joint letter. Keith Bell (Travelers) indicated that Travelers will submit a comment letter with additional observations during the exposure period.

6. Heard Updates from the Academy Regarding P/C RBC Premium and Loss Concentration Factors

Ron Wilkins (Academy) reported that, following a letter sent by the Academy to the Working Group in May 2019, three analyses were initiated to calibrate the premium and reserve risk components of the RBC formula. Two reports have already been published: the first in 2021, detailing the indicated risk factors for premium and reserve

risk, and the second in 2023, which included updates on investment income adjustment (IIA) factors and revised risk factors for premium and reserve risk. Wilkins noted that the Academy is nearing completion of the third analysis, with publication anticipated later in 2025. Preliminary findings suggest that as companies diversify across more lines of business, the maximum percentage decreases while the diversification credit increases. This could result in a higher maximum diversification credit for both premiums and reserves. Wilkins concluded by stating that the Academy will present a comprehensive update on the RBC dependency report in November.

7. Discussed Other Matters

A. Accident and Health Structure in the P/C RBC Formula

Botsko stated that the Health Risk-Based Capital (E) Working Group is actively developing the H2—Underwriting Risk Component and Managed Care Credit Calculation for inclusion in the 2026 health RBC formula. To ensure consistency across all lines of business, the Accident and Health section within the P/C RBC formula will also undergo review. He noted that committee support are currently working to develop this structure, drawing upon the health RBC formula as a reference. The updated instructions and framework are scheduled to be released for public exposure in November.

Lastly, Botsko announced that the Working Group and Subgroup are planning to schedule a meeting in November.

Having no further business, the Property and Casualty Risk-Based Capital (E) Working Group and Catastrophe Risk (E) Subgroup adjourned.

SharePoint/NAIC Support Staff Hub/ Member Meetings/E Cmte/CADTF/2025-Fall/PCRBCWG/Joint PCRBC Cat Risk Minutse 100825.docx

Capital Adequacy (E) Task Force

RBC Proposal Form

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

DATE: 11/3/2024

CONTACT PERSON: Derek Noe

TELEPHONE: 816-783-8973

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ON BEHALF OF: Catastrophe Risk (E) Subgroup

NAME: Wanchin Chou

TITLE: Chair

AFFILIATION: Connecticut Department of Insurance

ADDRESS: 153 Market St,
Hartford, CT 06103

FOR NAIC USE ONLY

Agenda Item # 2025-08-CR

Year 2025

DISPOSITION

[ ] ADOPTED 1st release: 2nd release:

[ ] REJECTED

[ ] DEFERRED TO

[ ] REFERRED TO OTHER NAIC GROUP

[x] EXPOSED 1st release: 11/3/2025 2nd release:

[ ] OTHER (SPECIFY)

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

[ ] Health RBC Blanks	[ ] Property/Casualty RBC Blanks	[ ] Life RBC Instructions
[ ] Fraternal RBC Blanks	[ ] Health RBC Instructions	[ ] Property/Casualty RBC Instructions
[ ] Life RBC Blanks	[ ] Fraternal RBC Instructions	[x] OTHER Cat Event Lists

DESCRIPTION OF CHANGE(S)

2025 U.S. and non-U.S. Catastrophe Event Lists

REASON OR JUSTIFICATION FOR CHANGE **

New events were determined based on the sources from Swiss Re and Aon Benfield.

Additional Staff Comments:

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**** This section must be completed on all forms.** **Revised 11-2013**

Attachment 2

Type of Event	Name	Date	Location	Overall losses when occurred
Hurricane	Matthew	2016	Florida, North Carolina, South Carolina, Georgia and Virginia	$ 2,698,400,000
Hurricane	Hermine	2016	Florida, North Carolina, South Carolina, Georgia and Virginia	$ 245,640,000
Convective Storm	Thunderstorm, flood, landslides	1/31/2016 - 2/1/2016	CA	25-100m
Convective Storm	Thunderstorms, wind	2/19/2016 - 2/20/2016	MI, IL	100-300m
Convective Storm	Thunderstorms, tornadoes, hail	2/22/2016-2/25/2016	TX, NC, LA, FL, GA, VA, NY, SC, PA, MA, AL, CT, MS, DC, DE	600m-1b
Convective Storm	Thunderstorms, hail, flood	3/5/2016 - 3/11/2016	LA, TX, CA, MS, AR, TN, OK	300-600m
Convective Storm	Thunderstorms, tornadoes, hail	3/13/2016 - 3/14/2016	SC, AR, NC	100-300m
Convective Storm	Thunderstorms, tornadoes, hail	3/13/2016 - 3/15/2016	IL, WA, CA	100-300m
Convective Storm	Thunderstorms, hail	3/17/2016 - 3/18/2016	TX, LA, MS, AR, FL, AL	600m-1b
Convective Storm	Thunderstorms, hail	3/27/2016	IN	25-100m
Convective Storm	Thunderstorms, hail, tornadoes, flood	3/30/2016 - 4/1/2016	TX, OK, MS, AR, AL, LA, KS	100-300m
Convective Storm	Thunderstorms, hail	4/2/2016 - 4/3/2016	IN, OH, NJ, IL, PA, MD, VA, NY, DE, DC	100-300m
Convective Storm	Thunderstorms, tornadoes, hail	4/25/2016 - 4/28/2016	TX, KS, MO, IN, WV, OK, IL, NC, MS	600m-1b
Convective Storm	Thunderstorms, hail, tornadoes, flood	4/29/2016 - 5/3/2016	TX, AR, VA, IN, NC, MD, OK, GA, MO, IL, WV	1-3b
Convective Storm	Thunderstorms, tornadoes, hail	5/7/2016 - 5/10/2016	NE, KY, TX, OK, CO, TN, KS	600m-1b
Convective Storm	Thunderstorms, tornadoes, hail	5/11/2016 - 5/12/2016	MO, TX, NE, IL	600m-1b
Convective Storm	Thunderstorms, hail	5/16/2016 - 5/19/2016	TX	100-300m
Convective Storm	Thunderstorms, tornadoes, hail	5/21/2016 - 5/28/2016	TX, MT, KS, MO, CO	600m-1b
Convective Storm	Thunderstorms, tornadoes, flood	5/29/2016 - 6/2/2016	TX	100-300m
Convective Storm	Thunderstorms, hail	6/6/2016 - 6/7/2016	CO	100-300m
Convective Storm	Thunderstorms, hail	6/16/2016 - 6/18/2016	VA, GA, AL, SC	100-300m
Convective Storm	Thunderstorms, hail	6/16/2016 - 6/18/2016	ND, SD, MN	100-300m
Convective Storm	Thunderstorms, hail, flood	7/5/2016 - 7/7/2016	MN, TN, KY, WI	100-300m
Convective Storm	Thunderstorms, hail	7/7/2016 - 7/9/2016	CO, MI, NC, TN	100-300m
Convective Storm	Thunderstorms, hail, tornadoes	7/13/2016 - 7/15/2016	CO, OK, IL, AR, MO, KS	300-600m
Convective Storm	Thunderstorms, hail	7/20/2016 - 7/21/2016	MN	25-100m
Convective Storm	Thunderstorms, hail, flood	7/30/2016 - 8/1/2016	MD, NJ, NY, PA, VA	100-300m
Convective Storm	Thunderstorms, hail, tornadoes, flood	8/24/2016 - 8/25/2016	IN, OH	25-100m
Convective Storm	Thunderstorms, hail, tornadoes, flood	9/19/2016 - 9/23/2016	WI, MN, IA	100-300m
Convective Storm	Thunderstorms, tornadoes	11/28/2016 - 12/1/2016	TN, AL, GA, SC, MS, LA, NC	100-300m
Convective Storm	Hailstorm	3/23/2016	TX	1-3b
Convective Storm	Hailstorm	4/10/2016 - 4/15/2016	TX, FL	1-3b
Convective Storm	Hailstorm	7/28/2016 - 7/29/2016	CO, WY	1-3b
Convective Storm	Hailstorm	11/4/2016 - 11/6/2016	TX, NM	300-600m
Wildfire	Erskine Fire	6/23/16-7/11/16	Lake Isabella, Kern County, California	~26 million
Wildfire	Soberanes Fire	7/22/16-9/30/16	Soberanes Creek, Garrapata State Park, Santa Lucia Preserve, Monterey County, California	> 200 million
Wildfire	Chimney Fire	8/13/16-9/6/16	Santa Lucia Range, San Luis Obispo County, California	> 25 million
Wildfire	Clayton Fire	8/13/16-8/26/16	Lake County, California	>25 million
Wildfire	Gatlinburg Wildfire	11/29/16-12/5/16	Sevier County, Gatlinburg, Pigeon Forge, Tennessee	~637 million
Wildfire	Northern California Wildfires	10/8/17-10/31/17	Northern California	~ 11 billion
Wildfire	Southern California Wildfires	12/4/17-12/23/17	Southern California	~ 2.2 billion
Hurricane	Harvey	2017	Texas, Lousiana	25+ million
Hurricane	Jose	2017	East Coast of the United States	25+ million
Hurricane	Irma	2017	Eastern United States	25+ million
Hurricane	Maria	2017	Southeastern United States, Mid-Atlantic States	25+ million
Hurricane	Nate	2017	Louisiana, Mississippi, Alabama, Tennessee and Eastern United States	25+ million
Convective Storm	Thunderstorms, tornadoes	1/1/2017 - 1/3/2017	GA, TX, AL, LA, MS	100-100m
Convective Storm	Tornadoes	1/18/2017 - 1/23/2017	CA, GA, MS, TX, FL, AL, LA, SC	600m-1b
Convective Storm	Thunderstorms, tornadoes, hail	2/7/2017	LA, AL, FL, MS	100-300m
Convective Storm	Thunderstorms, hail, tornadoes, flood	2/19/2017 - 2/20/2017	TX	100-300m
Convective Storm	Windstorm, flood	2/19/2017 - 2/21/2017	CA	25-100m
Convective Storm	Thunderstorms, tornadoes, hail	2/25/2017	VA, PA	100m-300m
Convective Storm	Thunderstorms, tornadoes, hail	2/28/2017 - 3/2/2017	IL, MO, IN, KY, OH, TN, GA, IA, AR, NC, VA, AL, SC, WV, MD, MI	1-3b
Convective Storm	Thunderstorms, tornadoes, hail	3/6/2017 - 3/9/2017	MO, MI, NY, MN, IA, OH, IL, WI, AR, OK, NE	1-3b
Convective Storm	Thunderstorms, hail	3/21/2017 - 3/22/2017	SC, TN, GA, NC	600m-1b
Convective Storm	Thunderstorms, tornadoes, hail	3/28/2017 - 3/31/2017	TX, VA, NC, OK	100-300m
Convective Storm	Thunderstorms, hail, tornadoes, flood	4/2/2017 - 4/3/2017	TX, GA, LA, MS, AL, SC, FL, AR, NC	100-300m

Attachment 2

Type of Event	Name	Date	Location	Overall losses when occurred
Convective Storm	Thunderstorms, tornadoes, hail	4/4/2017 - 4/6/2017	AL, KY, GA, VA, SC, TX, MO, NC, TN,FL, MD, OK, AR, KS, DC	600m-1b
Convective Storm	Thunderstorms, tornadoes	4/10/2017 - 4/11/2017	TX, IL, IN	100-300m
Convective Storm	Thunderstorms, hail, tornadoes, flood	4/21/2017 - 4/25/2017	TX, TN, OK, NC, VA, SC	600m-1b
Convective Storm	Thunderstorms, tornadoes, hail	4/26/2017	TX	25-100m
Convective Storm	Thunderstorms, tornadoes, hail	5/3/2017 - 5/5/2017	TX, LA, GA, VA, NC	100-300m
Convective Storm	Thunderstorms, tornadoes, hail	5/15/2017 - 5/18/2017	IL, WI, MN, OK, IA, NY	600m-1b
Convective Storm	Thunderstorms, tornadoes, hail	5/27/2017 - 5/28/2017	MO, TN, VA, OK, KY	300-600m
Convective Storm	Thunderstorms, hail	6/2/2017 - 6/4/2017	TX	100-300m
Convective Storm	Thunderstorms, tornadoes, hail	6/12/2017 - 6/14/2017	TX, WY, Midwest	600m-1b
Convective Storm	Thunderstorms, tornadoes, hail	6/16/2017 - 6/19/2017	NE, IA, KS, MO, PA, IL, VA, NY	300-600m
Convective Storm	Thunderstorms, tornadoes, hail	6/27/2017 - 6/29/2017	NE, IA, IL	1-3b
Convective Storm	Thunderstorms, hail, tornadoes, flood	7/11/2017 - 7/12/2017	IL, MN	100-300m
Convective Storm	Thunderstorms, hail	7/21/2017 - 7/23/2017	IL, KS, MO	300-600m
Convective Storm	Thunderstorms, hail, tornadoes, flood	8/5/2017 - 8/8/2017	TX, OK, LA, KS, MO	100-300m
Convective Storm	Thunderstorms, hail, flood	10/14/2017 - 10/15/2017	IL, MO, KS	100-300m
Convective Storm	Thunderstorms, hail	11/5/2017 - 11/6/2017	OH, MO	100-300m
Convective Storm	Thunderstorms, tornadoes, hail	3/26/2017 - 3/28/2017	TX, OK, AL, TN, KY, MS	1-3b
Convective Storm	Thunderstorms, tornadoes, hail	5/8/2017 - 5/11/2017	CO, NM, OK, TX, MO	1-3b
Convective Storm	Hailstorm	6/11/2017	MN, WI	1-3b
Tropical Storm	Alberto	2018	Southeast, Midwest	25+ million
Hurricane	Lane	2018	Hawaii	25+ million
Tropical Storm	Gordon	2018	Southeast, Gulf coast of the United States, Arkansas and Missouri	25+ million
Hurricane	Florence	2018	Southeast, Mid-Atlantic	25+ million
Hurricane	Michael	2018	Southeastern and East Coasts of United States	25+ million
Wildfire	Spring Creek Fire	6/27/18-7/11/18	Spring Creek, Colorado	< 100 million
Wildfire	Carr, Mendocino California Wildfires	7/23/18-8/15/18	Northern California	>1,000 million
Wildfire	Northern California Camp Wildfire	11/8/18-11/25/18	Butte County, California	>7.5 billion
Wildfire	Southern California Woolsey Wildfires	11/8/18-11/21/18	Los Angeles andVentura County, California	2.9 billion
Convective Storm		1/8/2018 - 1/10/2018	CA	<1,000m
Convective Storm		2/24/2018 - 2/26/2018	KY, TN, MO, AR	<1,000m
Convective Storm		3/18/2018 - 3/21/2018	TX, LA, AL, MS, GA, FL, SC	>1,000m
Convective Storm		4/6/2018 - 4/7/2018	TX, LA, MS, OK	<1,000m
Convective Storm		4/13/2018 - 4/17/2018	TX, OK, MO, AR, LA, MS, IA, KS, VA, NC, SC, GA, FL	<1,000m
Convective Storm		4/28/2018 - 5/5/2018	KS, MO, IA, IL	>1,000m
Convective Storm		5/12/2018 - 5/16/2018	Northeast, Midwest, Southern	>1,000m
Convective Storm		6/3/2018 - 6/6/2018	Southwest	<1,000m
Convective Storm		6/12/2018 - 6/13/2018	Midwest	<1,000m
Convective Storm		6/18/2018 - 6/20/2018	Midwest	>1,000m
Convective Storm		6/24/2018 - 6/26/2018	Midwest	<1,000m
Convective Storm		6/29/2018 - 7/1/2018	Midwest	<1,000m
Convective Storm		7/19/2018 - 7/22/2018	Midwest, Southern	>1,000m
Convective Storm		7/21/2018 - 7/26/2018	Northeast	<1,000m
Convective Storm		7/26/218 - 7/29/2018	Midwest, Southern	<1,000m
Convective Storm		7/30/2018 - 7/31/2018	Southwest	<1,000m
Convective Storm		8/6/2018 - 8/7/2018	Midwest	<1,000m
Convective Storm		9/20/2018 - 9/21/2018	Midwest	<1,000m
Convective Storm		10/31/2018 - 11/1/2018	Midwest	>1,000m
Convective Storm		11/14/2018 - 11/16/2018	Northeast	<1,000m
Hurricane	Dorian	2019	Southeast, Mid-Atlantic	500+ million
Hurricane	Barry	2019	Southeast, Midwest, Northeast	300+ million
Tropical Storm	Imelda	2019	Plains, Southeast	25+ million
Tropical Storm	Nestor	2019	Southeast	25+ million
Tropical Storm	Olga	2019	Louisiana, Mississippi, Texas and Arkansas	25+ million
Wildfire	Saddleridge Wildfire	10/10/19-10/23/19	Sylmar, Los Angeles, Calimesa, Riverside County, California	<1,000 million
Wildfire	Kincade Wildfire	10/23/19-11/6/19	Northeast of Geyserville, Sonoma County, California	<1,000 million
Convective Storm		2/1/2019 - 2/3/2019	CA	<100m
Convective Storm		2/23/2019 - 2/26/2019	Midwest, Northeastern	<1,000m

Attachment 2

Type of Event	Name	Date	Location	Overall losses when occurred
Convective Storm		2/26/2019 - 2/28/2019	CA	<100m
Convective Storm		3/3/2019 - 3/4/2019	Southern	<1,000m
Convective Storm		3/23/2019 - 3/25/2019	Southern	>1,000m
Convective Storm		3/26/2019 - 3/27/2019	FL	<1,000m
Convective Storm		4/5/2019 - 4/7/2019	Southern	<1,000m
Convective Storm		4/12/2019 - 4/15/2019	Midwest, Southeast	<1,000m
Convective Storm		4/17/2019 - 4/20/2019	Southern	<1,000m
Convective Storm		4/23/2019 - 4/25/2019	Southern	<1,000m
Convective Storm		4/30/2019 - 5/2/2019	Midwest, Southern	<1,000m
Convective Storm		5/7/2019 - 5/10/2019	Southern	<1,000m
Convective Storm		5/13/2019	NC	<1,000m
Convective Storm		5/16/2019 - 5/17/2019	Midwest	<1,000m
Convective Storm		5/17/2019 - 5/18/2019	TX	<1,000m
Convective Storm		5/20/2019 - 5/22/2019	Midwest, Southern	<1,000m
Convective Storm		5/24/2019 - 5/25/2019	Southern	<100m
Convective Storm		5/26/2019 - 5/29/2019	Multistate	>1,000m
Convective Storm		6/4/2019 - 6/6/2019	Midwest	<1,000m
Convective Storm		6/9/2019 - 6/10/2019	Southern	<1,000m
Convective Storm		6/15/2019 - 6/16/2019	IN	<100m
Convective Storm		6/16/2019 - 6/17/2019	TX	<1,000m
Convective Storm		6/23/2019 - 6/24/2019	TX	<1,000m
Convective Storm		6/29/2019 - 6/30/2019	IL, NY	<100m
Convective Storm		7/4/2019 - 7/5/2019	CO	<1,000m
Convective Storm		7/7/2019 - 7/8/2019	Southern	<1,000m
Convective Storm		7/17/2019 - 7/18/2019	MN, WY	<1,000m
Convective Storm		7/19/2019 - 7/23/2019	Northeast, Midwest	<1,000m
Convective Storm		7/26/2019 - 7/27/2019	MN	<1,000m
Convective Storm		8/4/2019 - 8/5/2019	MN, WI	<1,000m
Convective Storm		8/6/2019	ND, SD	<1,000m
Convective Storm		8/10/2019 - 8/11/2019	MT	<1,000m
Convective Storm		8/14/2019 - 8/18/2019	Midwest	<1,000m
Convective Storm		8/25/2019 - 8/26/2019	Midwest, South	<1,000m
Convective Storm		9/10/2019 - 9/11/2019	Midwest	<1,000m
Convective Storm		9/27/2019 - 9/28/2019	Midwest	<100m
Convective Storm		10/16/2019 - 10/17/2019	Northeast	<1,000m
Convective Storm		10/20/2019 - 10/21/2019	Southern	>1,000m
Convective Storm		10/26/2019 - 10/27/2019	CA	<100m
Convective Storm		10/31/2019 - 11/1/2019	Northeast, South	<1,000m
Convective Storm		11/19/2019 - 11/21/2019	AZ	<100m
Convective Storm		11/26/2019 - 11/28/2019	Midwest	<1,000m
Tropical Storm	Cristobal	2020	Southeast, Plains, Midwest	150 million
Tropical Storm	Fay	2020	Southeast, Northeast	400 million
Hurricane	Hanna	2020	Texas	350 million
Hurricane	Isaias	2020	Southeast, Mid-Atlantic, Northeast	> 3 billion
Hurricane	Laura	2020	Plains, Southeast, Mid-Atlantic	> 4 billion
Hurricane	Sally	2020	Southeast (Alabama, Mississippi, Louisiana)	> 1 billion
Tropical Storm	Beta	2020	Plains, Southeast	25+ million
Hurricane	Delta	2020	Gulf Coast of United States, Southeast, Northeast (AL, GA, NC, SC, MS, LA, TX)	> 2 billion
Hurricane	Eta	2020	Florida	>1 billion
Hurricane	Zeta	2020	Gulf coast of the United States, Southeastern United States, Mid-Atlantic	> 1.5 billion
Wildfire	Cameron Peak	08/13/20-12/02/20	Roosevelt National Forest, Larimer County, Colorado	~71 million
Wildfire	SCU Lighting Complex Wildfire	8/16/20-9/16/20	San Franciscon Bay Area, Central Valleym Santa Clara, Alameda, Contra Costa, San Joaquin, Merced, Stanislaus	<1,000 million
Wildfire	Beachie Creek Wildfire	8/16/20-10/10/20	Approx. 2 miles south of Jaw Bones flats in rugged terrain deep in the Opal Creek Wilderness.	>1,000 million
Wilfire	CZU Lightning Complex Wildfire	8/16/20-9/22/20	San Mateo and Santa Cruz Counties, California	>1,000 million
Wildfire	LNU Lightning Complex WildFire	8/17/20-10/2/20	Lake, Napa, Sonoma, Solano, and Yolo Counties, California	> 1,000 million
Wildfire	Carmel Fire	8/18/20-9/4/20	Carmel Valley, California	<1,000 milion

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Type of Event	Name	Date	Location	Overall losses when occurred
Wildfire	North Complex Fire	8/18/20-10/12/20	Plumas and Butte Counties, California	<1,000 milion
Wildfire	Creek Fire	9/4/20-10/12/20	Fresno and Madera Counties, California	<1,000 milion
Wildfire	Bobcat Fire	9/6/20-10/23/20	Central San Gabriel Mountains, in and around the Angeles National Forest California	< 1,000 million
Wildfire	Babb Road Fire	9/7/20-9/18/20	Malden and Pine City, Palouse County of Eastern Washington	<1,000 million
Wildfire	Almeda Fire	9/7/20-9/16/20	Jackson County, Oregon	<1,000 milion
Wildfire	Holiday Farm Fire	9/7/20-10/3/20	Willamette National Forest	<1,000 milion
Wildfire	Echo Mountain Complex Fire	9/7/20-9/23/20	north of Lincoln City, Oregon	<100 milion
Wildfire	Riverside FIre	9/8/20-10/3/20	Valley Drive between Misty Ridge Drive and Mitchell Avenue, Oregon	<100 milion
Wildfire	Slater Fire	9/8/20-10-9/20	Northern California and Southern Oregon	<100 million
Wildfire	Glass Fire	9/27/20-10/19/20	Napa and Sonoma Counties, California	> 1,000 million
Wildfire	East Troublesome Fire	10/14/20-11/9/20	Grand County, Colorado	~543 million
Convective Storm		1/10/2020 - 1/12/2020	Midwest, Southern	<1,000m
Convective Storm		2/5/2020 - 2/8/2020	South, Northeast	<1,000m
Convective Storm		2/8/2020 - 2/11/2020	AZ, CA	<100m
Convective Storm		3/2/2020 - 3/4/2020	Midwest, Southern	>1,000m
Convective Storm		3/17/2020 - 3/20/2020	Midwest, Southern	<1,000m
Convective Storm		3/27/2020 - 3/30/2020	Midwest. Southern	>1,000m
Convective Storm		4/7/2020 - 4/9/2020	Northeast, Midwest	>1,000m
Convective Storm		4/10/2020 - 4/14/2020	Northeast, Southern	>1,000m
Convective Storm		4/18/2020 - 4/20/2020	Southern	<1,000m
Convective Storm		4/21/2020 - 4/24/2020	Southern	>1,000m
Convective Storm		4/24/2020 - 4/26/2020	Southern	<1,000m
Convective Storm		4/27/2020 - 4/30/2020	South, Northeast	<1,000m
Convective Storm		5/2/2020 - 5/3/2020	Southern	<1,000m
Convective Storm		5/4/2020 - 5/5/2020	Southern	>1,000m
Convective Storm		5/7/2020 - 5/8/2020	Southern	<1,000m
Convective Storm		5/13/2020 - 5/15/2020	Midwest, Northeast	<1,000m
Convective Storm		5/16/2020 - 5/21/2020	South, Northeast	<1,000m
Convective Storm		5/20/2020 - 5/24/2020	Southern	>1,000m
Convective Storm		5/25/2020 - 5/26/2020	TX	<100m
Convective Storm		5/27/2020 - 5/28/2020	TX	>1,000m
Convective Storm		6/2/2020 - 6/3/2020	Northeast	<1,000m
Convective Storm		6/4/2020	SD	<1,000m
Convective Storm		6/5/2020 - 6/11/2020	Midwest	<1,000m
Convective Storm		6/6/2020 - 6/9/2020	Southern	<1,000m
Convective Storm		6/19/2020 - 6/21/2020	TX	<1,000m
Convective Storm		7/5/2020 - 7/7/2020	Northeast	<1,000m
Convective Storm		7/10/2020 - 7/12/2020	Midwest	<1,000m
Convective Storm		7/17/2020 - 7/19/2020	Midwest	<1,000m
Convective Storm		7/25/2020 - 7/27/2020	TX	<1,000m
Convective Storm		8/4/2020 - 8/5/2020	CO	<1,000m
Convective Storm		8/8/2020 - 8/11/2020	Midwest	>1,000m
Convective Storm		8/13/2020 - 8/17/2020	Midwest, Southern	<1,000m
Convective Storm		8/26/2020 - 8/28/2020	Northeast	<1,000m
Convective Storm		8/29/2020 - 8/30/2020	TX	<100m
Convective Storm		9/5/2020 - 9/6/2020	IA, MN	<1,000m
Convective Storm		9/7/2020 - 9/9/2020	ID, UT	<1,000m
Convective Storm		10/7/2020 - 10/8/2020	Northeast	<1,000m
Convective Storm		10/25/2020 - 10/28/2020	CA, OK	<1,000m
Convective Storm		11/10/2020 - 11/12/2020	Midwest, Southern	<1,000m
Convective Storm		11/15/2020 - 11/16/2020	Northeast	<1,000m
Convective Storm		11/30/2020 - 12/1/2020	Northeast	<100m
Tropical Storm	Claudette	2021	Gulf Coast of the United States, Georgia, Carolinas	> 350 million
Hurricane	Elsa	2021	East Coast of the United States	1.2 billion
Tropical Storm	Fred	2021	Eastern United States (particularly Florida and North Carolina)	1.3 billion
Hurricane	Henri	2021	Northeastern United States	550 million

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Type of Event	Name	Date	Location	Overall losses when occurred
Hurricane	Ida	2021	Gulf Coast of the United States (especially Louisana), East Coast of the United States (especially the Northeastern United States)	44 billion
Tropical Storm	Nicholas	2021	LA, TX	>1.1b
Tropical Storm	Wanda	2021	Southern United States, Mid-Atlantic United States, Northeastern United States	>200 million
Wildfire	Bootleg Wildfire	7/17/21-8/6/21	Northwest of Beatty, Oregon	<1,000 million
Wildfire	Dixie Wildfire	7/14/21-10/5/21	Butte, Plumas, Tehama, Lassen and Shasta Counties, California	>1,000 million
Wildfire	Caldor Fire	8/14/21-10/5/21	El Dorado National Forest and other areas of the Sierra Nevada in El Dorado, Amador, and Alpine County, Calfornia	<1,000 million
Wildfire	Corkscrew Fire	8/15/21-8/30/21	Ford, WA; Tum Tum, Springdale, City of Deer Park, Loon Lake, Clayton, H395, Scoop Mt	<100 million
Wilfire	Marshall Fire	12/30/21-1/1/22	Boulder County, Colorado	~ 2 billion
Convective Storm		1/11/2021 - 1/13/2021	Western	<1,000m
Convective Storm		1/17/2021 - 1/20/2021	CA	<1,000m
Convective Storm		1/25/2021 - 1/26/2021	Southern	<100m
Convective Storm		1/24/2021 - 1/29/2021	AZ, CA	<1,000m
Convective Storm		2/25/2021 - 2/26/2021	TX	<1,000m
Convective Storm		3/9/2021 - 3/11/2021	MN	<100m
Convective Storm		3/9/2021 - 3/11/2021	Midwest, Southern	<1,000m
Convective Storm		3/22/2021 - 3/23/2021	TX	<1,000m
Convective Storm		3/24/2021 - 3/26/2021	Northeast, Midwest	>1,000m
Convective Storm		3/27/2021 - 3/29/2021	Northeast, Midwest, Southern	<1,000m
Convective Storm		4/6/2021 - 4/8/2021	TX	<1,000m
Convective Storm		4/9/2021 - 4/11/2021	Southern	<1,000m
Convective Storm		4/9/2021 - 4/14/2021	LA, TX	<1,000m
Convective Storm		4/15/2021 - 4/16/2021	TX	>1,000m
Convective Storm		4/27/2021 - 5/2/2021	Southern, Northeast	>1,000m
Convective Storm		5/3/2021 - 5/4/2021	Southern, Northeast	<1,000m
Convective Storm		5/7/2021 - 5/11/2021	Southern, Midwest	<1,000m
Convective Storm		5/14/2021 - 5/19/2021	Southern, Midwest	<1,000m
Convective Storm		5/26/2021 - 5/28/2021	South, Northeast	<1,000m
Convective Storm		5/25/2021 - 5/26/2021	Northeast	<1,000m
Convective Storm		5/29/2021 - 5/31/2021	Midwest	<1,000m
Convective Storm		6/7/2021 - 6/9/2021	TX	<100m
Convective Storm		6/11/2021 - 6/14/2021	Midwest, Northeast	<1,000m
Convective Storm		6/17/2021 - 6/20/2021	Midwest, Northeast	>1,000m
Convective Storm		6/24/2021 - 7/1/2021	Midwest	<1,000m
Convective Storm		7/8/2021 - 7/10/2021	Midwest	<1,000m
Convective Storm		7/9/2021 - 7/11/2021	Southern	<1,000m
Convective Storm		7/22/2021 - 7/25/2021	AZ, NM	<1,000m
Convective Storm		7/24/2021	MI	<100m
Convective Storm		7/26/2021 - 7/27/2021	MN, WI	<1,000m
Convective Storm		7/28/2021 - 7/29/2021	Midwest, Northeast	<1,000m
Convective Storm		8/1/2021	TX	<100m
Convective Storm		8/7/2021 -8/9/2021	Midwest	<100m
Convective Storm		8/10/2021 - 8/13/2021	Midwest, Northeast	<1,000m
Convective Storm		8/10/2021 - 8/16/2021	AZ	<1,000m
Convective Storm		8/17/2021 - 8/19/2021	Western	<1,000m
Convective Storm		8/21/2021 - 8/22/2021	TN	<100m
Convective Storm		8/26/2021 - 8/28/2021	Midwest	<1,000m
Convective Storm		9/6/2021 - 9/7/2021	Midwest	<1,000m
Convective Storm		9/15/2021 - 9/17/2021	Midwest	<100m
Convective Storm		9/24/2021 - 9/29/2021	Southern	<100m
Convective Storm		9/30/2021 - 10/2/2021	TX	<100m
Convective Storm		10/4/2021 - 10/7/2021	Southern	<1,000m
Convective Storm		10/10/2021 - 10/11/2021	Southern	<1,000m
Convective Storm		10/10/2021 - 10/12/2021	Western	<100m
Convective Storm		10/24/2021 - 10/28/2021	Western, Southern	<1,000m
Convective Storm		10/24/2021 - 10/25/2021	Midwest	<100m

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Type of Event	Name	Date	Location	Overall losses when occurred
Convective Storm		10/24/2021 - 10/25/2021	Northeast	<100m
Convective Storm		11/11/2021 - 11/13/2021	WA	<100m
Convective Storm		11/14/2021 - 11/16/2021	TX	<100m
Convective Storm		11/10/2021 - 11/11/2021	TX	<100m
Convective Storm		12/10/2021 - 12/11/2021	South, Eastern, Central	>1,000m
Convective Storm		12/13/2021 - 12/16/2021	TX	>1,000m
Convective Storm		12/17/2021 - 12/18/2021	TX	<100m
Convective Storm		12/21/2021	FL	<100m
Wildfire	Calf Canyon/Hermits Peak Fire	4/6/22-8/22/22	San Miguel County, Mora County, Taos County	> 25 million
Wildfire	McKinney Fire	7/29/22-9/7/222	Siskiyou County, Northern California	> 25 million
Wildfire	Cedar Creek Fire	8/1/22-present	Central Oregon	> 25 million
Wildfire	Mosquito Fire	9/6/22- present	Northern California, Placer County, El Dorado County	> 25 million
Hurricane	Hurricane Fiona	9/18/22-9/20/22	PR	>3 billion
Hurricane	Ian	9/23/22-10/2/22	Florida and the Carolinas, FL, GA, NC, SC, VA	>110 billion
Hurricane	Hurricane Nicole	11/9/22-11/11/22	FL, GA, SC	>1 billion
Convective Storm		1/21/2022 - 1/22/2022	GA, SC	>25m
Convective Storm		2/21/2022 - 2/22/2022	MO, KY	>500m
Convective Storm		3/5/2022 - 3/7/2022	MO, IA, IL, WI, IN	>250m
Convective Storm		3/11/2022 - 3/13/2022	FL, GA	>50m
Convective Storm		3/14/2022 - 3/16/2022	TX, FL, GA, SC	>100m
Convective Storm	New Orleans Tornado	3/21/2022 - 3/23/2022	TX, LA, MS, AL, OK	>250m
Convective Storm		3/29/2022 - 3/31/2022	TX, OK, AR, LA, AL, MS, FL, TN	>500m
Convective Storm		4/2/2022 - 4/4/2022	MS, LA, AR, TX, OK	>50m
Convective Storm		4/3/2022 - 4/7/2022	MS, AL, GA, FL, SC, NC, TN	>500m
Convective Storm		4/10/2022 - 4/14/2022	MO, AR, TX, LA, IA, NE, KS, MS, AL, TN, KY, MN, WI	>1b
Convective Storm		4/15/2022 - 4/17/2022	AR, MS, LA, FL, AL	>250m
Convective Storm		4/21/2022 - 4/24/2022	TX, OK, KS, NE, SD, IA	>250m
Convective Storm	Andover Tornado	4/26/2022 - 4/30/2022	NC, VA, KS, MO, NE, OK	>100m
Convective Storm	Tornadoes, Hail	5/1/2022 - 5/3/2022	TX, OK, AR, KS, KY, OH,	>500m
Convective Storm	Tornadoes, Hail	5/4/2022 - 5/6/2022	TX, OK, MS, FL, GA, SC, NC, VA, TN, KY	>250m
Convective Storm	Thunderstorms, Hail	5/9/2022 - 5/10/2022	MN, WI, TX	>1b
Convective Storm	Upper Midwest Derecho	5/11/2022 - 5/12/2022	ND, SD, MN, IA, NE	>1b
Convective Storm	Tornadoes, Hail	5/13/2022 - 5/16/2022	IL, MO, TX, OK, KA, NE, NC, NY, NH, CO	>250m
Convective Storm	Tornadoes, Hail	5/17/2022 - 5/19/2022	KS, NE, OK, MO, IL, KY	>25m
Convective Storm		5/19/2022 - 5/22/2022	MN, WI, MI, IN, OH, AR, TX	>1b
Convective Storm	Tornadoes, Hail	5/23/2022 - 5/25/2022	TX, NC, SC, MS, IL	>50m
Convective Storm	Tornadom, Hail	5/29/2022	NE, SD, MN	>25m
Convective Storm	Tornadoes, Hail	5/30/2022 - 6/2/2022	MN, IA, NE, SD, KS, OK, TX, VA, OH	>250m
Convective Storm		6/1/2022 - 6/3/2022	NM, CO, TX	>25m
Convective Storm	Tornadoes, Hail	6/4/2022 - 6/8/2022	KS, NE, MO, IN, OH, OK, AR, TX	>1b
Convective Storm	Tornadoes, Hail	6/11/2022 - 6/17/2022	KS, NE, SD, MN, OH, KY, MI, IN, WI, VA, NC, SC	>1b
Convective Storm	Tornadoes, Hail	6/22/2022 - 6/23/2022	OH, KS, MN, KY, ND, SD	>25m
Convective Storm	South Dakota Derecho	7/1/2022 - 7/7/2022		>250m
Convective Storm		7/7/2022 - 7/13/2022	MT, ND, SD, MN, NE, IA	>250m
Convective Storm		7/21/2022 - 7/25/2022	ND, SD, NE, KS, IL, IN, OH, WI, IA, MN, MI	>500m
Convective Storm		8/1/2022 - 8/4/2022	WV, PA, IL, WI, MN, MI, MD	>25m
Convective Storm		8/11/2022 - 8/12/2022	WA, OR, ID, MT	>25m
Convective Storm		8/20/2022 - 8/21/2022	IA, IL, IN, OH, MO	>250m
Convective Storm		8/27/2022 - 8/29/2022	MN, IA, IL, MI	>25m
Convective Storm		8/28/2022 - 9/6/2022	TX, OK, KS	>100m
Convective Storm		9/18/2022 - 9/21/2022	IL, MO, IA, WI, MI	>250m
Convective Storm		10/1/2022 - 10/4/2022	CO, UT, AZ	>25m
Convective Storm		10/15/2022 - 10/26/2022	OK, AR, NE, ND, MN	>100m
Convective Storm		10/24/2022 - 10/25/2022	TX	>100m
Convective Storm	Southern Plains Tornadoes	11/4/2022 - 11/5/2022	TX, LA, OK, AR	>100m
Convective Storm		11/4/2022 - 11/5/2022	WI, IA, IL	>25m
Convective Storm		11/11/2022	TX, VA	>25m

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Type of Event	Name	Date	Location	Overall losses when occurred
Convective Storm	Western PA Hail	11/27/2022	PA	>25m
Convective Storm		11/29/2022 - 11/30/2022	LA, MS, AL, GA, FL, AR, TN, KY	>25m
Convective Storm	Mid-December Tornadoes	12/13/2022 - 12/14/2022	TX, OK, LA, AR, MS, AL, FL, GA	>100m
Wildfire	Hawaii Wildfire	8/8/23-8/17/23	Hawaii	> 25 million
Hurricane	Hurricane Hilary	8/17/23-8/22/23	West, Southwest United States	> 25 million
Wildfire	Washington Wildfire	8/18/23-8/22/23	Washington	> 25 million
Hurricane	Hurricane Idalia	8/27/23-8/31/23	Southeastern United States	> 25 million
Hurricane	Hurricane Lee	9/14/23-9/17/23	Northeast United States	> 25 million
Tropical Storm	Ophelia	9/22/23-9/26/23	East Coast of the United States	> 25 million
Convective Storm	Selma Tornado	1/12/2023	MS, AL, GA, TN, KY, NC, SC	>250m
Convective Storm	Houston Tornado	1/24/2023	TX, LA	>100m
Convective Storm		2/7/2023	TX, LA, MS	>100m
Convective Storm		2/15/2023 - 2/17/2023	OK, AR, MO, MS, TN	>100m
Convective Storm	Southern Plains Derecho	2/26/2023 - 2/28/2023	TX, OK, KS, MO, IL, IN, OH	>250m
Convective Storm		3/1/2023 - 3/3/2023	TX, AR, OK, LA, KY, IN, OH	>1b
Convective Storm	Dallas Hail	3/16/2023 - 3/17/2023	TX, OK	>250m
Convective Storm	Mississippi Tornado	3/23/2023 - 3/28/2023	TX, OK, MO, IL, AR, TN, MS, AL, GA, LA	>1b
Convective Storm		3/30/2023 - 4/1/2023	NE, IA, MO, IL, WI, AR, TN, KY, IN, OH, MI, NJ, MD	>1b
Convective Storm		4/2/2023	TX, LA, MS	>25m
Convective Storm		4/3/2023 - 4/5/2023	IA, WI, IL, MO, KY, IN, OH, TX	>1b
Convective Storm	Missouri Tornadoes	4/14/2023 - 4/16/2023	KS, NE, MO, IL, AR, TX, LA	>250m
Convective Storm	Oklahoma Tornadoes	4/18/2023 - 4/22/2023	KS, NE, IA, WI, IL, OK, TX	>1b
Convective Storm		4/23/2023 - 4/27/2023	TX, FL	>500m
Convective Storm		4/28/2023 - 5/1/2023	TX	>500m
Convective Storm		5/2/2023 -5/9/2023	TX, NE, MO, IL, IA, IL, KY, KS	>1b
Convective Storm		5/9/2023 - 5/16/2023	CO, KS, TX, OK, LA, NE, IA, KY	>1b
Convective Storm		5/17/2023 - 5/20/2023	TX	>1b
Convective Storm		5/22/2023 - 5/26/2023	TX, NM, CO	>250m
Convective Storm		5/23/2023 - 5/25/2023	ID, MT	>25m
Convective Storm		5/31/2023 - 6/4/2023	NM, TX, TN, PA	>100m
Convective Storm		6/5/2023 - 6/8/2023	KS, TX, TN, VA	>100m
Convective Storm		6/9/2023 - 6/14/2023	TX, OK, AR, MS, AL, TN, GA, LA	>1b
Convective Storm		6/15/2023 - 6/19/2023	TX, OK, LA, AMS, AL, FL, KS, AR, MO	>1b
Convective Storm		6/15/2023 - 6/16/2023	OH, MI, VA	>250m
Convective Storm		6/21/2023 - 6/26/2023	TX, CO, NM, WY, NE, SD, IA, MN, AR, IN, KY	>3b
Convective Storm	Midwest Derecho	6/28/2023 - 7/4/2023	CO, KS, NE, IL, MO, IA, IN, KY, PA	>1b
Convective Storm		7/3/2023 - 7/9/2023	SC, NC, VA	>250m
Convective Storm		7/5/2023 - 7/10/2023	TX, OK, CO, KS, NE	>1b
Convective Storm	Illinois Tornadoes	7/9/2023 - 7/14/2023	NE, IA, SD, IL, MI, MN	>500m
Convective Storm		7/15/2023 - 7/19/2023	KS, MO, NE	>250m
Convective Storm		7/19/2023 - 7/21/2023	MI, OH, PA, TN, AL	>1b
Convective Storm		7/19/2023 - 7/20/2023	MN	>25m
Convective Storm		7/25/2023 - 7/31/2023	MN, WI, IA, IL, IN, OH, MO, KS, NE	>500m
Convective Storm	Arizona Duststorm	7/25/2023 - 7/30/2023	NY, NH, VT, PA, MA	>25m
Convective Storm		8/4/2023 - 8/8/2023	MO, KS, CO, IL, NC, PA, NE	>500m
Convective Storm		8/10/2023 - 8/11/2023	SD, NE, MN, IA, MO, WI, MI	>1b
Convective Storm		8/12/2023 - 8/15/2023	OH, PA, NY, KY, TN, NC, SC, GA	>25m
Convective Storm		8/22/2023 - 8/24/2023	MI, OH,PA	>250m
Convective Storm		8/31/2023 - 9/2/2023	AZ, CA, NV	>25m
Convective Storm		9/9/2023 - 9/11/2023	KS, NE, TX, OK	>250m
Convective Storm		9/12/2023 - 9/14/2023	TX	>25m
Convective Storm		9/23/2023 - 9/24/2023	MN, SD, NE, KS, MO, OK, TX	>500m
Convective Storm		9/26/2023 - 9/27/2023	MO, IL, KY	>25m
Convective Storm		10/2/2023 - 10/5/2023	TX, KS, NE, OK	>250m
Convective Storm		10/23/2023 - 10/24/2023	WI, MN	>100m
Convective Storm	Tornados	10/24/2023 - 10/26/2023	TX	>100m
Convective Storm	Tornadoes, Hail	12/8/2023 - 12/10/2023	LA, TN, KY, MS, AL, FL, NC	>250m

Attachment 2

Type of Event	Name	Date	Location	Overall losses when occurred
Severe Convective Storm		1/8/24-1/10/24	Multistate	> 25 million
Winter Storm		1/11/24-1/18/24	Multistate	> 25 million
Severe Convective Storm		1/19/24-1/22/24	Multistate	> 25 million
Severe Convective Storm	Jan Southern SCS	1/22/24-1/26/24	Multistate	> 25 million
Severe Convective Storm	Early Feb Outbreak	2/8/24-2/13/24	Midwest, Southeast	> 25 million
Severe Convective Storm	Polar Front & SCS	2/26/24-2/29/24	Multistate	> 25 million
Severe Convective Storm	Western US Storm	2/28/24-3/4/24	Multistate	> 25 million
Wildfire	Smokehouse Creek Fire	2/26/24-3/9/24	Texas	> 25 million
Severe Convective Storm		2/28/24-3/2/24	Ohio, Pennsylvania	> 25 million
Severe Convective Storm	Early March Storm Complex	3/6/24-3/11/24	Southeast, Midwest	> 25 million
Winter Storm	Colorado Snow Storm	3/13/24-3/15/24	Colorado	> 25 million
Severe Convective Storm	Mid-March SCS Outbreak	3/12/24-3/17/24	Northeast	> 25 million
Severe Convective Storm	San Antonio Hail & SCS	3/21/24-3/23/24	Texas	> 25 million
Severe Convective Storm	Late March Southern SCS	3/24/24-3/28/24	California, Southeast	> 25 million
Severe Convective Storm	Early April Outbreak	3/31/24-4/4/24	California, Midwest	> 25 million
Severe Convective Storm	Southern SCS & Floods	4/6/24-4/12/24	Multistate	> 25 million
Severe Convective Storm	April Mid-Atlantic SCS	4/14/24-4/16/24	US	> 25 million
Severe Convective Storm	April Plains & Midwest SCS	4/15/24-4/16/24	Texas, Missouri	> 25 million
Severe Convective Storm	Central & Eastern Outbreak	4/17/24-4/20/24	Southeast	> 25 million
Severe Convective Storm	Texas April SCS	4/19/24-4/21/24	Texas	> 25 million
Severe Convective Storm	Late April Central SCS	4/25/24-4/29/24	Midwest, Southwest	> 25 million
Severe Convective Storm	Early May Hail	4/30/24-5/2/24	Kansas, Oklahoma, Texas	> 25 million
Severe Convective Storm	Texas SCS	5/3/24-5/5/24	Texas	> 25 million
Severe Convective Storm	Early May SCS	5/6/24-5/10/24	Multistate	> 25 million
Severe Convective Storm	Southern SCS	5/11/24-5/14/24	Southwest, Southeast	> 25 million
Severe Convective Storm	Houston Derecho	5/15/24-5/19/24	Southwest, Southeast	> 25 million
Severe Convective Storm	Mid-May SCS	5/17/24-5/22/24	Multistate	> 25 million
Severe Convective Storm	Late May Plains Outbreak	5/23/24-5/24/24	Southwest, Midwest	> 25 million
Severe Convective Storm	Late May Central & East SCS	5/25/24-5/26/24	Multistate	> 25 million
Severe Convective Storm	Dallas SCS	5/27/24-5/29/24	Southwest	> 25 million
Severe Convective Storm	Denver SCS	5/30/24-6/1/24	Southwest, Southeast	> 25 million
Severe Convective Storm	TX Hail & MD Tornadoes	6/2/24-6/5/24	Multistate	> 25 million
Severe Convective Storm	Early June Outbreak	6/6/24-6/10/24	Multistate	> 25 million
Severe Convective Storm	Colorado June SCS	6/9/24-6/10/24	Colorado	> 25 million
Severe Convective Storm	Midwest Mid-June Outbreak	6/12/24-6/13/24	Southwest, Midwest	> 25 million
Severe Convective Storm	Central & East Mid-June SCS	6/14/24-6/18/24	Multistate	> 25 million
Wildfire	South Fork & Salt fires	6/17/24-6/25/24	New Mexico	> 25 million
Severe Convective Storm	Central & East Late-June SCS	6/19/24-6/23/24	Multistate	> 25 million
Tropical Storm	Trophical Storm Alberto	6/19/24-6/20/24	Texas, Louisiana	> 25 million
Severe Convective Storm		6/24/24-6/26/24	Multistate	> 25 million
Severe Convective Storm	US Lat-June Outbreak	6/27/24-6/30/24	Multistate	> 25 million
Severe Convective Storm	Early July Plains Outbreak	7/1/24-7/4/24	Multistate	> 25 million
Severe Convective Storm	Southeast SCS	7/1/24-7/4/24	Multistate	> 25 million
Hurricane	Hurricane Beryl	7/1/24-7/12/24	Texas, Louisiana, the Ohio Valley, and the Lower Peninsula of Michigan	> 25 million
Severe Convective Storm	Early July Central Outbreak	7/6/24-7/7/24	Multistate	> 25 million
Severe Convective Storm	Chicago Derecho & SCS	7/13/24-7/18/24	Multistate	> 25 million
Severe Convective Storm	Arizon Monsoon SCS	7/14/24-7/15/24	Arizona	> 25 million
Severe Convective Storm	Late July Central Outbreak	7/19/24-7/20/24	Multistate	> 25 million
Severe Convective Storm	July Southwest Monsoon	7/15/24-7/21/24	Multistate	> 25 million
Severe Convective Storm	Late July US SCS Outbreak	7/24/24-8/1/24	Multistate	> 25 million
Wildfire	Park Fire California	7/24/24-8/20/24	California	> 25 million
Severe Convective Storm	Early Aug Eastern Outbreak	8/2/24-8/3/24	Multistate	> 25 million
Severe Convective Storm	Minnesota Aug SCS	8/3/24-8/5/24	Minnesota	> 25 million
Hurricane	Hurricane Debby	8/3/24-8/14/24	Florida, Georgia, and the Carolinas	> 25 million
Severe Convective Storm	Northeast July SCS	8/4/24-8/6/24	Northeast	> 25 million
Severe Convective Storm	Mid August SCS	8/12/24-8/19/24	Multistate	> 25 million
Severe Convective Storm	August Northern Outbreak	8/22/24-8/30/24	Multistate	> 25 million

Attachment 2

Type of Event	Name	Date	Location	Overall losses when occurred
Hurricane	Hurricane Francine	9/9/24-9/14/24	Mississippi and Louisiana	> 25 million
Severe Convective Storm	Oklahoma City Hail & SCS	9/21/24-9/24/24	Oklahoma	> 25 million
Hurricane	Hurricane Helene	9/24/24-9/29/24	Florida, Carolinas, Georgia, Alabama, Tennessee, Kentucky, Virginia, West Virginia, Illinois, Indiana, Ohio	> 25 million
Hurricane	Hurricane Milton	10/5/24-10/12/24	Florida, Georgia	> 25 million
Severe Convective Storm		11/2/24-11/4/24	South Central US	>25 million
Wildfire	Wildland Fire Mountain Fire	11/6/24-11/14/24	California	>25 million
Winter storm		11/19/25-11/24/24	Multistate	>25 million
Wind and thunderstorm		12/13/24-12/16/24	Northeast, West Coast	>25 million
Wind and thunderstorm		12/26/24-12/29/24	South	>25 million
Wind, Thunderstorms, Tornadoes	SCS	1/5/2025	Arkansas, Louisiana, Alabama	>25 million
Wildfire	Palisades Fire	1/7/25-1/28/25	California	>1 billion
Wildfire	Eaton Fire	1/7/25-1/27/25	California	>1 billion
Wind	SCS	1/7/25-1/9/25	California	>25 million
Flooding, Freezing, Ice, Snow, Wind	SCS	1/9/25-1/11/25	Georgia, Texas	>25 million
Flooding, Snow, Wind	SCS	1/11/25-1/13/25	Alaska	>25 million
Flooding, Freezing, Ice, Snow, Wind	SCS	1/20/25-1/22/25	Florida, Georgia, Louisiana, Texas	>25 million
Flooding, Freezing, Ice, Snow, Wind	SCS	1/21/25-1/25/25	Illinois, Maryland, New Jersey, Pennsylvania, Ohio, Virginia	>25 million
Flooding, Snow, Wind	SCS	1/30/25-2/7/25	California, Nevada, Oregon, Washington	>25 million
Wind, Thunderstorms, Tornadoes	SCS	2/5/25-2/7/25	Kentucky, Tennesse	>25 million
Wind, Thunderstorms, Tornadoes	SCS	2/11/25-2/13/25	Virginia	>25 million
Wind, Thunderstorms, Tornadoes	SCS	2/12/25-2/17/25	Alabama, California, Conneticut, Georgia, Kentucky, Massachusetts, Maryland, North Carolina, New Jersey, New York, Pennsylvainia, Tennesse	>25 million
Wind, Thunderstorms, Tornadoes	SCS	2/15/25-2/16/25	Louisiana, Mississippi, Alabama, Georgia, Tennesse, North Carolina, South Carolina	>25 million
	SCS	2/21/25-2/25/25	California, Oregon, Washington	>25 million
Wind, Thunderstorms, Tornadoes	SCS	3/3/25-3/6/25	Oklahoma, Texas, Louisiana, Mississippi, Alabama, Georgia, Tennesse, North Carolina, Virginia	>25 million
	SCS	3/7/25-3/10/25	Florida, Georgia, Texas	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS	3/14/25-3/17/25	Missouri, Iowa, Illinois, Indiana, Alabama, Louisiana, Mississippi, Tennesse, West Virginia, Pennsylvania, New York, Ohio	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS	3/18/25-3/20/25	Arkansas, Illinois, Indiana, Missouri, Nebraska, New Mexico, Texas	>25 million
Hail	SCS	3/23/25-3/24/25	Texas, Louisiana, Mississippi, Alabama, Tennesse	>25 million
	SCS	3/25/25-3/27/25	Texas	>25 million
	SCS	3/28/25-3/31/25	Arkansas, Florida, Georgia, Indiana, Kentucky, Louisiana, Michigan, Missouri, Ohio, Tennesse, Texas	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS Outbreak	4/1/25-4/7/25	Texas, Oklahoma, Kansas, Nebraska, Missouri, Arkansas,Louisiana, Mississippi, Tennesse, Kentucky, Illinois, Indiana, Michigan, Ohio, West Virginia, Georgia, Alabama, South Carolina, North Carolina	>25 million
Wind, Hail	SCS	4/10/25-4/11/25	Tennesse, Alabama, Georgia	>25 million
Wind, Hail	SCS	4/14/25-4/15/25	Kentucky, West Virginia, Virginia	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS Outbreak	4/16/25-4/21/25	Nebraska, Iowa, Missouri, Wisconsin, Oklahoma, Texas, Illinois	>25 million
	SCS	4/21/25-4/26/25	Iowa, Kansas, Louisiana, Nebraska, New Mexico, Oklahoma, Texas	>25 million
	SCS	4/27/25-5/1/25	Kansas, Missouri, New York, Ohio, Oklahoma, Pennsylvania, Texas	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS Outbreak	5/1/25-5/3/25	Nebraska, Minnesota, Wisconsin, Texas, Oklahoma, Kansas, Missouri, Ohio, Pennsylvania, Illinois, Arkansas, Tennesse, Mississippi, Alabama, Kentucky, Georgia, New Jersey, New York, Massachusetts, Conneticut	>25 million
Wind, Thunderstorms, Hail	SCS	5/4/25-5/8/25	Texas, Louisiana	>25 million
Wind, Thunderstorms, Hail	SCS	5/9/25-5/14/25	Alabama, Florida, Georgia, Maryland, North Carolina, Pennsylvania, South Carolina, Virginia	>25 million
	SCS	5/15/25-5/16/25	Illinois, Indiana, Kentucky, Maryland, Michigan, Missouri, North Carolina, Ohio, Pennsylvania, Texas, Virginia, Wisconsin	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS Outbreak	5/17/25-5/20/25	Alabama, Arkansas, Georgia, Kansas, Missouri, Mississippi, Oklahoma, Tennesse, Texas	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS	5/22/25-5/27/25	Texas, Oklahoma, Mississippi Tennesse, Alabama, Georgia, Louisiana	>25 million
Wind, Thunderstorms, Tornadoes	SCS	5/28/25-5/30/25	West Virginia, Virginia, South Carolina	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS	6/1/25-6/7/25	Texas, Colorado, Kansas, Oklahoma, Nebraska, Iowa, Minnesota, Missouri, Illinois	>25 million

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Type of Event	Name	Date	Location	Overall losses when occurred
Wind, Thunderstorms, Tornadoes, Hail	SCS	6/5/25-6/8/25	Texas, Oklahoma, Arkansas, Tennesse, Alabama, Mississippi, Georgia, South Carolina, Virginia, Missouri	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS	6/8/25-6/12/25	Illinois, Texas	>25 million
Wildfire	Rowena Fire	6/11/25-6/30/25	Oregon	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS	6/15/25-6/20/25	Montana, Minnesota, South Dakota, Nebraska, Kansas, Oklahoma, Illinois, Indiana, Ohio, West Virginia, Virginia, Maryland, North Dakota	>25 million
Wind, Thunderstorms, Hail	SCS	6/23/25-6/26/25	Georgia, South Carolina, North Carolina, Florida	>25 million
Wind, Thunderstorms, Hail	SCS	6/27/25-7/3/25	Pennsylvania, New York, New Jersey, Conneticut, Vermont, New Hampshire	>25 million
	SCS	7/3/25-7/7/25	Texas	>25 million
	SCS	7/4/25-7/7/25	Colorado	>25 million
Tropical Storm	Tropical Storm Chantal	7/5/25-7/7/25	Florida, North Carolina, Virginia	500 million
Wind, Thunderstorms, Tornadoes, Hail	SCS	7/8/25-7/13/25	Texas, Oklahoma, Virginia, Maryland, Deleware, New Jersey, Pennsylvania, South Carolina, Niorth Dakota, South Dakota, Missouri, Iowa,Illinois	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS	7/14/25-7/19/25	Nebraska, South Dakota	>25 million
	SCS	7/20/25-7/30/25	Florida, Georgia, Illinois, Maryland, Michigan, North Carolina, New Jersey, Ohio, Texas, Virginia	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS	7/26/25-7/30/25	Minnesota, Iowa, South Dakota, Nebraska	>25 million
	SCS	7/31/25-8/3/25	Texas, Wyoming	>25 million
Wind, Thunderstorm, Hail	SCS	8/4/25-8/12/25	North Dakota, Montana, Nebraska, Kansas, Colorado, Wisconsin	>25 million
Wind, Thunderstorm, Hail	SCS	8/14/25-8/20/25	South Dakota, Minnesota, Iowa, Wisconsin, Illinois	>25 million
Wildfire	TCU September Lightning Complex	9/2/25-9/13/2025	California	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS	9/3/25-9/5/25	Kansas, Texas	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS	9/6/2025	Massachusetts, Conneticut, New Hampshire, New York	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS	9/8/25-9/9/25	Texas, Oklahoma, Kansas	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS	9/14/2025	North Dakota, South Dakota, Nebraska	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS	9/15/25-9/21/25	Minnesota, Nebraska, Texas	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS	9/25/25-9/28/25	Arizona	>25 million
	SCS	10/11/25-10/13/25	Arizona	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS	10/11/25-10/14/25	Conneticut, Massachusetts, North Carolina, New Jersey, New York, South Carolina, Virginia	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS	10/18/2025	Louisiana, Mississippi	>25 million
Wind, Thunderstorms, Tornadoes, Hail	SCS	10/23/25-10/26/25	Texas, Oklahoma, Florida	>25 million

Attachment 2

Year	Event Type	Begin	End	Event	Country	Affected Area (Detail)	Munich Re NatCATService Insured losses (in original values, US$m) Criteria: insured losses equal/greater US$ 25m. Tries to reflect non-US losses only	Swiss Re Sigma: Insured Loss Est. US$m (mid point shown if range given) Mostly reflect total US and nonUS losses combined.	
2016	Hurricane	08/28/16	09/06/16	Hurricane Hermine		Dominican Republic, Cuba, The Bahamas	N/A	N/A	> 25 million
2016	Tropical Cyclone	02/16/16	02/22/16	TC Winston		South Pacific Islands	N/A	N/A	> 25 million
2016	Earthquake	02/06/16		Earthquake	Taiwan	Asia	N/A	N/A	> 25 million
2016	Earthquake	01/03/16		Kaohsiung EQ	India, Bangladesh, Myanmar	Asia	N/A	N/A	> 25 million
2016	Earthquake	02/14/16		Christchurch EQ	New Zealand	Oceania	N/A	N/A	> 25 million
2016	Earthquake	04/14/16	04/16/16	Kumamoto EQs	Japan	Asia	N/A	N/A	> 25 million
2016	Earthquake	04/16/16		Ecuador EQ	Ecuador	South America	N/A	N/A	> 25 million
2016	Tropical Cyclone	05/14/16	05/23/16	CY Roanu	Sri Lanka, india, Bangladesh, China	Asia	N/A	N/A	> 25 million
2016	Earthquake	08/24/16		Italy EQ	Italy	Europe	N/A	N/A	> 25 million
2016	Tropical Cyclone	09/14/16	09/16/16	STY Meranti	China, Taiwan, Philippines	Asia	N/A	N/A	> 25 million
2016	Tropical Cyclone	07/08/16	07/12/16	STY Nepartak	China, Taiwan	Asia	N/A	N/A	> 25 million
2016	Tropical Cyclone	09/26/16	09/29/16	TY Megi	Taiwan, China	Asia	N/A	N/A	> 25 million
2016	Earthquake	09/10/16		Kagera EQ	Tanzania, Uganda	Africa	N/A	N/A	> 25 million
2016	Tropical Cyclone	08/29/16	09/01/16	TY Lionrock	China, Japan, South Korea	Asia	N/A	N/A	> 25 million
2016	Tropical Cyclone	09/19/16	09/22/16	TY Malakas	Japan, China	Asia	N/A	N/A	> 25 million
2016	Tropical Cyclone	08/18/16	08/20/16	TS Dianmu	China, Vietnam	Asia	N/A	N/A	> 25 million
2016	Tropical Cyclone	07/31/16	08/03/16	TY Nidia	China, Phillippines Vietnam	Asia	N/A	N/A	> 25 million
2016	Tropical Cyclone	08/02/16	08/10/16	HU Earl	Belize, Mexico, Carribbean Islands	Caribbean Islands, Mexico and Central America	N/A	N/A	> 25 million
2016	Tropical Cyclone	08/22/16	08/23/16	TS Mindulle	Japan	Asia	N/A	N/A	> 25 million
2016	Tropical Cyclone	09/06/16	09/08/16	HU Newton	Mexico	North America (non-U.S.)	N/A	N/A	> 25 million
2016	Tropical Cyclone	10/04/16	10/07/16	STY Chaba	Japan, Korea	Asia	N/A	N/A	> 25 million
2016	Tropical Cyclone	10/16/16	10/22/16	STY Haima	Phillipines, China	Asia	N/A	N/A	> 25 million
2016	Tropical Cyclone	10/14/16	10/20/16	TY Sarika	Phillipines, China, Vietanm	Asia	N/A	N/A	> 25 million
2016	Earthquake	10/26/16		Central Italy EQ	Italy	Europe	N/A	N/A	> 25 million
2016	Earthquake	10/27/16		Central Italy EQ	Italy	Europe	N/A	N/A	> 25 million
2016	Earthquake	10/21/16		Tottori	Japan	Asia	N/A	N/A	> 25 million
2016	Hurricane	09/28/16	10/10/16	Hurricane Matthew		Carribbean Islands and Eastern Canada	N/A	N/A	> 25 million
2016	Hurricane	08/28/16	09/06/16	Hurricane Hermine		Dominican Republic, Cuba, The Bahamas	N/A	N/A	> 25 million
2016	Wildfire	01/06/16		Waroona-Yarloop Bushfire	Western Australia				~$71.25m
2016	Wildfire	05/01/16	05/26/16	Canada Wildfire	Canada	Fort McMurray			$3.52b
2016	Wildfire	11/22/16	11/27/16	November 2016 Israel Fires	Israel	Various regions in Israel, mainly in Haifa, Judaean Mountains and the Sharon Plain			>$25m
2016	Convective Storm	02/22/16	02/25/16	Thunderstorms, tornadoes	Canada				600m-1b
2016	Convective Storm	03/08/16	03/11/16	Thunderstorms, hail	UAE, Oman				100m
2016	Convective Storm	04/20/16	04/25/16	Thunderstorm, hail	China				25+m
2016	Convective Storm	06/23/16		Thunderstorm, hail, tornado	China				100+m
2016	Convective Storm	06/23/16		Thunderstorms, hail	Netherlands				527m
2016	Convective Storm	06/24/16	06/25/16	Thunderstorm, hail, flood	Germany				253m
2016	Convective Storm	06/28/16	06/30/16	Thunderstorms, hail, tornado, flood	Canada				64m
2016	Convective Storm	07/15/16	07/16/16	Thunderstorms, hail, flood	Canada				56m
2016	Convective Storm	07/18/16	07/20/16	Thunderstorm, hail, tornadoes	Canada				74m
2016	Convective Storm	07/30/16	08/01/16	Thunderstorms, hail, tornadoes, flood	Canada				327m
2016	Convective Storm	11/11/16		Thunderstorms, hail	Australia				197m
2016	Convective Storm	07/22/16		Hailstorm	Canada				56m
2017	Earthquake	01/18/17		Earthquake	Italy	Europe	N/A	N/A	> 25 million
2017	Earthquake	01/28/17		Earthquake	China	Asia	N/A	N/A	> 25 million

Attachment 2

Year	Event Type	Begin	End	Event	Country	Affected Area (Detail)	Munich Re NatCATService Insured losses (in original values, US$m) Criteria: insured losses equal/greater US$ 25m. Tries to reflect non-US losses only	Swiss Re Sigma: Insured Loss Est. US$m (mid point shown if range given) Mostly reflect total US and nonUS losses combined.	
2017	Earthquake	02/10/17		Earthquake	Philippines	Asia	N/A	N/A	> 25 million
2017	Earthquake	03/27/17		Earthquake	China	Asia	N/A	N/A	> 25 million
2017	Cyclone	03/28/17	04/05/17	CY Debbie	Australia	Queensland, New South Wales, New Zealand	N/A	N/A	> 25 million
2017	Earthquake	05/11/17		Earthquake	China	Asia	N/A	N/A	> 25 million
2017	Typhoon	07/29/17	07/31/17	TY Nesat & TS Haitang	China, Taiwan, Philippines	Asia	N/A	N/A	> 25 million
2017	Typhoon	08/07/17	08/09/17	Typhoon Noru	Japan	Asia	N/A	N/A	> 25 million
2017	Earthquake	08/08/17		Earthquake	China	Asia	N/A	N/A	> 25 million
2017	Typhoon	08/23/17	08/24/17	TY Hato	China	Macau, Hong Kong	N/A	N/A	> 25 million
2017	Typhoon	08/25/17	08/28/17	TY Pakhar	China	Asia	N/A	N/A	> 25 million
2017	Hurricane	08/25/17	09/02/17	Hurricane Harvey		Caribbean Islands and Central America	N/A	N/A	> 25 million
2017	Hurricane	08/30/17	09/16/17	Hurricane Irma		Caribbean Islands and Cape Verde	N/A	N/A	> 25 million
2017	Hurricane	09/05/17	09/26/17	Hurricane Jose		Caribbean Islands and Eastern Canada	N/A	N/A	> 25 million
2017	Hurricane	09/16/17	10/03/17	Hurricane Maria		Caribbean Islands, UK, Francs and Spain	N/A	N/A	> 25 million
2017	Earthquake	09/07/17		Earthquake		Mexico, Guatemala	N/A	N/A	> 25 million
2017	Earthquake	09/19/17		Earthquake	Mexico	Mexico City	>200	N/A	> 25 million
2017	Hurricane	10/04/17		Hurricane Nate		Central America, Cayman Islands, Cuba Yucatan Peninsula	N/A	N/A	> 25 million
2017	Wildfire	06/06/17		Knysna Fires	South Africa	Knysna region of the Western Cape			~$146m
2017	Wildfire	07/01/17	08/01/17	British Columnbia Wildfires	Canada	British Columbia			>$78m
2017	Wildfire	10/15/17	10/16/17	Iberian Wildfires	Portugal	Northern Portugal and Northwestern Spain			~$210m
2017	Convective Storm	02/01/17	02/02/17	Windstorm Kurt, Live, Marcel	France, Spain				86m
2017	Convective Storm	02/23/17	02/24/17	Windstorm Thomas	UK, Germany, Belgium, Netherlands, Ireland				292m
2017	Convective Storm	03/06/17	03/07/17	Windstorm Zues	France				341m
2017	Convective Storm	03/08/17	03/09/17	Windstorm	Canada				84m
2017	Convective Storm	05/23/17	05/24/17	Thunderstorms, hail, flood	Canada				52m
2017	Convective Storm	08/06/17	08/10/17	Thunderstorms, hail, flood	Italy				168m
2017	Convective Storm	10/05/17		Windstorm Xavier	Germany, Poland, Czech Republic, Netherlands				420m
2017	Convective Storm	10/09/17	10/10/17	Thunderstorms, hail, flood	South Africa				81m
2017	Convective Storm	10/16/17	10/18/17	Windstorm	Canada				87m
2017	Convective Storm	10/29/17		Windstorm Herwart	Germany, Austria, Denmark, Poland, Czech Republic, Slovakia, Hungary				390m
2017	Convective Storm	12/19/17		Thunderstorms, hail, flood	Australia				296m
2017	Convective Storm	02/18/17		Hailstorm	Australia				400m
2017	Convective Storm	06/22/17	06/23/17	Hailstorm Paul, Hailstorm Rasmund	Germany, Hungary				721m
2017	Convective Storm	06/24/17	06/28/17	Thunderstorms, hail, flood	Italy				132m
2017	Convective Storm	07/21/17	07/27/17	Hailstorm	Switzerland				88m
2017	Convective Storm	07/27/17		Thunderstorms, hail, flood	Turkey				185m
2018	Earthquake	02/06/18		Earthquake	Taiwan				> 25 million
2018	Earthquake	02/16/18		Earthquake	Mexico				> 25 million
2018	Cyclone	02/09/18	02/20/18	CY Gita	Tonga, Fiji, Samoa, New Zealand				> 25 million
2018	Earthquake	02/26/18		Earthquake	Papua New Guinea				> 25 million
2018	Earthquake	03/05/18		Earthquake	Papua New Guinea				> 25 million
2018	Cyclone	03/17/18		CY Marcus					> 25 million
2018	Tropical Storm	05/23/18	05/27/18	Tropical Storm Mekunu	Yamen, Oman , Saudi Arabia				> 25 million
2018	Tropical Storm	06/02/18	06/07/18	Tropical Storm Ewiniar	Vietnam, China, Taiwan, Philippines and Ryukyu Islands	Guangdong Province, Jiangxi, Fujian, Zhejiang Provinces, and Hainan Island.			> 25 million
2018	Earthquake	06/18/18		Earthquake	Japan				> 25 million
2018	Super Typhoon	07/10/18	07/12/18	STY Maria	China, Taiwan, Guam and Japan	Fujian province, Yantze River Basin, Japan's Ryukyu Islands			> 25 million

Attachment 2

Year	Event Type	Begin	End	Event	Country	Affected Area (Detail)	Munich Re NatCATService Insured losses (in original values, US$m) Criteria: insured losses equal/greater US$ 25m. Tries to reflect non-US losses only	Swiss Re Sigma: Insured Loss Est. US$m (mid point shown if range given) Mostly reflect total US and nonUS losses combined.	
2018	Tropical Storm	07/17/18	07/24/18	TS Sonh-Tinh	Vietnam, China, Loas	Japan, Russian Far East			> 25 million
2018	Tropical Storm	07/22/18	07/25/15	TS Ampil	China	Jiangsu, Zhejiang, Shandong, and Hebei			> 25 million
2018	Typhoon	07/27/18	08/03/18	TY Jongdari	Japan, China				> 25 million
2018	Earthquake	08/05/15	08/09/18	Earthquake	Indonesia				> 25 million
2018	Tropical Storm	08/09/18	08/15/18	TS Yagi	Philippines, China	Zhejiang, Anhui, Jiangsu and Shandong Provinces.			> 25 million
2018	Tropical Storm	08/13/18	08/19/18	TS Bebinca	China	Hong Kong, Guangdong and Hainan			> 25 million
2018	Typhoon	08/16/18	08/18/18	TY Rumbia	China	Shanghai, Jiangsu, Zhehiang, Anhui, Shandong and Henan			> 25 million
2018	Typhoon	08/23/18	08/25/18	TY Soulik	Japan, South Korea, China and Russia	Haenam County, South Jeolla Province			> 25 million
2018	Typhoon	09/04/18	09/05/18	RY Jebi	Japan, Mariana Islands, Taiwan, Japan, Russian Far East and Artic				> 25 million
2018	Earthquake	09/06/18		Earthquake	Japan	Hokkaido			> 25 million
2018	Super Typhoon	09/15/18	0918/18	STY Mangkhut	N. Mariana Islands, Philippines, China and Hong Kong				> 25 million
2018	Hurricane	Leslie	09/23/18	Hurricane Leslie	Azores, Bermuda, Europe	Azores, Bermuda, Madeira, Iberian Peninsula, France			> 25 million
2018	Hurricane	10/07/18	10/16/18	Hurricane Michael	Central American, Yucatan Peninsula, Cayman Islands, Cuba, Atlantic, Canad				> 25 million
2018	Wildfire	May-18	Aug-18	Sweden Wildfires	Sweden	ranging from north of Arctic Circle to the sourthern County of Scania.			>$87m
2018	Wildfire	Jul-18		Greece Wildfires	Greece	Attica, Greece			~38.1m
2018	Convective Storm	01/01/18		Windstorm Ingmar	France				<226m
2018	Convective Storm	01/03/18		Windstorm Burglind	Austria, Belgium, France, Germany, Ireland, Luxembourg, Netherlands, Switzerland, U.K.				1020m
2018	Convective Storm	01/17/18	01/18/18	Windstorm Friederike	Belgium, France, Germany, Great Britain, Netherlands, Italy, Central Europe				2,100m
2018	Convective Storm	01/23/18	01/24/18	Windstorm Georgina	Ireland, Norway, U.K.				<226m
2018	Convective Storm	09/19/18	09/20/18	Windstorm Dorcas-Elena	Ireland, Norway, U.K.				<226m
2018	Convective Storm	09/23/18		Windstorm Fabienne	Germany, Austria, Switzerland				<226m
2018	Convective Storm	04/10/18	04/11/18	Tornadoes	New Zealand				51m
2018	Convective Storm	May	June		Central/western Europe				900m
2018	Convective Storm	12/20/18		Hailstorm	Australia				492m
2019	Cyclone	05/03/19	05/05/19	Cyclone Fani	India, Bangladesh				>500 million
2019	Earthquake	06/17/19		Earthquake	China				> 25 million
2019	Tropical Storm	08/01/19	08/08/19	Tropical Storm Wipha	China, Vietnam				> 25 million
2019	Typhoon	08/09/19	08/11/19	Typhoon Lekima	China				> 855 million
2019	Typhoon	08/15/19	08/16/19	Typhoon Krosa	Japan				>25 million
2019	Hurricane	08/31/19	09/07/19	Hurricane Dorian	Caribbean, Bahamas, Canada				>1 billion
2019	Typhoon	09/05/19	09/08/19	Typhoon Lingling	Japan, China, Korea				>5.78 billion
2019	Typhoon	09/08/19	09/09/19	Typhoon Faxai	Japan				> 7 billion
2019	Hurricane	09/19/19	09/22/19	Hurricane Humberto	Bermuda				>25+ million
2019	Hurricane	09/17/19	09/26/19	Hurricane Lorenzo	Portugal				>25+ million
2019	Earthquake	11/26/19		Earthquake	Albania				>25+ million
2019	Cyclone	11/08/19	11/11/19	Cyclone Matmo (Bulbul)	India, Bangladesh				>25+ million
2019	Typhoon	10/01/19	10/02/19	Typhoon Hagibis	Japan				> 7 billion
2019	Earthquake	12/18/19		Earthquake	Philippines				>25+ million
2019	Wildfire	Sep-19	Mar-20	Australian Bushfires	New South Wales, Queensland, Victoria, South Australia, Western Australia, Tasmania and Northern Territory				~910 million
2019	Convective Storm	03/09/19	03/10/19	Windstorm Dragi-Eberhard	Belgium. France, UK, Germany, Czech Republic, Poland, Slovakia, Netherlands, Luxembourg				851m
2019	Convective Storm	06/20/19	06/23/19	Windstorm	Italy				277m
2019	Convective Storm	07/08/19	07/10/19	Windstorm	Italy				165m
2019	Convective Storm	11/17/19		Sunshine Coast Hailstorm	Australia				112m

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2019	Convective Storm	12/10/19	12/22/19	Ewindstorm Elsa-Fabien	Spain, Portugal, France				149m
2019	Convective Storm	06/10/19	06/13/19	European Hailstorm	Germany, Poland, Slvenia, Czech Republic				830m
2020	Earthquake	03/22/20		Earthquake	Croatia				>25+ million
2020	Cyclone	04/01/20	04/11/20	Cyclone Harold	Solomon Islands, Canuatu, Fiji, Tonga				> 25+ million
2020	Tropical Storm	05/31/20		Tropical Storm Amanda	El Salvador, Guatemala, Honduras				> 25+ million
2020	Tropical Storm	06/01/20	06/05/20	Tropical Storm Cristobal	Mexico, Guatemala, El Salvador				150 million
2020	Hurricane	07/25/20	07/27/20	Hurricane Hanna	Mexico				350 million
2020	Hurricane	07/28/20	08/01/20	Hurricane Isaias	Caribbean, Canada				> 3 billion
2020	Hurricane	08/22/20	08/25/20	Hurricane Laura	Caribbean				> 4 billion
2020	Typhoon	05/15/20	05/22/20	Typhoon Amphan	India, Bangladesh, Sri Lanka				15 billion
2020	Tropical Storm	06/03/20	06/04/20	Tropical Storm Nisarga	India				> 25+ million
2020	Typhoon	08/03/20	08/04/20	Typhoon Hagupit	China, Taiwan				> 100+ million
2020	Hurricane	10/05/20	10/12/20	Hurricane Delta	Jamaica, Nicaragua, Cayman Island, Yucatan Peninsula				> 2 billion
2020	Hurricane	10/24/20	10/30/20	Hurricane Zeta	Cayman Islands, Jamaica, Central America, Yucatan Peninsula, Ireland, United Kingdom				> 1.5 billion
2020	Cyclone	04/01/20	04/11/20	Cyclone Harold	Solomon Islands, Canuatu, Fiji, Tonga				> 25+ million
2020	Hurricane	10/31/20	11/14/20	Hurricane Eta	Colombia, Jamaica, Central America, Cayman Islands, Cuba, The Bahamas				> 7.9 billion
2020	Hurricane	11/14/20	11/19/20	Hurricane Iota	ABC Islands, Colombia, Jamaica, Central America				> 1.4 billion
2020	Typhoon	11/22/20	11/23/20	Typhoon Goni	Philippines, Vietnam, Cambodia, Laos				> 400+ million
2020	Typhoon	11/08/20	11/15/20	Typhoon Vamco	Philippines, Vietnam, Laos, Thailand				> 400+ million
2020	Wildfire	10/04/20		Lake Ohau Fire	New Zealand	Northwest of Lake Ohau Village			~$25m
2020	Convective Storm	01/20/20		Hailstorm	Australia				1,250m
2020	Convective Storm	02/08/20	02/11/20	Windstorm Sabine/Ciara	Austria, Belgium, Switzerland. Germany, Denmark, France, UK, Ireland, Luxembourg, Netherlands, Norway, Sweden				2,200m
2020	Convective Storm	02/15/20	02/17/24	Windstorm Victoria-Dennis	Belgium, Demark, France, Germany, Ireland, Luxembourg, Netherlands, Norway, Sweden, UK				372m
2020	Convective Storm	09/26/20	09/27/20	Windstorm Odette	Belgium				28+m
2020	Convective Storm	09/30/20	10/03/20	Windstorm Alex-Brigitte	UK, Spain, Portugal, France, Italy, Austria, Poland, Czech Republic				340m
2020	Convective Storm	10/31/20		South East Queensland Hailstorm	Australia				905m
2021	Wildfire	02/05/21		Perth Hills Wildfire	Australia	Shire of Mundaring, Shire of Chittering, Shire of Northam City of Swan			~$63m
2021	Earthquake	01/14/21	01/14/21	West Sulawesi	Indonesia				> 58.1 million
2021	Earthquake	02/13/21	02/13/21	Fukushima Prefecture Offshore	Japan				1.3 billion
2021	Tropical Cyclone	05/17/21		Toropical Cyclone Tautae	India				> 25+ million
2021	Tropical Storm	06/19/21	06/23/21	Trophical Storm Claudette	Oaxaca, Veracruz, Atlantic Canada				> 25+ million
2021	Earthquake	06/21/21	06/21/21	China	Yunnan Dali				> 25+ million
2021	Earthquake	06/21/21	06/21/21	China	Southern Qinghai				> 25+ million
2021	Hurricane	07/01/21	07/14/21	Elsa	Lesser Antilles, Greater Antilles, Venezuela, Colombia, Atlantic Canada, Greenland, Iceland				50 million
2021	Typhoon	07/16/21	07/31/21	In-fa (Fabian)	Philippines, Ryukyu Islands, Taiwan, China, North Korea				> 25+ million
2021	Trophical Storm	08/11/21	08/20/21	Fred	Lesser Antilles, Greater Antilles, Southern Quebec, The Maritimes				25 million
2021	Hurricane	08/13/21	08/21/21	Grace	Lesser Antilles, Greater Antilles, Yucatan Peninsula, Central Mexico				513 million
2021	Earthquake	08/14/21	08/14/21		Haiti				1 billion
2021	Hurricane	08/26/21	09/04/21	Ida	Venezuela, Colombia, Jamaica, Cayman Islands, Cuba, Atlantic Canada				> 250 million
2021	Earthquake	09/07/21	09/07/21	Guerrero	Mexico				200 million
2021	Earthquake	09/16/21			China				> 25+ million

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2021	Hurricane	09/12/21	09/18/21	Nicholas	Yucatan Peninsula, Tamaulipas				1.1 billion
2021	Hurricane	09/10/21	09/11/21	Larry	Canada				80 million
2021	Cyclone	10/02/21	10/04/21	Cyclone Shaheen	Oman, Iran, India, Pakistan, United Arab Emirates, Saudi Arabia, Yemen				> 25+ million
2021	Earthquake	10/07/21	10/07/21		Japan				> 25+ million
2021	Tropical Storm	10/10/21	10/14/21	Tropical Storm Kompasu	Philippines, Hong Kong, China				245 million
2021	Earthquake	10/16/21	10/16/21		Indonesia				> 25+ million
2021	Tropical Cyclone	10/24/21	11/02/21	Apollo	Italy, Malta, Tunisia, Algeria, Libya, Turkey				> 25+ million
2021	Tropical Storm	10/31/21	11/07/21	Wanda	Atlantic Canada, Bermuda, Azores				> 25+ million
2021	Earthquake	11/14/21	11/14/21		Iran				> 25+ million
2021	Tropical Cyclone	12/14/21	12/18/21	Rai (Odette)	Caroline Islands, Palau, Philippines				> 25+ million
2021	Convective Storm	01/08/21	01/10/21	Windstorm Filomena	Spain				259m
2021	Convective Storm	01/18/21	01/20/21	Windstorm Christoph	UK, Norway				106-159m
2021	Convective Storm	03/10/21	03/13/21	Windstorm Klaus-Luis	France, Belgium, UK, Ireland, Germany, Netherlaands, Luxembourg				192m
2021	Convective Storm	10/20/21	10/23/21	Windstorm Aurore	France, Belgium, Germany, Poland, Luxembourg, Czech Republic				362m
2021	Convective Storm	11/26/21	11/28/21	Windstorm Arwen	UK				330-396m
2021	Convective Storm	06/18/21	07/01/21	Europe Hailstorm	Austria, Czech Republic, Germany, Poland, Switzerland, Slovakia, France, Italy				2,132m
2021	Convective Storm	06/24/21		Tronado	Czech Republic				200m
2021	Convective Storm	10/28/21	10/29/21	Hail	Australia				733m
2022	Wildfire	01/15/22	02/28/22	Corrientes	Corrientes Province, Argentina				> 25+ million
2022	Earthquake	03/16/22		Fukushima Earthquake	Japan				2.8 billion
2022	Tropical Storm	04/08/22	04/12/22	Megi	Philippines				>25+ million
2022	Typhoon	08/28/22	09/07/22	Hinnamnor	Japan, Taiwan, Philippines, South Korea, Russian, Far East				>25+ million
2022	Earthquake	09/05/22		Luding Earthquake	Luding County in Sichuan province				>25+ million
2022	Hurricane	09/14/22	09/28/22	Fiona	Leeward Islands, Puerto Rico, Dominican Republic, Lucayan Archipelago, Bermuda, Eastern Canada, Saint Pierre and Miquelon, Greenland				660 million
2022	Hurricane	09/23/22	10/02/22	Ian	Trinidad and Tobago, Venezuela, Colombia, ABC Islands, Jamaica, Cayman Islands, Cuba				> 110 billion
2022	Hurricane	10/07/22	10/10/22	Julia	Trinidad and Tobago, Venezuela, ABC islands, Colombia, Nicaragua, El Salvador, Honduras, Guatemala, Panama, Mexico				>400 million
2022	Convective Storm	01/16/22	01/17/22	Windstorm Hannelore	Norway, Sweden, Denmark, Poland, Finland, Lithuania, Liechtenstein				>25m
2022	Convective Storm	01/29/22	01/30/22	Windstorms Malik, Nadia, Valtteri	Denmark, Germany, Sweden, Austria, Czech Republic, UK, Norway, Poland, Slovakia, Lithuania, Latvia				>100m
2022	Convective Storm	02/06/22	02/07/22	Windstorm Roxana	Germany, France, UK, Belgium				>25m
2022	Convective Storm	02/16/22	02/21/22	Windstorms Dudley, Eunice, Franklin	Germany, Belgium, Netherlands, Luxembourg, UK, Ireland, France, Poland, Czech Republic, Austria, Denmark, Switzerland				>1b
2022	Convective Storm	04/06/22	04/07/22	Windstorm Nasim	Germany, Belgium, France, UK, Netherlands				>25m
2022	Convective Storm	05/20/22		Emmelinde	France, Germany				>100m
2022	Convective Storm	05/22/22	05/25/22	Finja	France, Italy, Austria, Hungary, Switzerland, Slovenia				>100m
2022	Convective Storm	06/02/22	06/06/22	Leocardia, May	France, Switzerland, Germany, Slovenia, Austria, Czech Republic, Hungary				>250m
2022	Convective Storm	06/19/22	06/24/22	Petra, Qiara	France, Germany, Switzerland, Italy, Czech Republic, Poland				>1b
2022	Convective Storm	06/26/22	06/29/22	Rebecca, Scarlett	France, Czech Republic, Germany, Italy, Poland, Netherlands, Austria				>250m
2022	Convective Storm	06/30/22	07/01/22	Ulrike	France, Germany, Poland				>25m

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2022	Convective Storm	07/20/22		Carolin	Switzerland, France, Denmark, Austria, Poland				>25m
2022	Convective Storm	08/17/22	08/21/22	Karin, Lavinia	France, Italy, Austria, Switzerland, Slovenia,				>100m
2022	Convective Storm	05/21/22		Southern Canada Derecho	Canada				>250m
2022	Convective Storm	07/18/22	07/21/22		Canada				>25m
2023	Wildfire	02/01/23	03/06/23		Chile				>25 million
2023	Earthquake	02/06/23	02/20/23		Turkey, Syria				> 25 million
2023	Cyclone	02/12/23	02/17/23	Gabrielle	New Zealand				> 25 million
2023	Typhoon	05/23/23	05/31/23	Mawar	Guam				> 25 million
2023	Earthquake	06/16/23		France Earthquake	France				> 25 million
2023	Wildfire	08/15/23	09/21/23	Kelowna Wildfire	Canada				> 25 million
2023	Wildfire	08/24/23	09/30/23	Bush Creek Wildfire	Canada				> 25 million
2023	Earthquake	09/08/23			Morocco				> 25 million
2023	Typhoon	07/26/23	08/01/23	Doksuri	Philippines, Taiwan, China, Vietnam				> 25 million
2023	Typhoon	08/26/23	09/03/23	Saola	Eastern Asoa				> 25 million
2023	Typhoon	09/03/23	09/07/23	Haikui	Philippines, Taiwan, China				> 25 million
2023	Typhoon	09/27/23	10/11/23	Koinu	China, Japan, Philippines				>25 million
2023	Hurricane	10/22/23	10/25/23	Otis	Southern Mexico, primarily Guerrero				> 25 million
2023	Earthquake	12/18/23		Jishishan Earthquake	China				> 25 million
2023	Convective Storm	01/15/23	01/18/23	Windstorm Gerard/Gero	Belgium, Switzerland, Czech Republic, Germany, France, UK				>25m
2023	Convective Storm	02/16/23	02/18/23	Windstorm Otto/Ulf	Germany, Denmark, UK, Norway, Poland, Sweden				>25m
2023	Convective Storm	03/07/23	03/10/23	Windstorm Larisa/Diethelm	Austria, Belgium, Czech Republic, Germany,France, Ireland, UK, Netherlands, Luxembourg				>25m
2023	Convective Storm	03/30/23	03/31/23	Windstorm Mathis/Markus	Belgium, Swtzerland, Czech Republic, Germany, France, UK				>25m
2023	Convective Storm	07/04/23	07/06/23	Windstorm Poly	Germany, Italy, Netherlands				>25m
2023	Convective Storm	11/01/23	11/03/23	Windstorm Ciaran/Emir	Bulgaria, Germany, Spain, France, UK, Ireland, Italy, Netherlands				>1b
2023	Convective Storm	11/04/23	11/05/23	Windstorm Domingos/Fred	Spain, France				>100m
2023	Convective Storm	11/15/23	11/17/23	Windstorm Frederico/Linus	Germany, France, UK				>25m
2023	Convective Storm	12/20/23	12/22/23	Windstorm Pia/Zoltan	Austria, Belgium, Czech Republic, Germany, Denmark, France, UK, Netherlands,Norway				>100m
2023	Convective Storm	12/26/23	12/28/23	Windstorm Gerrit/Bodo	Ireland, UK				>25m
2023	Convective Storm	06/18/23	06/23/23	Lows Kay, Lambert	Austria, Belgium, Czech Republic, Germany, France, Slovakia				>250m
2023	Convective Storm	07/06/23		Zargoza	Spain, France				>25m
2023	Convective Storm	07/11/23	07/13/23		Austria, Czech Republic, France, Germany, Italy, Slovenia, Serbia				>250m
2023	Convective Storm	07/17/23	07/19/23		Austria, Bosnia, Croatia, Germany, Italy, Serbia, Slovakia, Slovenia				>1b
2023	Convective Storm	07/20/23	07/25/23		Bosnia, Switzerland, Germany, France, Serbia, Hungary, Italy, Serbia, Slovakia, Slovenia, Romania				>1b
2023	Convective Storm	08/12/23	08/16/23	Arend, Bernd	Austria, Czech Republic, Germany, France, Italy, Poland				>100m
2023	Convective Storm	08/24/23	08/30/23	Denis, Rae	Austria, Czech Republic, France, Germany, Italy, Lithuania, Latvia, Norway, Poland, Spain, Switzerland				>1b
2023	Convective Storm	07/01/23			Canada				>25m
2023	Convective Storm	07/13/23			Canada				>25m
2023	Convective Storm	07/15/23	07/16/23		Canada				>25m
2023	Convective Storm	07/20/23	07/21/23		Canada				>25m
2023	Convective Storm	08/03/23			Canada				>25m
2023	Convective Storm	08/23/23	08/25/23		Canada				>25m
2023	Convective Storm	08/24/23			Canada				>25m
2023	Convective Storm	05/23/23	05/26/23		Australia				>25m
2023	Convective Storm	12/23/23	12/26/23		Australia				>100m
2024	Earthquake	01/01/24		Noto Earthquake	Ishikawa Japan				>25 million

Attachment 2

Year	Event Type	Begin	End	Event	Country	Affected Area (Detail)	Munich Re NatCATService Insured losses (in original values, US$m) Criteria: insured losses equal/greater US$ 25m. Tries to reflect non-US losses only	Swiss Re Sigma: Insured Loss Est. US$m (mid point shown if range given) Mostly reflect total US and nonUS losses combined.	
2024	Severe Convective Storm	01/20/24	01/22/24	Windstorm Isha	Belgium, Switzerland, Germany, Denmark France, Great Britain, Ireland, Netherlands, Norway				>25 million
2024	Severe Convective Storm	01/23/24	01/24/24	Windstorm Jocelyn	Great Britain, Ireland, Demark, Germany, Netherlands, Norway, Poland				>25 million
2024	Severe Convective Storm	01/31/24	02/01/24	Windstorm Ingunn	Norway, Great Britain, Ireland, Sweden				>25 million
2024	Wildfire	02/01/24	03/22/24	Chile Wildfires	Chile				>25 million
2024	Severe Convective Storm	02/12/24	02/23/24	Windstorm Louis	Western & Northern Europe				>25 million
2024	Severe Convective Storm	02/14/24		Victoria Valentine's Day SCS	Australia				>25 million
2024	Severe Convective Storm	02/21/24	02/23/24	Windstorm Nelson	France, Potgugal, Spain, Great Britain				>25 million
2024	Severe Convective Storm	03/30/24	04/03/24	Easter Weekend SCS	Czech Republic, France, Italy, Poland				>25 million
2024	Earthquake	04/03/24		Hualien Earthquake	Taiwan				>25 million
2024	Severe Convective Storm	04/03/24	04/08/24		Australia				>25 million
2024	Severe Convective Storm	04/04/24	04/07/24	Windstorm Olivia	Ireland, Great Britain, France, Spain, Portugal, Netherlands				>25 million
2024	Severe Convective Storm	04/16/24		Hyogo Hailstorm	Japan				>25 million
2024	Severe Convective Storm	05/14/24	05/17/24		Western & Central Europe				>25 million
2024	Severe Convective Storm	06/06/24	06/10/24	Storm Tina	Austria, Demark, Hungary, Switzerland, Slovakia, Romania				>25 million
2024	Severe Convective Storm	06/17/24	06/20/24	Storm Wibke	Denmark, France, Czech Republic, Poland, Switzerland, Beliguim				>25 million
2024	Severe Convective Storm	06/10/24	06/16/24		Chile				>25 million
2024	Tropical Storm	06/19/24	06/20/24	Tropical Storm Alberto	Mexico, Yucatan Peninsula				>25 million
2024	Severe Convective Storm	06/25/24	06/28/24		Central Europe				>25 million
2024	Severe Convective Storm	06/28/24	06/30/24	Storm Annelie	France, Italy, Switzerland				>25 million
2024	Hurricane	07/01/24	07/12/24	Hurricane Beryl	Barbados, Windward Islands, Trinidad and Tobago, Venezuela, Hispaniola, Jamaica, Cayman Islands, Yucatan Peninsula, Belize, Eastern Canada				>25 million
2024	Typhoon	07/23/24	07/28/24	Typhoon Gaemi	Taiwan, China, Philippines, Yaeyama Islands, Indonesia, Vietnam, North Korea				>25 million
2024	Hurricane	08/03/24	08/14/24	Hurricane Debby	Caribbean, Quebec, Atlantic Canada				>25 million
2024	Hurricane	08/13/24	08/19/24	Hurricane Ernesto	Bermuda, Puerto Rico, U.S. Virgin Islands, Antigua and Barbuda, Guadeloupe				>25 million
2024	Wildfire	08/23/24	09/06/24	Brazil/Sao Paulo Fires					
2024	Typhoon	08/28/24	08/31/24	Typhoon Shanshan	Japan, South Korea				>25 million
2024	Typhoon	09/01/24	09/12/24	Typhoon Yagi	China, Phillippines, Vietnam, Loas, Thailand, Myanmar, Hong Kong, Macau				>25 million
2024	Hurricane	09/09/24	09/14/24	Hurricane Francine	Mexico				>25 million
2024	Wildfire	09/15/24	09/20/24	Portugal Wildfires	Central and Northern Portugal				>25 million
2024	Typhoon	09/15/24	09/17/24	Typhoon Bebinca	China, Philippines, NorthMariana Islands, Ryukyu Islands				>25 million
2024	Hurricane	09/22/24	09/28/24	Hurricane John	Mexico				>25 million
2024	Hurricane	09/24/24	09/29/24	Hurricane Helene	Yucatan Peninsula, Honduras, Cayman Islands, Cuba				>25 million
2024	Typhoon	09/26/24	10/04/24	Typhoon Krathon (Julian)	Philippines, Taiwan				>25 million
2024	Hurricane	10/05/24	10/12/24	Hurricane Milton	Mexico, Yucatan Peninsula, Western Cuba, The Bahamas				>25 million
2024	Tropical Storm	10/25/24	10/27/24	Tropical Storm Trami	Philippines, Vietnam				>25 million
2024	Huricane	11/04/24	11/10/24	Huricane Rafeal	Cuba, Panama, Coast Rica, Columbia				>25 million
2024	Typhoon	11/01/24	11/07/24	Typhoon Kong-rey	Philippines, China, South Korea, Japan, Taiwan				>25 million
2024	Typhoon	11/09/24	11/20/24	Typhoon Man-yi	Philippines, Guam, Northern Mariana Islands				>25 million
2025	Earthquake	01/07/25			China, Nepal				>100 million
2025	Windstorm	01/23/25	01/25/25	Windstorm Eowyn (Gilles)	UK, Ireland				>500 million
2025	Cyclone	02/27/25	02/28/25	Cyclone Garance	Reunion, Mauritus				>100 million
2025	Cyclone	03/06/25	03/08/25	Cyclone Alfred	Australia				>100 million
2025	Earthquake	03/28/25			Myanmar, Thailand, Vietnam				>100 million
2025	Earthquake	04/23/25			Turkey				>25 million

Attachment 2

Year	Event Type	Begin	End	Event	Country	Affected Area (Detail)	Munich Re NatCATService Insured losses (in original values, US$m) Criteria: insured losses equal/greater US$ 25m. Tries to reflect non-US losses only	Swiss Re Sigma: Insured Loss Est. US$m (mid point shown if range given) Mostly reflect total US and nonUS losses combined.	
2025	SCS	05/02/25	05/04/25		Spain, France, Portugal, Germany, Austria, Czechia, Poland, Sebia, Bosnia, Romania, Bulgaria, Macedonia				>100 million
2025	SCS	05/13/25	05/14/25		China				>25 million
2025	Wildfire	May	June		Canada				>25 million
2025	SCS	06/13/25	06/15/25		France, Italy, Germany, Switzerland, Belgium, Austria, Czechia, Croatia				>100 million
2025	Typhoon Wutip	06/11/25	06/15/25		China, Philippines, Thailand, Veitnam				>25 million
2025	Hurricane Erick	06/16/25	06/21/25		Mexico, Guatemala, El Salvador, Honduras				>25 million
2025	SCS	06/21/25	06/27/25		France, Italy, Germany, Switzerland, Belgium, Austria, Czechia, Slovakia				>25 million
2025	Typhoon Danas	07/04/25	07/10/25		China, Taiwan, Philippines				>25 million
2025	Tropical Storm Wipha	07/18/25	07/24/25		China, Philippines, Vietnam,				>25 million
2025	Wildfire	07/01/25	07/31/25		Cyprese, Greece, Turkey, Bulgaria, Bosnia, Herzegovina				>25 million
2025	SCS	09/04/25	09/09/25		France, Switzerland, Germany, Italy, Austria, Belgium, Luxembourg, Poland				>25 million
2025	Super Typhoon Ragasa	09/22/25	09/26/25		China, Taiwan, Philippines				>25 million
2025	Windstorm Amy	10/03/25	10/04/25		UK, Ireland, France, Norway, Sweden				>25 million

Source: Munich Re's NAT CAT Service, Swiss Re Sigma and Aon Benfield

Capital Adequacy (E) Task Force
RBC Proposal Form

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☒ Catastrophe Risk (E) Subgroup
☐ Variable Annuities Capital. & Reserve (E/A) Subgroup
☐ Health RBC (E) Working Group
☐ P/C RBC (E) Working Group
☐ Economic Scenarios (E/A) Subgroup
☐ Life RBC (E) Working Group
☐ Longevity Risk (A/E) Subgroup
☐ RBC Investment Risk & Evaluation (E) Working Group

DATE: 11/12/25

CONTACT PERSON: Eva Yeung
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EMAIL ADDRESS: eyeung@naic.org
ON BEHALF OF: Catastrophe Risk (E) Subgroup
NAME: Wanchin Chou
TITLE: Chair
AFFILIATION: Connecticut Department of Insurance
ADDRESS: 153 Market St., Hartford CT 06103

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Agenda Item #2025-19-CR
Year 2026

DISPOSITION

ADOPTED:
☐ TASK FORCE (TF) _____
☐ WORKING GROUP (WG) _____
☐ SUBGROUP (SG) _____

EXPOSED:
☐ TASK FORCE (TF) _____
☐ WORKING GROUP (WG) _____
☐ SUBGROUP (SG) _____

REJECTED:
☐ TF ☐ WG ☐ SG _____

OTHER:
☐ DEFERRED TO _____
☐ REFERRED TO OTHER NAIC GROUP
☐ (SPECIFY) _____

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

☐ Health RBC Blanks
☐ Health RBC Instructions
☐ Health RBC Formula
☒ Property/Casualty RBC Blanks
☐ Property/Casualty RBC Instructions
☐ Property/Casualty RBC Formula
☐ Life and Fraternal RBC Blanks
☐ Life and Fraternal RBC Instructions
☐ Life and Fraternal RBC Formula
☐ OTHER _____

DESCRIPTION/REASON OR JUSTIFICATION OF CHANGE(S)

The objective of this proposal is to differentiate hurricane and earthquake losses, following the methodology applied to wildfire and severe convective storm events. This distinction will enable the Subgroup and Working Group to more effectively manage and address each peril, considering their unique characteristics and impacts.

Additional Staff Comments:

** **This section must be completed on all forms.** **Revised 2-2023**

SCHEDULE P PART 1XX - XXXX PR100s (Option 2)

	(3) Premiums Earned, Net	(24) Total Net Losses and Expenses Unpaid	(28) Total Losses and Expenses Incurred, Net	Earthquake Catastrophe Experience* (24AI) Total U.S. Net Losses Unpaid	(28AI) Total U.S. Losses Incurred, Net	(24BI) Total Non-U.S. Net Losses Unpaid	(28BI) Total Non-U.S. Losses Incurred, Net	Hurricane Catastrophe Experience* (24AII) Total U.S. Net Losses Unpaid	(28AII) Total U.S. Losses Incurred, Net	(24BII) Total Non-U.S. Net Losses Unpaid	(28BII) Total Non-U.S. Losses Incurred, Net	Wildfire Catastrophe Experience* (24AIII) Total U.S. Net Losses Unpaid	(28AIII) Total U.S. Losses Incurred, Net	(24BIII) Total Non-U.S. Net Losses Unpaid	(28BIII) Total Non-U.S. Losses Incurred, Net	(28C) Total Losses and Expenses Incurred, Net excluding Earthquake, Hurricane and Wildfire Losses
(2) 2017	0		0		0		0		0		0		0		0	0
(3) 2018	0		0		0		0		0		0		0		0	0
(4) 2019	0		0		0		0		0		0		0		0	0
(5) 2020	0		0		0		0		0		0		0		0	0
(6) 2021	0		0		0		0		0		0		0		0	0
(7) 2022	0		0		0		0		0		0		0		0	0
(8) 2023	0		0		0		0		0		0		0		0	0
(9) 2024	0		0		0		0		0		0		0		0	0
(10) 2025	0		0		0		0		0		0		0		0	0
(11) 2026	0		0		0		0		0		0		0		0	0
(12) Totals		0		0		0		0		0		0		0		

	Convective Storms Catastrophe Experience* (24III) Total U.S. Net Losses Unpaid	(28III) Total U.S. Losses Incurred, Net	(24IV) Total Non-U.S. Net Losses Unpaid	(28IV) Total Non-U.S. Losses Incurred, Net	(28V) Total Losses and Expenses Incurred, Net excluding Earthquake, Hurricane, Wildfire and Convective Storms Losses
(2) 2017		0		0	0
(3) 2018		0		0	0
(4) 2019		0		0	0
(5) 2020		0		0	0
(6) 2021		0		0	0
(7) 2022		0		0	0
(8) 2023		0		0	0
(9) 2024		0		0	0
(10) 2025		0		0	0
(11) 2026		0		0	0
(12) Totals	0		0		

vendor link items

manual data entry items

*Please provide losses only; no expenses. Catastrophe losses should 1.) be the net losses incurred for the reporting entity, not net losses incurred for the group; 2.) be a subset of, and therefore, less than, total net losses reported in Column (28); 3.) be reported in 000s to be consistent with all values reported in this exhibit; and 4.) not be reported as negative amounts.

If this line of business has incurred U.S. catastrophe losses arising from events either included on the list of U.S. catastrophe events approved by the Catastrophe Risk Subgroup as available on the NAIC's website or numbered and labeled by PCS as a hurricane, tropical storm, or earthquake, provide only the amount of those catastrophe losses in Catastrophe Experience columns (24AI), **(24AII), (24AIII), (28AI), **(28AII) and (28AIII)**.

***If this line of business has incurred non-U.S. catastrophe losses arising from a hurricane, tropical storm, or earthquake from an event included on the list of non-U.S. catastrophe events approved by the Catastrophe Risk Subgroup as available on the NAIC's website, provide only the amount of those catastrophe losses in Catastrophe Experience Columns (24BI),**(24BII), (24BIII),** (28BI), **(28BII) and (28BIII)**.

****Columns 24III through 28V are for informational purposes only.

Capital Adequacy (E) Task Force
RBC Proposal Form

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DATE: 11/12/25

CONTACT PERSON: Eva Yeung
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ON BEHALF OF: Catastrophe Risk (E) Subgroup
NAME: Wanchin Chou
TITLE: Chair
AFFILIATION: Connecticut Department of Insurance
ADDRESS: 153 Market St., Hartford CT 06103

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Agenda Item #2025-20-CR
Year 2026

DISPOSITION

ADOPTED:
☐ TASK FORCE (TF) _____
☐ WORKING GROUP (WG) _____
☐ SUBGROUP (SG) _____
EXPOSED:
☐ TASK FORCE (TF) _____
☐ WORKING GROUP (WG) _____
☐ SUBGROUP (SG) _____
REJECTED:
☐ TF ☐ WG ☐ SG _____
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☐ DEFERRED TO _____
☐ REFERRED TO OTHER NAIC GROUP
☐ (SPECIFY) _____

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

☐ Health RBC Blanks
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☒ Property/Casualty RBC Instructions
☐ Property/Casualty RBC Formula
☐ Life and Fraternal RBC Blanks
☐ Life and Fraternal RBC Instructions
☐ Life and Fraternal RBC Formula
☐ OTHER _____

DESCRIPTION/REASON OR JUSTIFICATION OF CHANGE(S)

Building on the precedent set by the 2021 wildfire review, an ad hoc group was re-established and began a new evaluation cycle on March 18, guided by the Actuarial Standard of Practice (ASOP) No. 38—Catastrophe Modeling for All Practice Areas. This comprehensive process included high-level analysis, confidential assessments, and detailed impact studies. In addition to the original three vendors—Moody Risk Management Solutions (RMS), Verisk Extreme Event Solutions, and KCC—CoreLogic joined as a new participant for this review cycle. Starting in early June and July, the group collaborated with all four vendors to conduct a second round of impact analysis using consistent exposure inputs. On September 25, the group reconvened to address feedback from the impact analysis presentations. A comparative review of the initial 2022 assessment and the current evaluation revealed that model outputs have become increasingly consistent. As a result, the Subgroup now has greater confidence in the models and their suitability for risk management applications.

This proposal formally recommends adding wildfire peril to the Rcat component, reflecting the enhanced reliability and applicability of the catastrophe models.

Additional Staff Comments:

**** This section must be completed on all forms.** **Revised 2-2023**

CALCULATION OF CATASTROPHE RISK CHARGE RCAT
PR027A, PR027B, PR027BI, PR027BII, PR027BIII, PR027BIV PR027C, PR027CI, PR027CII, PR027CIII, PR027CIV, PR027D, PR027, PR027INT, AND PR027INTA

The catastrophe risk charge for earthquake (PR027A), hurricane (PR027B), wildfire (PR027C) and convective storms for informational purposes only (~~PR027C and~~ PR027D) risks is calculated by multiplying the RBC factors by the corresponding modeled losses and reinsurance recoverables. The risk applies on a net basis with a corresponding contingent credit risk charge for certain categories of reinsurers. Data must be provided for the worst year in 50, 100, 250, and 500; however, only the worst year in 100 will be used in the calculation of the catastrophe risk charge. While projected losses modeled on an Aggregate Exceedance Probability basis is preferred, companies are permitted to report on an Occurrence Exceedance Probability basis if that is consistent with the company's internal risk management process.

The projected losses can be modeled using the following NAIC approved third-party commercial vendor catastrophe models: AIR, CoreLogic, RMS, KCC for earthquake, ~~and~~ hurricane, and wildfire only, ~~RMS, KCC,~~ the ARA HurLoss Model (hurricane ~~only~~), or the Florida Public Model for hurricane only, as well as catastrophe models that are internally developed by the insurer or that are the result of adjustments made by the insurer to vendor models to represent the own view of catastrophe risk (hereinafter "own models").

However, an insurer seeking to use an own model must first obtain written permission to do so by the domestic or lead state insurance regulator. In the situation where the model output is used to determine the catastrophe risk capital requirement for a single entity, the regulator granting permission to use the own model is the domestic state. In the situation where the model output is used to determine the catastrophe risk capital requirement for a group, the grantor is the lead state regulator. In the situation where the insurer seeking permission is a non-U.S. insurer, the grantor shall be the lead state regulator. Under all scenarios, the regulator that is granting permission should inform other domestic states that have a catastrophe risk exposure and share the results of the review.

To obtain permission to use the own model, the insurer must provide the domestic or lead state insurance regulator with written evidence of each of the following:

1. The nature, scale, and complexity of the insurer's catastrophe risk make it reasonable for the insurer to use its own model.
2. The own model is used for catastrophe risk management, capital assessment, and the capital allocation process.
3. The insurer has validated the own model(s) for each of the perils included in the RBC catastrophe risk charge. The insurer is including both U.S. and non-U.S. exposures in the calculation of the RBC charge.
4. The insurer has individuals with experience in developing, testing and validating internal models or engages third parties with such experience.
5. The own model was developed using reasonable data and assumptions.
6. The insurer must provide supporting model documentation and/or the differences from the vendor models if modified from the vendor models, supporting that the model was developed using reasonable data and assumptions. The insurer must provide a copy of the latest validation report and the insurer is solely responsible for the relevant cost. The validation report must provide a description of the scope, content, results and limitations of the validation, the individual qualifications of validation team and the date of the validation. Both the model documentation and the model validation report must be provided at a minimum once every five years, or whenever the lead or domestic state calls an examination; whenever there is a material change in the model; or whenever there is a material change in the insurer's exposure to catastrophe exposure.
7. The results of the own model for each relevant peril should be compared with the results produced by at least one of the following models: AIR, CoreLogic, RMS, and KCC for earthquake, ~~and~~ hurricane and wildfire only, ~~RMS, KCC,~~ ARA HurLoss (hurricane ~~only~~), or the Florida Public Model for hurricane only. The insurer must provide the comparison and an explanation of the drivers of differences between the results produced by the internal model vs. results produced by the selected prescribed model. Evidence that the own model produces reasonable results must be provided at a minimum once every

five years, or whenever the lead or domestic state calls an examination; whenever there is a material change in the model; or whenever there is a material change in the insurer's exposure to catastrophe exposure.

8. If the own model has been approved or accepted by the non-U.S. lead supervisor for use in the determination of regulatory capital, the insurer must submit evidence, if available, from the non-US lead supervisor of the most recent approval/acceptance including the description of scope, content, results and limitations of the approval/acceptance process and dates of any planned future approval/acceptance, if known. The name and the contact information of a contact person at the non-US lead supervisor should also be provided for questions on the approval/acceptance process.

If the lead or domestic state determines that permission to use the own model cannot be granted, the insurer shall be required to determine the RBC Catastrophe Risk Charge through the use of one of the third-party commercial vendor models (AIR, CoreLogic, RMS, and KCC for earthquake, ~~and~~ hurricane, and wildfire only, ~~RMS, KCC,~~ ARA HurLoss (hurricane ~~only~~)), or the Florida Public Model for hurricane only, as advised by the lead state or domestic state.

If the lead or domestic state determines that permission to use the own model can be granted to determine the RBC Catastrophe Risk Charge, the model will be subject to additional review through the ongoing examination process. If, as a result of the examination, the lead or domestic state determines that permission to use the own model should be revoked, the insurer may be required to resubmit the risk-based capital filing and any past filings so impacted where own model was used, as directed by the lead state or domestic state.

If the insurer obtains permission to use the own model, it cannot revert back to using third-party commercial vendor models to determine the RBC Catastrophe Risk Charge in subsequent reporting periods, unless this is agreed with the lead or domestic state that granted permission.

The contingent credit risk charge should be calculated in a manner consistent with the way the company internally evaluates and manages its modeled net catastrophe risk.

Note that no tax effect offsets or reinstatement premiums should be included in the modeled losses. Further note that the catastrophe risk charge is for earthquake, ~~and~~ hurricane, and wildfire risks only.

As per the footnote on this page, modeled losses to be entered PR027A, PR027B PR027C and PR027D in Lines (1) through (4) are to be calculated using one of the **third-party** commercial **vendor** models – AIR, CoreLogic, RMS, and KCC for earthquake, ~~and~~ hurricane, and wildfire only, ~~RMS, KCC,~~ ARA HurLoss (hurricane ~~only~~); or the Florida Public Model ~~(~~for hurricane only~~)~~**or the insurer's own catastrophe model**; and using the insurance company's own insured property exposure information as inputs to the model. The insurance company may elect to use the modeled results from any one of the models, or any combination of results of two or more of the models. Each insurer will not be required to utilize any prescribed set of modeling assumptions but will be expected to use the same exposure data, modeling, and assumptions that the insurer uses in its own internal catastrophe risk management process. Any exceptions must be explained in the required *Attestation Re: Catastrophe Modeling Used in RBC Catastrophe Risk Charges* within this RBC Report.

CALCULATION OF CATASTROPHE RISK CHARGE FOR WILDFIRE PR027C

~~(For Informational Purposes Only)~~

	Wildfire	Reference	Modeled Losses (1) Direct and Assumed	(2) Net	(3)† Ceded Amounts Recoverable	(4)†† Ceded Amounts Recoverable with zero Credit Risk Charge
(1)	Worst Year in 50	Company Records				
(2)	Worst Year in 100	Company Records				
(3)	Worst Year in 250	Company Records				
(4)	Worst Year in 500	Company Records				
(5)	Worst Year in 1000 **(For Informational Purposes Only)**	Company Records				

		(5) Y/N
(6)	Has the company reported above, its modeled wildfire losses using an occurrence exceedance probability (OEP) basis?	

		Reference	(6) Amount	Factor	(7) RBC Requirement (C(6) * Factor)
(7)	Net Wildfire Risk	L(2) C(2)	0	1.000	0
(8)	Contingent Credit Risk for Wildfire Risk	L(2)(C(3) - C(4))	0	0.018	0
(9)	Total Wildfire Catastrophe Risk (AEP Basis)	If L(6) C(5) = "N", L(9) C(6) = L(7) C(7)+ L(8) C(7), otherwise "0"	0	1.000	0
(10)	Total Wildfire Catastrophe Risk (OEP Basis)	If L(6) C(5) = "Y", L(10) C(6) = L(7) C(7)+ L(8) C(7), otherwise "0"	0	1.000	0
(11)	Total Wildfire Catastrophe Risk	L(9) C(7) + L(10) C(7)			0

Disclosure in lieu of model-based reporting:

		(8) Direct and Assumed	(9) Net
(12)	For a company qualifying for the exemption under PR027INT C (10), complete 12a through 12c below:		
	a. Provide the company's gross and net 1-in-100-year wildfire losses on a best estimate basis in lieu of model-based reporting.		
	b. Provide details on how the company estimated the amounts shown in 12a.		
	c. Provide a narrative disclosure about how the company manages its wildfire risk.		

Lines (1)-(5): Modeled losses to be entered on these lines are to be calculated using one of the following NAIC approved third party commercial vendor catastrophe models - AIR, RMS, ~~or~~ KCC**, Corelogic~~,~~** or a catastrophe model that is internally developed by the insurer and has received permission of use by the lead or domestic state. The insurance company's own insured property exposure information should be used as inputs to the model(s). The insurance company may elect to use the modeled results from any one of the models, or any combination of the results of two or more of the models. Each insurer will not be required to utilize any prescribed set of modeling assumptions, but will be expected to use the same data, modeling, and assumptions that the insurer uses in its own internal catastrophe risk management process. An attestation to this effect and an explanation of the company's key assumptions and model selection may be required, and the company's catastrophe data, assumptions, model and results may be subject to examination.

† Column (3) is modeled catastrophe losses that would be ceded under reinsurance contracts. This should be associated with the Net Modeled Losses shown in Column (2).

††Column (4) is modeled catastrophe losses that would be ceded to the categories of reinsurers that are not subject to the RBC credit risk charge (i.e., U.S. affiliates and mandatory pools, whether authorized, unauthorized, or certified).

CALCULATION OF CATASTROPHE RISK CHARGE PR027

		Reference	(1) RBC Amount
(1)	Total Earthquake Catastrophe Risk	PR027A L(10) C(7)	0
(2)	Total Hurricane Catastrophe Risk	PR027B L(11) C(7)	0
(3)	Total Wildfire Catastrophe Risk	PR027C L(11)C(7)	0
(4)	Total Convective Storms Catastrophe Risk	PR027D L(10)C(7)	0
(5)	Total Catastrophe Risk (R_{cat})	SQRT(L(1)^2 + L(2)^2 + **L(3)^2**)	0
(5a)	Total Catastrophe Risk (R_{cat} For Informational Purposes Only)	SQRT(L(1)^2 + L(2)^2 +L(3)^2+L(4)^2)	0

Lines ~~3,~~ 4, and 5a are for informational purposes only

Priority 1 – High Priority
Priority 2 – Medium Priority
Priority 3 – Low Priority

CAPITAL ADEQUACY (E) TASK FORCE
WORKING AGENDA ITEMS FOR CALENDAR YEAR 2026

2026 #	Owner	2026 Priority	Expected Completion Date	Working Agenda Item	Source	Comments	Date Added to Agenda
Ongoing Items – P&C RBC							
P1	Cat Risk SG	1		Continue development of RBC formula revisions to include a risk charge based on catastrophe model output:			
			Year-end ~~2025~~ 2027 or later	a) Evaluate other catastrophe risks for possible inclusion in the charge - determine whether to recommend developing charges for any additional perils, and which perils or perils those should be.	Referral from the Climate and Resiliency Task Force. March 2021		4/26/2021
P2	PCRBCWG	1	Ongoing	Review and analyze the P/C RBC charges that have not been reviewed since developed.			3/23/2023
Carryover Items Currently being Addressed – P&C RBC							
P3	P&C RBC WG	~~1~~2	Year-end ~~2025~~ 2027 or later	Evaluate a) the current growth risk methodology whether it is adequately reflects both operational risk and underwriting risk; b) the premium and reserve based growth risk factors either as a stand-alone task or in conjunction with the ongoing underwriting risk factor review with consideration of the operational risk component of excessive growth; c) whether the application of the growth factors to NET proxies adequately accounts for growth risk that is ceded to reinsures that do not trigger growth risk in their own right. *Referral to the Academy:* *https://naiconline.sharepoint.com/teams/FRSRBC/PRBC/2018%20Calls%20-%20PRBC/PCRBC/06_14/attC01_Growth%20Risk%20Referral%20to%20Academy.pdf*	Referral from Operational Risk Subgroup	1) Sent a referral to the Academy on 6/14/18 conference call.	1/25/2018
P4	P&C RBC WG	1	~~2024~~ 2027 Summer Meeting or later	Continue working with the Academy to review the methodology and revise the underwriting (Investment Income Adjustment, Loss Concentration, LOB UW risk) charges in the PRBC formula as appropriate.		11/16/23 The Academy provided a presentation on their Underwriting Risk Report at the Joint PCRBC And Cat Risk SG meeting. 3/17/23 Proposal 2024-11-P was exposed for a 30-day public comment period during the	6/10/2019

						Spring National Meeting. 4/25/24 Proposal 2024-11-P was adopted during the PCRBCWG interim meeting. 11/12/25 The Academy provided a presentation on loss concentration factors report at the Joint PCRBC and Cat Risk SG meeting.	
P5	P&C RBC WG	1	~~2025~~ 2027 Summer Meeting or later	Evaluate the Underwriting Risk Line 1 Factors in the P/C formula.			7/30/2020
P6	Cat Risk SG	1	~~2025~~ 2026 Summer Meeting	Quantify the R5 Ex-cat Factors for wildfire peril ~~(for informational purposes only)~~ ~~Evaluate the possibility of adding PR018A~~ to determine the R5 excluding the wildfire peril in addition to earthquake, and hurricane.			3/21/2023
~~P7~~	~~Cat Risk SG~~	~~2~~	~~2026 Spring Meeting~~	~~Evaluate the impact of flood peril to the insurance market~~		6/30/25 The Working Group and Subgroup agreed to hold off on this issue until clear guidance is received from NAIC leadership.	~~3/21/2023~~
~~P8~~	~~Cat Risk SG~~	~~1~~	~~2025 Summer Meeting~~	~~Create additional Rcat pages to collect commercial Cat modelers product information known as "Climate Conditioned Catalogs", which would provide an estimate of climate change for hurricane and wildfire.~~	~~From Solvency Workstream of the Climate & Resiliency (EX) Task Force~~	~~1/29/24 Proposal 2023-17-CR was exposed for a 30-day public comment period at the Cat Risk SG Interim Meeting on Jan. 29.~~ ~~3/17/24 Proposal 2024-10-P was re-exposed for a 22-day public comment period during the Spring National Meeting.~~ ~~8/2/24 Proposal 2023-17-CR didn't get~~	~~1/29/2024~~

						~~adopted in Financial Condition (E) Committee. Instead, the Committee adopted industry proposal 2024-20-CR MOD on August 2.~~	
~~P9~~P7	Cat Risk SG	2	~~2025~~ 2026 Fall Meeting	Consider: 1) further investigating all geographic concentration related issues. possibly modifying the property and casualty (P/C) risk-based capital formulas		6/10/24 Exposed a referral from the Task Force for a 30-day comment period ending July 10.	
New Items – P&C RBC							
P8	Cat Risk SG	1	2026 Summer Meeting	Evaluate the possibility of adding Wildfire peril in the Rcat component		11/12/25 Proposal 2025-20-CR was exposed for a 60-day comment period ending 1/11/26.	11/12/25
P9	Cat Risk SG	1	2026 Summer Meeting	Evaluate the possibility of separating earthquake and hurricane loss experience data in PR100s.		11/12/25 Proposal 2025-19-CR was exposed for a 60-day comment period ending 1/11/26.	11/12/25
P10	P&C RBC WG	1	2026 Summer Meeting	Evaluate the possibility of updating the Loss and Premium concentration factors in PR017 and PR018			11/12/25

Historical Comments:

P1:

4/26/21 - The SG exposed the referral for a 30-day period.
6/1/21 - The SG forwarded the response to the Climate and Resiliency Task Force.
2/22/22 - The SG adopted proposal 2021-17-CR (adding the wildfire peril for informational purposes only). The SG continues reviewing other perils for possible inclusion in the Rcat.

8/11/22 – The TF adopted Proposal 2022-04-CR (2013-2021 Wildfire Event Lists)

9/26/22 – The SG formed an ad hoc group to conduct review on severe convective storm models.

7/18/23-The SG is finishing reviewing the following SCS vendor models: RMS, Verisk, KCC, and Corelogic.

12/2/23-Proposal 2023-15-CR (Convective Storm for Informational Purposes Only Structure) was exposed for a 30-day comment period at the Joint P/C RBC and Cat Risk SG meeting.

CA1:

1. Structural and instructions changes will be exposed by each individual working group for comment in 2022 with an anticipated effective date of 2023.
2. Proposal 2022-09-CA MOD was adopted at the 2023 Spring Meeting.
3. Proposal 2023-12-CA was adopted at the 2023 Fall Meeting.
4. Editorial Proposal 2024-08-CA will be exposed on 3/17/24 for a 30-day public comment.

NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

MEMORANDUM

TO: Steve Drutz, Chair, Health Risk-Based Capital (E) Working Group
Matthew Richard, Vice Chair, Health Risk-Based Capital (E) Working Group

Tom Botsko, Chair, Property and Casualty Risk-Based Capital (E) Working Group
Wanchin Chou, Vice Chair, Property and Casualty Risk-Based Capital (E) Working Group

FROM: Philip Barlow, Chair, Risk-Based Capital Investment Risk and Evaluation (E) Working Group
Thomas Reedy, Vice-Chair, Risk-Based Capital Investment Risk and Evaluation (E) Working Group

DATE: June 23, 2025

RE: Securities Valuation Office (SVO) Fund Risk Based Capital (RBC) Alignment Project

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On June 23, 2025, the Risk-Based Capital Investment Risk and Evaluation (E) Working Group met and received nine comment letters (Attachment A) on the American Council of Life Insurers' (ACLI's) Risk Based Capital (RBC) Principles for Bond Funds Presentation and the NAIC's Memorandum of Bond Funds Reported in 2023 Annual Statement Filings (Attachment B). The Working Group consented to expose Proposal 2025-12-IRE Securities Valuation Office (SVO) Fund Alignment Project (Attachment C) for a 30-day public comment period ending July 23, 2025. Note that this Proposal is specifically drafted for the Life RBC formula as directed by the Working Group during its 2025 Spring National Meeting.

In addition, the Working Group directed NAIC Staff to refer SVO Fund Alignment Project and its applicability to non-life RBC formulas to Health Risk-Based Capital (E) Working Group and Property and Casualty Risk-Based Capital (E) Working Group. The Working Group would appreciate consideration by your Working Groups and should a formal RBC proposal be formulated for respective RBC formula at your Working Groups, the NAIC Staff stands ready to augment the scope of Proposal 2025-12-IRE to ensure coordinated adoption.

Please contact NAIC Staff of the Risk-Based Capital Investment Risk and Evaluation (E) Working Group with any questions.

Cc: Julie Gann, Maggie Chang, Eva Yeung, Kazeem Okosun, Derek Noe

Washington, DC 444 North Capitol Street NW, Suite 700, Washington, DC 20001-1509 p | 202 471 3990

Kansas City 1100 Walnut Street, Suite 1500, Kansas City, MO 64106-2197 p | 816 842 3600

New York One New York Plaza, Suite 4210, New York, NY 10004 p | 212 398 9000

www.naic.org

NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

Attachment A - Comment Letters Received on June 23, 2025

Attachment B - ACLI's RBC Principles for Bond Funds Presentation and the NAIC's Memorandum of Bond Funds Reported in 2023 Annual Statement Filings

Attachment C - Proposal 2025-12-IRE

Washington, DC 444 North Capitol Street NW, Suite 700, Washington, DC 20001-1509 p | 202 471 3990

Kansas City 1100 Walnut Street, Suite 1500, Kansas City, MO 64106-2197 p | 816 842 3600

New York One New York Plaza, Suite 4210, New York, NY 10004 p | 212 398 9000

www.naic.org

AmeriHealth Caritas
3875 West Chester Pike
Newtown Square, PA 19073

June 10, 2025

Dear Chairs and members of **NAIC Risk-Based Capital Investment Risk and Evaluation (E) Working Group, Capital Adequacy (E) Task Force, Health Risk-Based Capital (E) Working Group, and Valuation of Securities (E) Task Force**:

We strongly support your call at the 2025 NAIC Spring National meeting for developing a proposal for harmonization including assigning bond-like treatment to SVO designated funds across all insurer types.

We would like to point out that 96% of SVO-designated mutual funds and significant amount of private funds resided on non-life insurance balance sheets.[1] However, for fixed income funds, as a Health insurer, presently we are subject to punitive RBC charges, i.e., Schedule D-2 Equity charge to mutual funds and Schedule BA charge to private funds. On the other hand, Life insurers have been benefiting from bond-like treatment for SVO designated private funds and will likely be able to apply the same to mutual funds given the exposure draft. This inconsistency disadvantages us as a Health insurer.

Furthermore, as a smaller insurer, we rely on fund vehicles to access select fixed income markets and to diversify investment risk. We do not have the required scale and operational infrastructure to invest in these fixed income assets directly on our balance sheets, but fund vehicles allow more efficient market access. In our view, the ability for us to invest in fixed income funds and to receive fair RBC treatment commensurate with their SVO designations is critical for leveling market access across all insurers regardless of size.

Sincerely yours,

Pamela Schmidt

Pamela Schmidt
Vice President Treasury & Chief Investment Officer
AmeriHealth Caritas

[1] Certain Bond funds reported in 2023 Annual Statement Filings

Amerisure Mutual Holdings, Inc.
Amerisure Mutual Insurance Company
Amerisure Insurance Company
Amerisure Partners Insurance Company

April 25, 2025

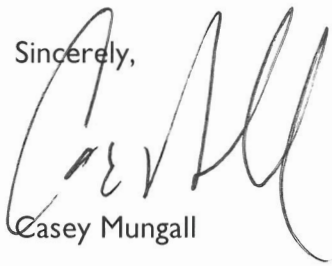
Dear Chairs and members of NAIC Risk-Based Capital Investment Risk and Evaluation (E) Working Group:

We strongly support your call at the 2025 NAIC Spring National meeting for developing a proposal for harmonization including assigning bond-like treatment to SVO designated funds across all insurer types.

We would like to point out that 96% of SVO-designated mutual funds and significant amount of private funds resided on non-life insurance balance sheets. However, for fixed income funds, as a Property & Casualty insurer, presently we are subject to punitive RBC charges, eg. Schedule D-2 Equity charge to mutual funds and Schedule BA charge to private funds. On the other hand, Life insurers have been benefiting from bond-like treatment for SVO designated private funds and will likely be able to apply the same to mutual funds given the exposure draft. This inconsistency disadvantages us as a Property & Casualty insurer.

Furthermore, as a smaller insurer, we rely on fund vehicles to access select fixed income markets and to diversify investment risk. We do not have the required scale and operational infrastructure to invest in these fixed income assets directly on our balance sheets and fund vehicles allow more efficient market access. In our view, the ability for us to invest in fixed income funds and to receive fair RBC treatment commensurate with their SVO designations is critical for leveling market access across all insurers regardless of size.

Sincerely,



Casey Mungall

Vice President, Enterprise Risk Management & Investments

Amerisure Insurance

BCS Insurance Company
2 Mid America Plaza, Suite 200 | Oakbrook Terrace, IL 60181
630.472.7700 | bcsf.com

April 25, 2025

Dear Chairs and members of **NAIC Risk-Based Capital Investment Risk and Evaluation (E) Working Group, Capital Adequacy (E) Task Force, Property and Casualty Risk-Based Capital (E) Working Group, and Valuation of Securities (E) Task Force**:

We strongly support your call at the 2025 NAIC Spring National meeting for developing a proposal for harmonization including assigning bond-like treatment to SVO designated funds across all insurer types.

We would like to point out that 96% of SVO-designated mutual funds and significant amount of private funds resided on non-life insurance balance sheets.1 However, for fixed income funds, as a P&C insurer, presently we are subject to punitive RBC charges, i.e., Schedule D-2 Equity charge to mutual funds and Schedule BA charge to private funds. On the other hand, Life insurers have been benefiting from bond-like treatment for SVO designated private funds and will likely be able to apply the same to mutual funds given the exposure draft. This inconsistency disadvantages us as a P&C insurer.

Furthermore, as a smaller insurer, we rely on fund vehicles to access select fixed income markets and to diversify investment risk. We do not have the required scale and operational infrastructure to invest in these fixed income assets directly on our balance sheets, but fund vehicles allow more efficient market access. In our view, the ability for us to invest in fixed income funds and to receive fair RBC treatment commensurate with their SVO designations is critical for leveling market access across all insurers regardless of size.

Sincerely yours,

Alexander D Hudson

Alex Hudson
Vice President, Investment Services and Treasury
BCS Insurance Company

[1] Certain Bond funds reported in 2023 Annual Statement Filings

CO/ACTION℠
SPECIALTY INSURANCE GROUP

Coaction Specialty Insurance Group, Inc.
on behalf of New York Marine and General Insurance Company,
Southwest Marine and General Insurance Company, and
Gotham Insurance Company

April 29, 2025

Dear Chairs and members of NAIC Risk-Based Capital Investment Risk and Evaluation (E) Working Group, Capital Adequacy (E) Task Force, Property and Casualty Risk-Based Capital (E) Working Group, and Valuation of Securities (E) Task Force:

We strongly support your call at the 2025 NAIC Spring National meeting for developing a proposal for harmonization including assigning bond-like treatment to SVO designated funds across all insurer types.

We would like to point out that 96% of SVO-designated mutual funds and significant amount of private funds resided on non-life insurance balance sheets.[1] However, for fixed income funds, as a P&C insurer, presently we are subject to punitive RBC charges, i.e., Schedule D-2 Equity charge to mutual funds and Schedule BA charge to private funds. On the other hand, Life insurers have been benefiting from bond-like treatment for SVO designated private funds and will likely be able to apply the same to mutual funds given the exposure draft. This inconsistency disadvantages us as a P&C insurer.

Furthermore, as a smaller insurer, we rely on fund vehicles to access select fixed income markets and to diversify investment risk. We do not have the required scale and operational infrastructure to invest in these fixed income assets directly on our balance sheets, but fund vehicles allow more efficient market access. In our view, the ability for us to invest in fixed income funds and to receive fair RBC treatment commensurate with their SVO designations is critical for leveling market access across all insurers regardless of size.

Sincerely yours,

DocuSigned by:
William Sloan
403B1A6472D1484...
William Sloan, Chief Financial Officer

Coaction Specialty Insurance Group, Inc.
on behalf of New York Marine and General Insurance Company,
Southwest Marine and General Insurance Company, and
Gotham Insurance Company

[1] Certain Bond funds reported in 2023 Annual Statement Filings

412 Mount Kemble Ave, Suite 300C Morristown, NJ 07960
Tel: 800-774-2755 - Fax: 855-200-1158
inquiries@coactionspecialty.com

PREMERA BLUE CROSS

Attachment 6

Premera Blue Cross
PO Box 327 – MS 341
Seattle, WA 98111-0327

April 28, 2025

NAIC
1101 K Street, N.W., Suite 650
Washington, DC 20005

Dear Chairs and members of **NAIC Risk-Based Capital Investment Risk and Evaluation (E) Working Group, Capital Adequacy (E) Task Force, Health Risk-Based Capital (E) Working Group, and Valuation of Securities (E) Task Force**:

We strongly support your call at the 2025 NAIC Spring National meeting for developing a proposal for harmonization including assigning bond-like treatment to SVO designated funds across all insurer types.

We would like to point out that 96% of SVO-designated mutual funds and significant amount of private funds resided on non-life insurance balance sheets.[1] However, for fixed income funds, as a P&C (Health) insurer, presently we are subject to punitive RBC charges, i.e., Schedule D-2 Equity charge to mutual funds and Schedule BA charge to private funds. On the other hand, Life insurers have been benefiting from bond-like treatment for SVO designated private funds and will likely be able to apply the same to mutual funds given the exposure draft. This inconsistency disadvantages us as a P&C (Health) insurer.

Furthermore, as a smaller insurer, we rely on fund vehicles to access select fixed income markets and to diversify investment risk. We do not have the required scale and operational infrastructure to invest in these fixed income assets directly on our balance sheets, but fund vehicles allow more efficient market access. In our view, the ability for us to invest in fixed income funds and to receive fair RBC treatment commensurate with their SVO designations is critical for leveling market access across all insurers regardless of size.

Sincerely,

David Ratliff, CFA
VP, Treasury & Investments

[1] Certain Bond funds reported in 2023 Annual Statement Filings

THE DOCTORS COMPANY
medical ~~mal~~practice insurance

T.C. Wilson III
Chief Investment Officer

May 23, 2025

Dear Chairs and members of NAIC Risk-Based Capital Investment Risk and Evaluation (E) Working Group, Capital Adequacy (E) Task Force, Property and Casualty Risk-Based Capital (E) Working Group (Health Risk-Based Capital (E) Working Group), and Valuation of Securities (E) Task Force:

We strongly support your call at the 2025 NAIC Spring National meeting for developing a proposal for harmonization including assigning bond-like treatment to SVO designated funds across all insurer types.

We would like to point out that 96% of SVO-designated mutual funds and significant amount of private funds resided on non-life insurance balance sheets. However, for fixed income funds, as a P&C insurer, presently we are subject to punitive RBC charges, i.e., Schedule D-2 Equity charge to mutual funds and Schedule BA charge to private funds. On the other hand, Life insurers have been benefiting from bond-like treatment for SVO designated private funds and will likely be able to apply the same to mutual funds given the exposure draft. This inconsistency disadvantages us as a P&C insurer.

We utilize fund vehicles such as ETFs and mutual funds extensively for certain fixed income exposures due to their liquidity, diversification, operational and expense efficiencies. In our view, the ability to invest in fixed income funds and to receive fair RBC treatment commensurate with the associated SVO designation risk level is critical for leveling market access across all insurers regardless of size.

Sincerely,

TC Wilson
Chief Investment Officer
The Doctors Company Group

NAPA, CALIFORNIA
MAILING ADDRESS PO Box 2900, Napa, CA 94558 | **LOCAL ADDRESS** 185 Greenwood Road, Napa, CA 94558
P 800.421.2368, x1193 . 707.226.0193 | **F** 707.226.0111 | thedoctors.com | tc.wilson@thedoctors.com

PineBridge® INVESTMENTS

June 18, 2025

Dear Chairs and members of NAIC Risk-Based Capital Investment Risk and Evaluation (E) Working Group, Capital Adequacy (E) Task Force, Property and Casualty Risk-Based Capital (E) Working Group (Health Risk-Based Capital (E) Working Group), Valuation of Securities (E) Task Force, and Risk-Based Capital (RBC) Model Governance (EX) Task Force:

We commend the working groups for your efforts in harmonizing in the risk-based capital (RBC) treatment for bond funds. In our March 2025 comment letter, we proposed allowing non-life insurers to apply the Securities Valuation Office (SVO) fund designation for RBC purposes for mutual funds and private funds. This harmonization will accomplish several important objectives:

- Creating consistent RBC treatment across fund types (ETF, mutual fund, private fund) and insurer types (Life, P&C, and Health).
- Leveling the playing field for small insurers regarding market access and diversification. Small insurers, for instance, represent over 90% of the P&C industry by insurer count.
- In addition to funds, applying bond-like RBC treatment to tens of billions of non-bond debt obligations that were reclassified as Schedule BA assets and moved out of Schedule D-1 under the Principles-Based Bond Definition (PBBD). This is another area for harmonization across life and non-life.

P&C Industry is Built on Small Insurers

Over 90% of the P&C industry by insurer count is comprised of small insurers that have less than $5 billion in assets under management (AUM) per entity, totaling $375 billion in aggregate.[1] These small insurers are a key part of the industry, yet they currently face structural disadvantages. They are subject to an onerous capital charge of 20% on fixed-income funds except for ETFs; and the same treatment is applied to assets held by health insurers. In contrast, life insurers in the same funds would receive bond-like RBC treatment commensurate with their SVO designations.

	Aggregate Small Insurers AUM ($ billion)	Small Insurer Count	Industry Insurer Count	%Count
Life/Fraternal	$207	281	387	73%
P&C	$375	1035	1151	**90%**
Health	$92	280	428	65%

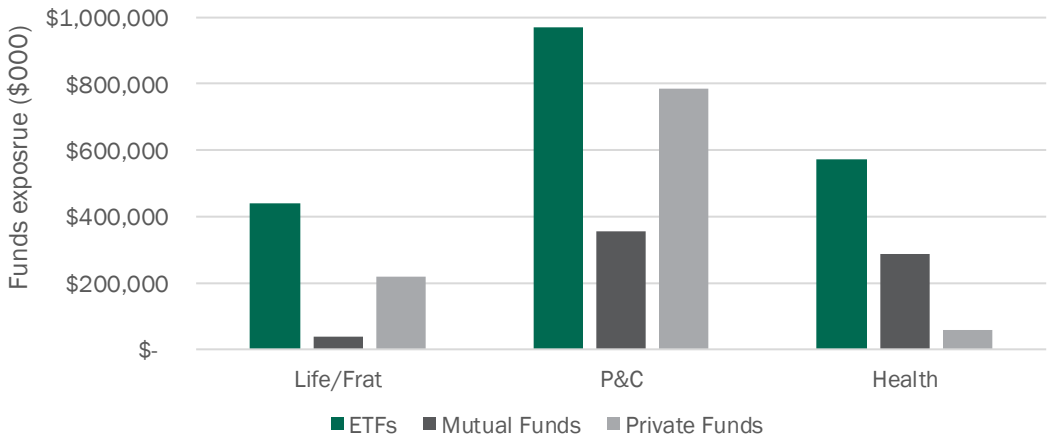
Source: PineBridge Investments. Based on 2024 Annual Statutory Flings retrieved from S&P Capital IQ

[1] Insurer counts are based on S&P Capital IQ's consolidated subgroups. **Without the subgrouping, 94% of total 2679 P&C entities fall into <$5 billion in assets.** AUM represents total cash and invested assets of general account.

PineBridge® INVESTMENTS

Investment Funds: A Critical Tool for Market Access and Diversification

Investment funds are essential tools for small insurers. They offer efficient market access, diversification, and asset management expertise that would otherwise be out of reach. For these reasons, small non-life insurers with under $5 billion in assets, are the most prolific users of funds across all categories including ETFs, mutual funds, and private funds, as indicated in the chart below.



Source: PineBridge Investments. Based on 2024 annual statutory filings data retrieved from S&P Capital IQ

A Disproportionate Burden for Non-Life Insurers

Despite their importance, non-life insurers who purchase interests in non-ETF, fixed-income funds are penalized under the current RBC framework. Using P&C insurers as an example, these funds can be subject to RBC charges as much as twenty times those for life insurers.[2]

SVO Fund Designation	Non-life Funds RBC	Bond-Like RBC (for P&C Insurers)	**Multiplier**
NAIC 1.E (A+)	20.0%	1.0%	**20.0x**
NAIC 2.B (BBB)	20.0%	2.1%	**9.5x**
NAIC 3.B (BB)	20.0%	6.0%	**3.3x**

Source: PineBridge Investments. Based on NAIC P&P manual and public materials

These onerous capital charges discourage small, non-life insurers to invest in funds, limit diversification, and disproportionately harm the insurers who need these tools the most. While covariance adjustments may dampen the unfavorable RBC impact illustrated above, for small insurers overall, we expect covariance adjustment will fall short of correcting the significant imbalance illustrated above. For example, assuming covariance adjustment would reduce P&C funds RBC charge by half from 20% to 10%, the multiples would be lowered to 10x, 4.8x, and 1.7x respectively, which remain materially in excess of the investment risk commensurate with a bond-like profile.

[2] Assuming the American Council of Life Insurers' (ACLI) proposal on harmonizing mutual fund treatment is adopted for the life insurance industry.

PineBridge® INVESTMENTS

Treatment for Non-Bond Debt with SVO Designation

Given the implementation of the PBBD, tens of billions of non-bond debt were reclassified as Schedule BA assets and moved out of D-1, increasing the size of the Schedule BA bucket materially for certain insurers.[3] Currently, for life insurers, bond-like treatment is applied to the non-bond debt with SVO designation, but not for non-life insurers. Furthermore, the larger reportable Schedule BA allocation due to non-bond debt can be a challenge for non-life insurers that face tight state regulatory limits on Schedule BA assets in addition to the penal fund RBC charges, further constraining their ability to invest in funds. For non-life insurers, applying the same bond-like treatment for non-bond debt is another area for harmonization.

A Call for Consistency and Harmonization

We are encouraged by the recent launch of the NAIC RBC Model Governance Task Force by the NAIC Executive Committee to promote RBC consistency. We believe aligning asset RBC charge with appropriate investment risk will improve the accuracy of regulatory capital assessment and promote leveled market access to diverse investment strategies–all of which goes to support a sound solvency framework.

Sincerely yours,
PineBridge Insurance Solutions and Strategies

[3] "Q1 bond definition change nets billions of dollars in reclassifications," published by S&P Capital IQ on May 19, 2025.

1100 15th Street, NW
Washington, DC 2005

June 18, 2025

aima.org

Chairman Phil Barlow
NAIC Risk-Based Capital Investment Risk and Evaluation (RBC-IRE) Working Group
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, MO 64106

Subject: Second Comment Letter on the Proposed Principles for Bond Funds

Dear Chairman Barlow and Members of the RBC-IRE Working Group,

The Alternative Credit Council[1], the private credit affiliate of the Alternative Investment Management Association Ltd (AIMA), appreciates the opportunity to provide a supplemental comment on the ACLI's proposed RBC Principles for Bond Funds ("bond fund principles").[2]

In our March 6th comment letter, we strongly supported the ACLI's proposed bond fund

[1] The Alternative Credit Council (ACC) is a global body that represents asset management firms in the private credit and direct lending space. It currently represents 250 members that manage over US$2 trillion of private credit assets. The ACC is an affiliate of AIMA and is governed by its own board, which ultimately reports to the AIMA Council. ACC members provide an important source of funding to the economy. They provide finance to mid-market corporates, SMEs, commercial and residential real estate developments, infrastructure, and the trade and receivables business. The ACC's core objectives are to provide guidance on policy and regulatory matters, support wider advocacy and educational efforts and generate industry research to strengthen the sector's sustainability and wider economic and financial benefits. Alternative credit, private debt or direct lending funds have grown substantially in recent years and are becoming a key segment of the asset management industry. The ACC seeks to explain the value of private credit by highlighting the sector's wider economic and financial stability benefits.

[2] National Association of Insurance Commissioners, *RBC Principles for Bond Funds* (February 2025), available at https://content.naic.org/sites/default/files/inline-files/Attn%202%20Principles%20for%20Bond%20Funds%20%201-9-2025%20%28ACLI%20revised%20deck%29.pdf.

principles, because they appropriately "address inconsistencies in the risk-based capital (RBC) treatment of bond funds, which arise due to differences in legal structures and accounting standards despite the economic risks being fundamentally similar." Given that the ACLI volunteered to take the initiative in response to your request, they naturally focused on life insurers.

We urge the RBC-IRE to expand its consideration of more equitable capital treatment for mutual and private bond funds across all insurer types, including property & casualty and health insurance companies. Current RBC rules place an outsized burden on small insurers – who make up the overwhelming majority of the P&C sector – by subjecting them to higher capital charges when investing in bonds via mutual and private funds. Extending the proposed principles to all insurers would enable both large and small insurers to benefit from more appropriate, risk-aligned treatment based on Securities Valuation Office (SVO) determinations.

Over 90% of P&C insurers manage less than $5 billion in assets. For these smaller firms, pooled investment vehicles such as bond funds are a vital tool. They provide affordable access to diversified fixed income exposures and professional management that would otherwise be operationally or economically out of reach. Yet under the current RBC framework, these funds attract disproportionately high capital charges, discouraging use of the very vehicles that could strengthen portfolio resilience and solvency.

To rectify these imbalances and improve capital efficiency, we recommend extending SVO-based RBC recognition to non-life insurers' bond fund holdings. This would bring much-needed consistency to capital standards, support prudent diversification, and ensure that solvency rules reflect actual investment risk, regardless of how the bond exposure is accessed or which type of insurer holds it.

We commend the RBC-IRE Working Group and the other related committees for their leadership and commitment to regulatory consistency and capital adequacy. Please contact me at Jkrol@aima.org or Joe Engelhard, Head of Private Credit & Asset Management Policy, Americas, at jengelhard@aima.org if you have any questions or would like to discuss these topics in more detail.

Sincerely,

Jiří Król
Global Head of Alternative Credit Council

CC:
NAIC Capital Adequacy (E) Task Force
Property and Casualty Risk-Based Capital Working Group
Health Risk-Based Capital Working Group
Valuation of Securities Task Force
Risk-Based Capital (RBC) Model Governance Task Force

D. Keith Bell
Senior Vice President
Accounting Policy - Finance
Plaza Building, 6th Floor

Phone: (860) 277-0537
Email: d.keith.bell@travelers.com

One Tower Square
Hartford, CT 06183

June 23, 2025

Philip Barlow, Chairman
Risk-Based Capital Investment Risk and Evaluation (E) Working Group
National Association of Insurance Commissioners
1100 Walnut Street, Suite 1500
Kansas City, MO 64106-2197

RE: Risk-Based Capital (RBC) Principles for Bond Funds Presentation

Dear Mr. Barlow:

Thank you and the NAIC Risk-Based Capital (RBC) Investment Risk and Evaluation (E) Working Group (the Working Group) for the opportunity to comment on the proposed RBC Principles for Bond Funds that was presented to the Working Group during its meeting in December 2024.

We offer the following comments.

We believe that a change to the property & casualty (P&C) RBC to accomplish a greater "look-through" for investment risk charges is unnecessary, and if pursued should be done with the knowledge that P&C RBC is an approximate tool, is not meant to differentiate the relative strength of financially viable insurers and is not (and never has been) designed as a mechanism for evaluating or optimizing an insurer's investment strategy.

Purpose of the formula

As stated in Section 8E of the NAIC's Risk-Based Capital Model Act, the RBC formula "is not intended as a means to rank insurers generally". It is meant to identify troubled companies, not to rank financially viable insurers. Additionally, it was not designed as a means of evaluating or optimizing an insurers' investment strategy or internal compensation metrics. Therefore

modifications (such as a Schedule D or Schedule BA look-through) designed to better evaluate financially strong insurers are not furthering the purpose of the RBC formulae.

RBC was designed to identify troubled companies and the differences between the life and property casualty formulas were intentionally structured to emphasize the primary risks of each business model.

For example, the P&C RBC formula is structured to emphasize underwriting risk for the 6-month to one-year policies written by P&C insurers, with a much lesser emphasis on asset risk. In contrast, the life RBC formula is structured to emphasize asset risk due to the longer-term nature (measured in years) of a life insurer's insurance products. Additionally, life insurers have the risk that policyholders may cancel and withdraw accumulated balances associated with their products which can occur at the same time that negative market conditions occur, making the asset risk associated with such products much greater than the products offered by P&C insurers.

Covariance impacts

The NAIC's P&C RBC formula currently has six elements within the square root ("covariance") component of the formula. As has been discussed before, the largest elements within the covariance part of the formula drive the final result, with the impact of the smaller elements becoming smaller or immaterial after covariance. For P&C insurers, the biggest elements are from insurance operations (i.e., premiums, reserves, cat risk, reinsurance credit risk), not investment operations. This is borne out by the risk factors for those items being comparable to or above the risk factors applied to equity items, all of which are well above the average risk factors existing for bond investments.

To isolate the impact of the various risk factors, we analyzed the reduction in total RBC ratio after covariance if an RBC component were to be completely eliminated. For the P&C formula, the risk factors are:

- R*0* Subsidiary Insurance Companies and Miscellaneous Other Amounts (Off Balance Sheet)
- R*1* Asset Risk - Fixed Income
- R*2* Asset Risk - Equity
- R*3* Asset Risk - Credit (including 1/2 reinsurance)
- R*4* Underwriting Risk - Reserves (and 1/2 reinsurance)
- R*5* Underwriting Risk - Net Written Premium
- R*cat* Catastrophe Risk

Not surprisingly, the largest impact comes from R*4* – Underwriting Risk – Reserves and ½ reinsurance, followed by R*cat* – Catastrophe Risk, and R*5* – Underwriting Risk – Net Written Premium. The elimination of any of the remaining RBC components resulted in a less than 1% change in the RBC ratio.

For an insurer with a balanced portfolio of directly held investments that are within the

limitations imposed by state investment statutes, the impact of a look-through approach for RBC is minor to negligible. In contrast, the impact of going from a 30% equity risk charge to a look-through approach for RBC can have a meaningful impact for an insurer that relies on an external investment advisor that placed a significant portion of the insurer's investment portfolio in open-ended investment company funds.

As a result, the impact of a look-through approach is generally very small for the property casualty industry overall. This conclusion is consistent with the analysis that was performed by the NAIC staff when the topic of changing the RBC treatment of Schedule BA assets to provide a look-through approach was previously discussed by the Property Casualty Risk-Based Capital (E) Working Group[1] where the following summary was provided:

> There is no significant difference on RBC ratios between Scenario 1 and Scenario 2. Most companies with difference in RBC ratio of 2% or less. Only 2 companies with difference between 2% and 5%. No company with difference greater than 5%.

P&C versus Life RBC differences

The above-described situations for the covariance formula are very different for the NAIC Life RBC formula. While most of the information underlying the NAIC P&C RBC formula is public, the same is not true for the life formula. This restricts the ability of rating agencies to rely on proprietary capital strength models vis-a-vis reliance on the NAIC formula.

With regard to the covariance formula, the largest element in the NAIC Life RBC formula is asset risk, with fixed income and asset risk combined into a single element. That fact makes changes to the asset risk factors a material item for the Life RBC formula and resulting RBC ratio, in stark contrast to the situation for the P&C formula.

Rating Agency approaches

The NAIC P&C RBC formula is not utilized by the major rating agencies in their evaluation of capital strength, and as a result, for reflection of financial strength ratings. The rating agencies all have their own proprietary formulas to determine capital strength and to differentiate among well capitalized companies. Accordingly, any look-through added to the NAIC P&C formula will have no impact on a P&C insurer's rating. There is also nothing to prevent these rating agencies from performing a Schedule D or Schedule BA look-through in their proprietary formulas, regardless of what happens to the NAIC's formulas.

The Use of NAIC RBC Formulas in Determining an Investment Strategy

It is generally agreed that any business decision should reflect the risks associated with that decision, and, for those with outside stakeholders, the external view of that

[1] See Attachment F to the Agenda and meeting materials of the Property Casualty Risk-Based Capital (E) Working Group for its meeting on Thursday, April 26, 2018.

risk. For investment decisions, the internal risk evaluation would include some level of due diligence beyond the use of a single external rating. For an evaluation of external views, that evaluation would look at the most relevant constraint or comparison.

For these reasons, we do not believe an investment look-through approach is necessary or relevant for an insurer's investment strategy to be appropriately managed.

* * * *

In summary, we do not believe it's necessary or impactful to change the P&C RBC formula to provide a look-through. However, if the Working Group concludes that such a change should be made, we recommend that it be optional for property casualty insurers as it may not have a significant impact on an insurer and it may not be cost effective as it requires either the insurer or others to file such investments with the NAIC Securities and Valuation Office (SVO.

Thank you for considering our comments. We look forward to working with you and the Working Group on this topic. If you have any questions in the interim, please do not hesitate to contact me.

Sincerely,

D. Keith Bell

cc: Julie Gann, NAIC staff

ACLI
Financial Security for Life

RBC Principles for Bond Funds

December 2024

Background

- Operating under a regulatory regime where funds with slightly different structures but same economic risks receive different RBC treatment

- (9/27/2017) VOSTF directed NAIC staff to develop a comprehensive proposal to ensure consistent treatment for investments that involved funds that invest in bond portfolios (history included in Appendix)

- (5/10/2019) VOSTF requested that CATF consider formally integrating the comprehensive instructions for mutual funds recently adopted for the P&P Manual into the NAIC RBC framework

- ACLI has agreed with RBC IRE to begin looking at three types of bond funds that get different treatment in RBC calculation. ACLI has been looking at these to determine whether the risk profiles are similar or different to warrant different treatment for different types of bond funds. While this work focuses on these three types of bond funds, ACLI is identifying principles that can be used to expand treatment from these types of bond funds to other similar bond fund types.

Focus on Bond Funds – Current State

	Bond Exchange Traded Funds (ETF)[1]	SEC Registered Bond Mutual Funds	Private Bond Funds[1]
Description	Portfolios of bonds held in a 1940 Act fund structure whose ownership interests trade on a centralized securities exchange	Open-end investment company registered with the SEC under 1940 Act that invests in a portfolio of bonds but does not trade on an exchange	Fund in LLC/LP form investing in bonds for benefit of investors
Accounting Standard	SSAP 26	SSAP 30	SSAP 48
Accounting Methodology	Fair Value unless Systematic Value elected	Fair Value	Equity Method Value of Accounting
RBC Charge	Bond RBC	Equity RBC	Bond RBC
RBC Charge Methodology	SVO WARF	30% equity charge (can file and SVO can apply WARF but cannot be used for RBC)	SVO WARF
RBC Asset Concentration Factors	Excluded[2]	Excluded[2]	Look through for inclusion
SIRI[3] Top 10 Exposure Disclosure	Excluded[2]	Excluded[2]	Look through for inclusion
Reporting Schedule	Schedule D-1	Schedule D-2-2	Schedule BA
AVR Treatment for Realized Capital Gains/Losses	Depends on NAIC rating changes	Entirely	Entirely

[1] *For funds meeting SVO criteria*
[2] *For funds that are diversified within the meaning of the Investment Company Act of 1940 [Section 5(b)(1)]*
[3] *Supplementary Investment Risks Interrogatories*

Focus on Bond Funds – Future State after Applying Principles

	Bond Exchange Traded Funds (ETF)[1]	SEC Registered Bond Mutual Funds	Private Bond Funds[1]
Description	Portfolios of bonds held in a 1940 Act fund structure whose ownership interests trade on a centralized securities exchange	Open-end investment company registered with the SEC under 1940 Act that invests in a portfolio of bonds but does not trade on an exchange	Fund in LLC/LP form investing in bonds for benefit of investors
Accounting Standard	SSAP 26	SSAP 30	SSAP 48
Accounting Methodology	Fair Value unless Systematic Value elected	Fair Value	Equity Method Value of Accounting
RBC Charge	Bond RBC	**Bond RBC**	Bond RBC
RBC Charge Methodology	SVO WARF	**SVO WARF**	SVO WARF
RBC Asset Concentration Factors	Excluded[2]	Excluded[2]	Look through for inclusion
SIRI[3] Top 10 Exposure Disclosure	Excluded[2]	Excluded[2]	Look through for inclusion
Reporting Schedule	Schedule D-1	Schedule D-2-2	Schedule BA
AVR Treatment	Depends on NAIC rating changes	Entirely	Entirely

[1] For funds meeting SVO criteria
[2] For funds that are diversified within the meaning of the Investment Company Act of 1940 [Section 5(b)(1)]
[3] Supplementary Investment Risks Interrogatories

Assumptions / Constraints for Principles

- Develop principles for consistent RBC treatment for Bond ETFs, Bond Mutual Funds, and Bond Private Funds that bear substantially the same economic risks regardless of legal form.

- The accounting for the aforementioned Bond Funds will/should not be changed because each different fund type is governed by different SSAPs.

Application of Principles

- Candidate principles developed to evaluate and ensure consistent RBC treatment between various fund types where the underlying holdings are bonds and currently meet the criteria for the SVO WARF methodology.

- Candidate principles could be applied for substantially similar bond fund investments to Bond ETFs, Bond Mutual Funds, and Bond Private Funds (currently meet the criteria for SVO WARF methodology) that the SVO could also apply their WARF as they become known.

- Candidate principles are intended to focus on the C-1 factor exclusively (i.e., excludes concentration factors).

- Principles could be leveraged for addressing similar situations where industry or regulators note similar significantly inconsistent RBC treatment for substantially similar investments. While the principles can potentially be leveraged, they will need to be tailored, as other fund types are likely not subject to the SVO WARF methodology.

Candidate Principles

1. Meets qualifications for SVO to apply WARF methodology
2. RBC is based on underlying economic risk
   - Regardless of accounting method applied, fund risk depends on the collateral pool
   - Differences between fund types are considered immaterial where such differences are deemed not to contribute risks captured by RBC (e.g., illiquidity is not measured by C-1)
3. Economic risk of fund investment is materially similar to the collateral pool
   - There are no support tranches
   - All fund investors have equal ownership status (i.e., no fund investors are more senior nor junior than others)
4. Included within an SSAP in AP&P Manual

Focus on Bond Funds – Future State after Applying Principles

	Bond Exchange Traded Funds (ETF)[1]	SEC Registered Bond Mutual Funds	Private Bond Funds[1]
Description	Portfolios of bonds held in a 1940 Act fund structure whose ownership interests trade on a centralized securities exchange	Open-end investment company registered with the SEC under 1940 Act that invests in a portfolio of bonds but does not trade on an exchange	Fund in LLC/LP form investing in bonds for benefit of investors
Accounting Standard	SSAP 26	SSAP 30	SSAP 48
Accounting Methodology	Fair Value unless Systematic Value elected	Fair Value	Equity Method Value of Accounting
RBC Charge	Bond RBC	**Bond RBC**	Bond RBC
RBC Charge Methodology	SVO WARF	**SVO WARF**	SVO WARF
RBC Asset Concentration Factors	Excluded[2]	Excluded[2]	Look through for inclusion
SIRI[3] Top 10 Exposure Disclosure	Excluded[2]	Excluded[2]	Look through for inclusion
Reporting Schedule	Schedule D-1	Schedule D-2-2	Schedule BA
AVR Treatment	Depends on NAIC rating changes	Entirely	Entirely

[1] For funds meeting SVO criteria
[2] For funds that are diversified within the meaning of the Investment Company Act of 1940 [Section 5(b)(1)]
[3] Supplementary Investment Risks Interrogatories

Key Questions for Regulators

- Which candidate-principles do regulators support?
- Are there additional principles not outlined herein that also ought to be incorporated into RBC for funds?

Appendix: History of VOSTF Treatment of Funds Investing in Bonds

- 1991 – Money market mutual funds that hold short-term U.S. Treasuries - exempted from reserve
- 1992 – Funds holding U.S. direct and full faith and credit obligations - exempted from reserving
- 1992 – Funds holding high quality corporate bonds & U.S. Government obligations - reserve as NAIC 1 bonds
- 1995 – Short-term bond funds - holding high quality corporate & U.S./GSO obligations) - Schedule D; market value & reserved as bonds for AVR and RBC
- 2003 – Exchange Traded Funds that held bonds – report as bonds
- 2005 – BA assets with fixed income characteristics can be assigned NAIC Designations
- 2017 – SVO authorized to assign NAIC Designations to private Schedule BA funds, joint ventures or partnership interests if underlying investments are fixed-income like to align with Annual Reporting Instruction

Source: September 21, 2018 Referral to the Capital Adequacy Task Force – Comprehensive Fund Proposal from VOSTF

NAIC NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

MEMORANDUM

TO: Risk-Based Capital Investment Risk and Evaluation (E) Working Group members and interested parties

FROM: Philip Barlow, Chair of the Risk-Based Capital Investment Risk and Evaluation (E) Working Group

DATE: January 6, 2025

RE: Certain Bond funds reported in 2023 Annual Statement Filings

Background

On October 22, 2024, the Working Group met and discussed the status of the Working Agenda #2 & #4 (collectively the "Fund Review Project"). Representatives from the American Council of Life Insurers (ACLI) proposed, and the Working Group agreed, to narrow the scope of the project with the intent to achieve convergence in RBC treatment among three types of funds when they predominantly invest in bonds and receive SVO-assigned designations: 1) exchange-traded funds (ETFs), 2) U.S. Securities and Exchange Commission (SEC)-registered mutual funds; and 3) private funds.

NAIC staff was directed to summarize herein the amount of respective fund types reported on insurers' 2023 annual statement filings to facilitate the Working Group's discussions.

	Bond Exchange Traded Fund (SVO-identified) Schedule D – part 1 Bonds Line 1619999999 **(as % of Total Invested Assets)**	**SEC Registered Bond Mutual Funds (SVO-identified)** Schedule D – part 2 – Section 2 Common Stock Line 5319999999, 5519999999, 5719999999 **(as % of Total Invested Assets)**	**Private Bond Funds (SVO-identified)** Schedule BA, Part 1, Line 079999999, 0899999999, 13999999, 14999999, 15999999999, 1699999999 Note A **(as % of Total Invested Assets)**	**Total Invested Assets** 2023 Asset Page Line 12
2023 Life	$5,844,611,923 **(0.11%)**	$95,524,695 **(0.00%)**	$5,858,319,676 **(0.11%)**	$5,470,188,985,349
2023 P/C	$4,934,503,172 **(0.19%)**	$1,652,371,654 **(0.06%)**	$905,395,147 **(0.03%)**	$ 2,662,293,397,830
2023 Health	$1,292,501,879 **(0.36%)**	$877,352,361 **(0.24%)**	$118,990,522 **(0.03%)**	$360,699,408,453

Note A, per 2023 AVR instruction, "… the book/adjusted carrying value of all Schedule BA assets owned where the characteristics of the underlying investment are similar to bonds (Lines 0799999 and 0899999 **and the portion of Lines 1399999, 1499999, 1599999 and 1699999 that applies to fixed income instruments similar to bonds) that have been valued according to the *Purposes and Procedures Manual of the NAIC Investment Analysis Office*** …" should be reported on Line 22 through 28 of AVR Equity Component table, thereby afforded RBC charge based on NAIC Designation. As there is no AVR reporting for P/C and Health, the statistics are obtained directly from lines 0799999, 0899999,1399999, 1499999, 1599999, and 1699999 of Schedule BA, Part 1. As such, overstatement is expected.

Please contact NAIC Staff of Risk-Based Capital Investment Risk and Evaluation (E) Working Group with any questions.

Cc: Julie Gann, Maggie Chang, Eva Yeung, Kazeem Okosun, Derek Noe

Washington, DC 444 North Capitol Street NW, Suite 700, Washington, DC 20001-1509 p | 202 471 3990

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Capital Adequacy (E) Task Force
RBC Proposal Form

☐ Capital Adequacy (E) Task Force ☐ Health RBC (E) Working Group ☐ Life RBC (E) Working Group
☐ Catastrophe Risk (E) Subgroup ☐ P/C RBC (E) Working Group ☐ Longevity Risk (A/E) Subgroup
☐ Variable Annuities Capital. & Reserve Evaluation (E/A) Subgroup ☐ Economic Scenarios (E/A) Subgroup ☒ RBC Investment Risk & (E) Working Group

DATE: 5/29/2025	**FOR NAIC USE ONLY**
CONTACT PERSON: Maggie Chang	Agenda Item # 2025-12-IRE
TELEPHONE: 816-783-8976	Year 2026 or later
EMAIL ADDRESS: mchang@naic.org	**DISPOSITION**
ON BEHALF OF: RBC Investment Risk and Evaluation (E) Working Group	**ADOPTED:** ☐ TASK FORCE (TF) ☐ WORKING GROUP (WG) ☐ SUBGROUP (SG)
NAME: Philip Barlow, Chair	**EXPOSED:** ☐ TASK FORCE (TF) ☐ WORKING GROUP (WG) ☐ SUBGROUP (SG)
TITLE: Associate Commissioner of Insurance	**REJECTED:** ☐ TF ☐ WG ☐ SG
AFFILIATION: District of Columbia	**OTHER:** ☐ DEFERRED TO ☐ REFERRED TO OTHER NAIC GROUP ☐ (SPECIFY)
ADDRESS: 1050 First Street NE Suite 801 Washington, DC 20002	

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

☐ Health RBC Blanks ☐ Property/Casualty RBC Blanks ☒ Life and Fraternal RBC Blanks
☐ Health RBC Instructions ☐ Property/Casualty RBC Instructions ☒ Life and Fraternal RBC Instructions
☐ Health RBC Formula ☐ Property/Casualty RBC Formula ☐ Life and Fraternal RBC Formula
☐ OTHER _____

DESCRIPTION/REASON OR JUSTIFICATION OF CHANGE(S)

Risk-Based Capital Investment Risk and Evaluation (E) Working Group met on February 11 and during 2025 Spring National Meeting to deliberate the merits of aligning RBC treatment for three types of funds that are identified by the NAIC Securities Valuation Office (SVO): 1) exchange-traded funds (ETFs); 2) U.S. Securities and Exchange Commission (SEC)-registered fixed income-like funds; and 3) private bond funds. As a result of the discussions, NAIC Staff is directed to develop a formal RBC proposal for Life RBC formula. Proposal 2025-12-IRE is drafted in response to the Working Group's direction.

Note that the proposed changes to LR005 Unaffiliated Preferred and Common Stock page are predicated on the changes proposed to the Annual Statement Blanks Asset Valuation Reserve (AVR) instruction. The Working Group will need to sponsor the AVR instruction changes at NAIC Blanks (E) Working Group should the Proposal 2025-12-IRE be supported by the Working Group.

Additional Staff Comments:

5/28/25 NAIC Staff had prepared a drafting notes memo that memorialized decision points in the proposal drafting process.

**** This section must be completed on all forms.** **Revised 2-2023**

NAIC NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

MEMORANDUM

TO: Risk-Based Capital Investment Risk and Evaluation (E) Working Group members and interested parties

FROM: NAIC Staff

DATE: May 28, 2025

RE: Drafting Notes – Proposal 2025-12-IRE SVO-identified funds alignment project

Background

Risk-Based Capital Investment Risk and Evaluation (E) Working Group met on February 11 and during 2025 Spring National Meeting to deliberate the merits of aligning RBC treatment for three types of funds that are identified by the NAIC Securities Valuation Office (SVO): 1) exchange-traded funds (ETFs); 2) U.S. Securities and Exchange Commission (SEC)-registered fixed income-like funds; and 3) private bond funds. As a result of the discussion, NAIC Staff is directed to develop a formal RBC proposal for Life RBC formula. This memo memorializes the decision points when drafting the proposal.

Staff drafting notes:

(1) As seen in summary below, there is no complete alignment among three types of funds in scope, with the following justifications:

- **a)** Classification, measurement convention and reporting of these fund types are under purview of other working groups. With the current reporting of SVO's Fixed Income-Like SEC-Registered Funds reported as stocks, grafting these funds into LR002 Bonds would be inappropriate.
- **b)** NAIC Staff noted that funds in scope of SVO's Fixed Income-Like SEC-Registered Funds predominantly own bonds and/or preferred stocks. As such, grafting these funds into current LR005's preferred stock section would be justifiable, especially after considering the hybrid nature of these fixed income-like funds and the potential alignment that the proposed changes created.
- **c)** Given the relatively more opaque structure of the private funds, complete alignment among all 3 types is not preferrable.
- **d)** Operational efficiencies (e.g. structure of the forecasting files, ease of maintenance) are also factored into the drafting consideration.

(2) Upon review, the NAIC staff believe the Asset Concentration instructions for LR010 and LR011 could be further enhanced to provide the following guidance:

a) Whether or not SVO identified ETFs and SVO's fixed income-like SEC-registered funds should be considered in LR010 Asset Concentration page or LR011 Common Stock Concentration page?

b) How would diversification status of the funds impact the asset concentration exposure ranking?

The proposed edits addressed the above questions and to the extent possible, aligned LR010 and LR011 instructions with Supplemental Investment Risk Interrogatory (SIRI) Line 2 and/or Line 13 instructions.

NAIC NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

Summary of key similarities/differences among the various types of SVO designated fund, should the proposal be adopted (yellow highlighted):

	SVO-identified Bond ETFs	SVO-identified Preferred Stock ETFs	SVO-identified Fixed Income-Like SEC-Registered Funds	SVO-identified Private Bond Funds
Description	SEC registered	SEC registered	SEC registered	Non-SEC registered
Accounting Standard	SSAP 26	SSAP 32	SSAP 30	SSAP 48
Reporting Schedule	Schedule D –1 Bonds	Schedule D – 2- 1 Preferred Stock	Schedule D – 2 – 2 Common Stock	Schedule BA – Other Long-Term Assets
Measurement Convention	Fair Value unless Systematic Value elected	Fair Value	Fair Value	Equity Method
RBC Reporting	LR002	LR005	LR005	LR008
RBC Risk Component	C-1o	C-1o	C-1o	C-1o
RBC Charge Methodology	Driven by SVO Designation – 20 Designation Categories Same as Bond charges	Driven by SVO Designation – 6 Designations Unaffiliated Preferred Stock charges	Driven by SVO Designation – 6 Designations Same as Unaffiliated Preferred Stock charges	Driven by SVO Designation – 6 Designations Same as Unaffiliated Preferred Stock charges
Tax effect	0.168 for NAIC 1-5 0.21 for NAIC 6	0.1575 for NAIC 1-5 0.21 for NAIC 6	0.1575 for NAIC 1-5 0.21 for NAIC 6	0.1575 for NAIC 1-5 0.21 for NAIC 6
AVR Component	Default Component	Default Component	Default Component	Equity Component
AVR factors	Bond AVR Factors	Preferred Stock AVR Factors	Same as Preferred Stock AVR Factors	Same as Preferred Stock AVR Factors
AVR Treatment for Realized Capital Gains/Losses	Depends on NAIC rating changes	Entirely	Entirely	Entirely

UNAFFILIATED PREFERRED AND COMMON STOCK

LR005

Basis of Factors

Unaffiliated Preferred Stock and NAIC Fixed Income-Like SEC Registered Funds Designated by SVO

Starting with year-end 2004 RBC, the preferred stock factors were changed to be the same as for bonds. Starting (2026 tentatively), NAIC fixed income-like SEC registered funds designated by SVO are included in the preferred stock section.

Unaffiliated Common Stock, excluding NAIC Fixed Income-Like SEC Registered Funds Designated by SVO

Federal Home Loan Bank Stock has characteristics more like a fixed-income instrument rather than common stock. A 1.1% pre-tax factor was chosen. The factor for other unaffiliated common stock is based on studies conducted at two large life insurance companies. Both of these studies focused on well-diversified portfolios with characteristics similar to the Standard and Poor's 500 and indicate that a 30% pre-tax factor is needed to provide capital to cover approximately 95% of the greatest losses in common stock value over a two-year future period. This factor assumes capital losses are unrealized and not subject to favorable tax treatment at the time loss in fair value occurs.

Two adjustments are made to the 30% pre-tax factor to account for differences between the insurer's portfolio and the Standard and Poor's 500: first, the factor for publicly traded unaffiliated common stock is adjusted up or down by the weighted average beta of the insurer's portfolio subject to a maximum of 45% and a minimum of 22.5%; and second, a common stock concentration component is calculated, adding an additional requirement equal to 50% of the beta adjusted basic requirement for the five largest holdings of common stock in the insurer's portfolio.

Specific Instructions for Application of the Formula

Lines (1) through (6)

Column (1) amounts are from the Asset Valuation Reserve Default Component, Page 30, Column 1, Lines 10 through 15 of the annual statement. Since affiliated amounts are included for affiliated companies without an AVR in the Asset Valuation Reserve Default Component, Lines 10 through 15, these affiliated amounts should be deducted in Column (2). Affiliated companies with an AVR are reported on the Asset Valuation Reserve Default Component, Line 16 and should not be included in Column (2).

Line (7)

Column (1) should equal Annual Statement Assets, Page 2, Column 3, Line 2.1 less Asset Valuation Reserve Default Component, Column 1, Line 16 plus sum of Schedule D, Part 2, Section 2 Column 6, Line 5319999999, Line 5519999999 and Line 5719999999. Column (2) should equal Schedule D Summary by Country, Column 1, Line 22 less Asset Valuation Reserve Default Component, Column 1, Line 16.

Line (13)

Amount should reflect any non-admitted unaffiliated common stock that was included in Line (11) of this page.

Line (14)

Federal Home Loan Bank common stock reported on Schedule D, Part 2, Section 2 of the annual statement should be reflected on this line.

Line (16)

The pre-tax factor for other unaffiliated common stock should be equal to 30% adjusted in the case of publicly traded stock by the weighted average beta for the insurer's portfolio of common stock, subject to a minimum factor of 22.5% and a maximum factor of 45%. The calculation of the beta adjustment should follow the procedures laid out for the similar adjustment in the asset valuation reserve calculation. Insurers that choose not to calculate a beta for their portfolio should use the maximum factor of 45%.

~~Line (17)~~
~~Column (1) should equal Annual Statement Schedule D Summary by Country, Column 1, Line 25~~ 29 ~~less Schedule D Summary by Country, Column 1, Line 24~~ 28 ~~less line (13).~~

Lines (19) and (20)
To the extent that a modco or funds withheld transaction is backed by common stock included in Line (17) of the ceding company's RBC calculation, the ceding company's credit and assuming reinsurer's charge should include a beta adjustment that is calculated in a manner consistent with the Line (17) calculation of the ceding insurer.

ASSET CONCENTRATION FACTOR

LR010

Basis of Factors

The purpose of the asset concentration factor is to reflect the additional risk of high concentrations in single exposures (represented by an individual issuer of a security or a holder of a mortgage, etc.) The concentration factor doubles the risk-based capital pre-tax factor (with a maximum of 45% pre-tax) of the 10 largest asset exposures excluding various low-risk categories or categories that already have a maximum factor. Since the risk-based capital of the assets included in the concentration factor has already been counted once in the basic formula, the asset concentration factor only serves to add in the additional risk-based capital required. The calculation is completed on a consolidated basis; however, the concentration factor is reduced by amounts already included in the concentration factors of subsidiaries to avoid double-counting.

Specific Instructions for Application of the Formula

The 10 largest asset exposures should be developed by consolidating the assets of the parent with the assets of the company's insurance and investment subsidiaries. The concentration factor component on any asset already reflected in the subsidiary's RBC for the concentration factor should be deducted from Column (4). This consolidation process affects higher tiered companies only. Companies on the lowest tier of the organizational chart will prepare the asset concentration on a "stand alone" basis.

The 10 largest exposures should exclude the following: affiliated and non-affiliated common stock, affiliated preferred stock, home office properties, policy loans, bonds for which AVR and RBC are zero, NAIC 1.A to 1.G bonds, NAIC 1 unaffiliated preferred stock, CM 1 Commercial and Farm Mortgages and any other asset categories with RBC factors less than 0.85% post-tax (this includes residential mortgages in good standing, insured or guaranteed mortgages, cash, certain cash equivalents and short-term investments) and SVO-identified exchange-traded funds (ETFs) and SVO designated fixed income-like SEC registered funds that are diversified within the meaning of the federal Investment Company Act of 1940 [Section 5(b) (1)]. For SVO-identified ETFs and SVO designated fixed income-like SEC registered funds that are not diversified within the meaning of the Investment Company Act of 1940, reporting entities are required to identify actual exposures (unless excluded categories as above) and aggregate those exposures with directly held investments to determine the 10 largest exposures. .

In determining the assets subject to the concentration factor for both C-1o and C-1cs, the ceding company should exclude any asset whose performance inures primarily (>50%) to one reinsurer under modified coinsurance or funds withheld arrangements. The reinsurer should include 100% of such assets. Any asset where no one reinsurer receives more than 50% of its performance should remain with the ceding company.

Assets should be aggregated by issuer before determining the 10 largest exposures. Aggregations should be done separately for bonds including applicable Other Invested Assets with Underlying Characteristics of Bonds that are reported in Line 22 through 28 of Asset Valuation Reserve (AVR) Equity and Other Invested Asset Component table, and preferred stock (the first six digits of the CUSIP number can be used as a starting point) (please note that the same issuer may have more than one unique series of the first six digits of the CUSIP), mortgages and real estate. Investments held within SEC and foreign registered funds (open-end, closed end, unit investment trusts and ETFs) and non-registered funds such as Schedule BA funds in joint venture, partnerships or limited liability company structures (collectively "funds") that are not diversified within the meaning of the federal Investment Company Act of 1940 [Section 5(b) (1)] ~~Securities held within Schedule BA joint ventures partnerships limited liability and other fund structures~~ should be aggregated by issuer as if the ~~securities~~ underlying investments are held directly. Likewise, where joint venture real estate is mortgaged by the insurer, both the mortgage and the joint venture real estate should be considered as part of a single exposure. Tenant exposure is not included. For bonds and unaffiliated preferred stock, aggregations should be done first for classes 2 through 6. After the 10 largest issuer exposures are chosen, any NAIC 1.A to 1.G bonds or NAIC 1 unaffiliated preferred stock, from any of these issuers should be included before doubling the risk-based capital. For some companies, following the above steps may generate less than 10 "issuer" exposures. These companies should list all available exposures.

Replicated assets other than synthetically created indices should be included in the asset concentration calculation in the same manner as other assets.

The book/adjusted carrying value of each asset is listed in Column (2).

The RBC factor will correspond to the risk-based capital category of the asset reported previously in the formula before application of the size factor for bonds. Consistent with the aggregation noted above, applicable Other Invested Assets with Underlying Characteristics of Bonds receive the same RBC factor as bonds. To get the proper Asset Type for investments within the 'Other Invested Assets with Underlying Characteristics of Bonds' AVR category, use the NAIC Designation and NAIC Designation Modifier from the 'NAIC Designation, NAIC Designation Modifier and SVO Administrative Symbol' column as reported on Schedule BA – Part 1. The RBC filing software automatically allows for an overall 45% RBC cap.

Lines (17) through (22)

The Asset Concentration RBC Requirement for a particular property plus the Real Estate RBC Requirement for a particular property cannot exceed the book/adjusted carrying value of the property. Any properties exceeding the book/adjusted carrying value must be adjusted down to the book/adjusted carrying value in Column (6) of the Asset Concentration.

Line (18), Column (4) is calculated as Line (17), Column (2) multiplied by 0.1100 plus Line (18), Column (2) multiplied by 0.0925, but not greater than Line (17), Column (2).

Line (20), Column (4) is calculated as Line (19), Column (2) multiplied by 0.1100 plus Line (20), Column (2) multiplied by 0.0925, but not greater than Line (19), Column (2).

Line (22), Column (4) is calculated as Line (21), Column (2) multiplied by 0.1300 plus Line (22), Column (2) multiplied by 0.1125, but not greater than Line (21), Column (2).

Lines (23) through (54)

The Asset Concentration RBC Requirement for a particular mortgage plus the LR004 Mortgages RBC Requirement or LR009 Schedule BA Mortgages RBC Requirement for a particular mortgage cannot exceed 45% of the book/adjusted carrying value of the mortgage. Any mortgages exceeding 45% of the book/adjusted carrying value must be adjusted down in Column (6) of the Asset Concentration.

Line (32), Column (4) is calculated as the greater of 0.1800 multiplied by [(Line (31) plus Line (32)] less Line (32) or Line (31) multiplied by the appropriate factor for the CM class to which the loan is assigned.

Line (34), Column (4) is calculated as the greater of 0.0140 multiplied by [(Line (33) plus Line (34)] less Line (34) or Line (33) multiplied by 0.0068.

Line (36), Column (4) is calculated as the greater of 0.1800 multiplied by [(Line (35) plus Line (36)] less Line (36) or Line (35) multiplied by the appropriate factor for the CM class to which the loan is assigned.

Line (38), Column (4) is calculated as the greater of 0.2200 multiplied by [(Line (37) plus Line (38)] less Line (38) or Line (37) multiplied by the appropriate factor for the CM class to which the loan is assigned.

Line (40), Column (4) is calculated as the greater of 0.0270 multiplied by [(Line (39) plus Line (40)] less Line (40) or Line (39) multiplied by 0.0068.

Line (42), Column (4) is calculated as the greater of 0.2200 multiplied by [(Line (41) plus Line (42)] less Line (42) or Line (41) multiplied by the appropriate factor for the CM class to which the loan is assigned.

Line (43), Column (4) is calculated as Line (43) multiplied by the appropriate factor for the CM class to which the loan is assigned.

Line (52), Column (4) is calculated as the greater of 0.1800 multiplied by [(Line (51) plus Line (52)] less Line (52) or Line (51) multiplied by the appropriate factor for the CM class to which the loan is assigned.

Line (54), Column (4) is calculated as the greater of 0.2200 multiplied by [(Line (53) plus Line (54)] less Line (54) or Line (53) multiplied by the appropriate factor for the CM class to which the loan is assigned.

COMMON STOCK CONCENTRATION FACTOR

LR011

Basis of Factors

The purpose of the common stock concentration factor is to reflect the additional risk of high concentrations in a single exposure of common stock. The common stock concentration factor increases by 50% the risk-based capital factor for the five largest common stock exposures. The 50% increase was chosen by comparing the total variance of particular holdings of common stock to the portion of the variance that can be explained by movements of the overall stock market. The risk-based capital of the assets included in the unaffiliated common stock concentration factor has already been counted once in the basic formula; the common stock concentration factor only serves to add in the additional risk-based capital required. The calculation is completed on a consolidated basis; however, the common stock concentration factor is reduced by amounts already included in the concentration factors of subsidiaries to avoid double-counting.

Specific Instructions for Application of the Formula

The five largest common stock exposures should be developed by consolidating the assets of the parent with the assets of the company's insurance and investment subsidiaries. The concentration factor component on any asset already reflected in the subsidiary's RBC for the concentration factor should be deducted from Column (4). This consolidation process affects higher tiered companies only. Companies on the lowest tier of the organizational chart will prepare the asset concentration on a "stand alone" basis.

The five largest holdings should exclude common stock in the FHLB, ~~investment companies (mutual funds) and common trust funds,~~ SEC and foreign registered funds (open-end, closed end, unit investment trusts and ETFs) and non-registered funds such as Schedule BA funds in joint venture, partnerships or limited liability company structures (collectively "funds") that are diversified with the meaning of the Investment Company Act of 1940 [Section 5(b) (1)], and affiliated investments other than investments in non-insurance subsidiaries. For non-insurance subsidiaries, i.e., those with affiliate code 3 on LR044 (the portion of holding companies in excess of indirect subsidiaries) and those with affiliate code 9 (other subsidiaries), the total stock investment including both preferred and common stock should be used. For funds that are not diversified within the meaning of the Investment Company Act of 1940, reporting entities are required to identify actual common stock exposures and aggregate those exposures with directly held common stock to determine the 5 largest exposures. For example, if a reporting entity directly holds common stocks in Exxon Mobil and holds a non-diversified closed-end fund with common stock in Exxon Mobil, the reporting entity shall aggregate the directly held common stock investments with the common stock investments held in the closed-end funds to determine the aggregate exposure to Exxon Mobil.

Replicated assets in the nature of common stock other than synthetically created indices should be included in the common stock concentration calculation in the same manner as other investments in common stock.

Assets should be aggregated by issuer before determining the five largest exposures.

The book/adjusted carrying value of each asset is listed in Column (2).

UNAFFILIATED PREFERRED AND COMMON STOCK

		Annual Statement Source	(1) Book / Adjusted Carrying Value	(2) Less Affiliated Preferred Stock Without AVR	(3) RBC Subtotal	(4) Factor	(5) RBC Requirement
	Unaffiliated Preferred Stock **and NAIC Fixed Income-Like SEC Registered Funds Designated by SVO**						
(1)	Preferred Stock Asset NAIC 1	AVR Default Component Column 1 Line 10	$0	$0	$0	X 0.0039 =	$0
(2)	Preferred Stock Asset NAIC 2	AVR Default Component Column 1 Line 11	$0	$0	$0	X 0.0126 =	$0
(3)	Preferred Stock Asset NAIC 3	AVR Default Component Column 1 Line 12	$0	$0	$0	X 0.0446 =	$0
(4)	Preferred Stock Asset NAIC 4	AVR Default Component Column 1 Line 13	$0	$0	$0	X 0.0970 =	$0
(5)	Preferred Stock Asset NAIC 5	AVR Default Component Column 1 Line 14	$0	$0	$0	X 0.2231 =	$0
(6)	Preferred Stock Asset NAIC 6	AVR Default Component Column 1 Line 15	$0	$0	$0	X 0.300 =	$0
(7)	Total Unaffiliated Preferred Stock **and NAIC Fixed Income-Like SEC Registered Funds Designated by SVO** (pre-MODCO/Funds Withheld)	Sum of Lines (1) through (6)	$0	$0	$0		$0
	(Column (1) should equal Page 2 Column 3 Line 2.1 less Asset Valuation Reserve Default Component Column 1 Line 16 **plus Schedule D, Part 2, Section 2 Column 6, Line 5319999999 + Line 5519999999 + 5719999999**)						
	(Column (2) should equal Schedule D Summary by Country Column 1 Line 22 less Asset Valuation Reserve Default Component Column 1 Line 16.)						
(8)	Reduction in RBC for MODCO/Funds Withheld Reinsurance Ceded Agreements	Company Records (enter a pre-tax amount)					$0
(9)	Increase in RBC for MODCO/Funds Withheld Reinsurance Assumed Agreements	Company Records (enter a pre-tax amount)					$0
(10)	Total Unaffiliated Preferred Stock **and NAIC Fixed Income-Like SEC Registered Funds Designated by SVO** (including MODCO/Funds Withheld.)	Lines (7) - (8) + (9)					$0
	Unaffiliated Common Stock, **excluding NAIC Fixed Income-Like SEC Registered Funds Designated by SVO**						
(11)	Total Common Stock, **excluding NAIC Fixed Income-Like SEC Registered Funds Designated by SVO**	**AVR Equity Component Column 1 Line 17 ~~Schedule D Summary Column 1 Line 29~~**	$0				
(12)	Less Affiliated Common Stock	**AVR Equity Component Column 1 Line ~~4+5+6+7+8+9+10+11+12+13+14+15+16 Schedule D Summary Column 1 Line 28~~**	$0				
(13)	Less Non-Admitted Unaffiliated Common Stock included in Line (11)	Company Records	$0				
(14)	Less Federal Home Loan Bank Common Stock	AVR Equity Component Column 1 Line 3	$0		$0	X 0.011 =	$0
(15)	Less Unaffiliated Private Common Stock	AVR Equity Component Column 1 Line 2	$0		$0	X 0.300 =	$0
(16)	Net Other Unaffiliated Public Common Stock	Lines (11) - (12) - (13) - (14) - (15)	$0		$0	X 0.450 † =	$0
(17)	Total Admitted Unaffiliated Common Stock, **excluding NAIC Fixed Income-Like SEC Registered Funds Designated by SVO** (pre-MODCO/Funds Withheld)	Lines (14) + (15) + (16)	$0		$0		$0
	(Column 1 should equal Schedule D Summary by Country Column 1 Line 29 less Line 28 less Line (13))						
(18)	Credit for Hedging	LR015 Hedged Asset Common Stock Schedule Column 10 Line **(**0299999**)**					$0
(19)	Reduction in RBC for MODCO/Funds Withheld Reinsurance Ceded Agreements	Company Records (enter a pre-tax amount)					$0
(20)	Increase in RBC for MODCO/Funds Withheld Reinsurance Assumed Agreements	Company Records (enter a pre-tax amount)					$0
(21)	Total Admitted Unaffiliated Common Stock, **excluding NAIC Fixed Income-Like SEC Registered Funds Designated by SVO** (including MODCO/Funds Withheld and Credit for Hedging.)	Lines (17) - (18) - (19) + (20)					$0

† The factor for publicly traded common stock should equal 30 percent adjusted up or down by the weighted average beta for the publicly traded common stock portfolio subject to a minimum of 22.5 percent and a maximum of 45 percent in the same manner that the similar 13 percent factor for publicly traded common stock in the Asset Valuation Reserve (AVR) calculation is adjusted up or down. The rules for calculating the beta adjustment are set forth in the AVR section of the annual statement instructions.

ASSET VALUATION RESERVE

This exhibit and its supporting calculations are designed to address the non-interest-related (default) and equity risks of the company's assets by calculating a basic contribution, a reserve objective and a maximum reserve amount and controlling the flow of the reserve from/into surplus. These instructions cover the Asset Valuation Reserve (AVR) for both the General Account Statement and the Separate Account Statement. If an AVR is required for investments in the Separate Accounts Statement, it is combined with the General Account AVR and accounted for in the General Accounts statement. Worksheets supporting the separate accounts portion of the reserve are included with the Separate Accounts Statement. The criteria for determining when an AVR is required for separate accounts are described in the Separate Accounts AVR Worksheet instructions.

Line 1 – Reserve as of December 31, Prior Year

Enter amounts from Line 16 of the prior year's Reserve Calculation.

Line 2 – Realized Capital Gains (Losses) Net of Taxes – General Account

Report all realized non-interest-related (default) and equity capital gains (losses) (which includes, but is not limited to, common stock, perpetual preferred stock, mandatory convertible preferred stock (regardless if redeemable or perpetual) and SVO-Identified Preferred Stock ETFs), net of capital gains tax, applicable to the assets in each component and sub-component. All realized capital gains (losses) transferred to the AVR are net of capital gains taxes thereon. Exclude all interest rate-related capital gains (losses) from the AVR.

Capital gains tax should be determined using the method developed by the company to allocate taxes used for statutory financial reporting purposes.

Report all realized capital gains (losses), net of capital gains tax, on each debt security (excluding asset-backed securities) whose NAIC/SVO designation at the end of the holding period is different from its NAIC/SVO designation at the beginning of the holding period by more than on NAIC designation shall be considered to reflect non-interest-related changes. Gains (losses) from those debt instruments shall be reported in the AVR. However, securities without more than one designation change shall be included in the AVR if it includes the following:

- Between the purchase and sale date there was an acute credit event (a known event that significantly negatively impacts the price of the security), that was not yet reflected in CRP ratings and/or the SVO feed at the time of the sale, where the resulting gain (loss) from the sale was predominantly credit related.

Determination of AVR gain (loss) on multiple lots of the same fixed income securities should follow the underlying accounting treatment in determining gain (loss). Thus, the designation, on a purchase lot basis, should be compared to the designation at the end of the holding period to determine IMR or AVR gain or (loss).

In accordance with *SSAP No. 26—Bonds*, securities with other-than-temporary impairment losses shall be recorded entirely to either AVR or IMR and not bifurcated between interest and non-interest components.

In accordance with *SSAP No. 43—Asset-Backed Securities*, for asset-backed securities only:

DEFAULT COMPONENT –
BASIC CONTRIBUTION, RESERVE OBJECTIVE AND MAXIMUM RESERVE CALCULATIONS

This supporting form is used to calculate the basic contribution, reserve objective and maximum reserve amount for the bond, preferred stock, derivative instruments and mortgage loan sub-components of the default component of the AVR. Instructions apply to the general account and the separate accounts, if applicable.

Column 5 – Basic Contribution Factor

These factors, on average, will provide an amount that approximates expected annual losses.

Include: The reserve factor calculated for mortgage loans.

Column 7 – Reserve Objective Factor

These factors are set to provide an accumulation level estimated to cover, in the aggregate, about 85% of the distribution of losses for each asset category.

Include: The reserve factor calculated for mortgage loans.

Column 9 – Maximum Reserve Factor

These factors define the largest amount that may be accumulated in the AVR. They operate to limit the level of AVR in periods of unusual capital gains or when voluntary reserves are added to the AVR.

Include: The reserve factor calculated for mortgage loans.

Lines 1 through 7 – Long-Term Bonds

Report the book/adjusted carrying value of all bonds and other fixed income instruments owned in Columns 1 and 4. Categorize the bonds and other fixed income instruments into NAIC designations 1 through 6 as directed by the *Purposes and Procedures Manual of the NAIC Investment Analysis Office*, except that, exempt obligations should be reported separately. Multiply the amount in Column 4 for each designation by the reserve factors provided in Columns 5, 7 and 9, and report the products by designation in Columns 6, 8 and 10, respectively.

Line 8 – Total Unrated Mortgage-Backed/Asset-Backed Securities Acquired by Conversion

"Unrated Mortgage-Backed/Asset-Backed Securities Acquired by Conversion" are securities acquired through the conversion of a portion of the company's assets, on or after January 1, 1993, into securities for which the company does not obtain a rating from an NAIC recognized rating agency and for which there is no recourse liability.

For instructions for completing this line, refer to "Basic Contribution, Reserve Objective and Maximum Reserve Calculation for Unrated Mortgage-Backed/Asset-Backed Securities Acquired by Conversion."

Line 9 – Total Long-Term Bonds

Column 1 should agree with Page 2, Line 1, Column 3 plus Schedule DL Part 1, Column 6, Line 2009999999.

Lines 10 through 15 – Preferred Stocks and NAIC Fixed Income-Like SEC Registered Funds Designated by SVO

Report the book/adjusted carrying value of all preferred stocks, mutual funds designated by SVO, unit investment trusts designated by SVO and closed-end funds designated by SVO (Schedule D, Part 2, Section 2, Lines 5319999999, 5519999999 and 5719999999 respectively, collectively "SVO-identified mutual funds, unit investment trusts and closed-end funds") owned in Columns 1 and 4. Note that these SVO-identified mutual funds, unit investment trusts and closed-end funds predominantly hold bonds or preferred stocks and are captured in NAIC Fixed Income-Like SEC Registered Fund List maintained by the SVO. Categorize the preferred stocks and SVO-identified mutual funds, unit investment trusts and closed-end funds into NAIC designations one through six as directed by the NAIC Securities Valuation Office instructions. Multiply the amount in Column 4 for each designation by the reserve factors provided in Columns 5, 7 and 9, and report the products by designation in Columns 6, 8 and 10, respectively.

Line 16 – Affiliated Life Insurer with AVR

Report the book/adjusted carrying value of all preferred stocks owned in a controlled or affiliated company, or a subsidiary that is a life or fraternal insurance company that holds an AVR, in Columns 1 and 4. These companies are required to carry their own asset valuation reserve or an equivalent, and therefore the preferred stocks are not required to be included in the asset valuation reserve of an affiliated company.

Line 17 – Total Preferred Stocks and NAIC Fixed Income-Like SEC Registered Funds Designated by SVO

Column 1 should agree with Page 2, Line 2.1, Column 3 plus Schedule DL, Part 1, Column 6, Line 4509999999 plus Schedule D, Part 2, Section 2, Lines 5319999999, 5519999999 and 5719999999.

Lines 18 through 24 – Short-Term Bonds

Report the book/adjusted carrying value of all short-term bonds and other short-term fixed-income investments (Schedule DA, Part 1 (Line 0509999999) and short-term bonds included on Schedule DL, Part 1, Line 9509999999 owned in Columns 1 and 4. Categorize the short-term bonds and other fixed-income instruments listed in the *Purposes and Procedures Manual of the NAIC Investment Analysis Office* into NAIC designations 1 through 6 as directed by the Securities Valuation Office instructions, except that exempt obligations listed in the *Purposes and Procedures Manual of the NAIC Investment Analysis Office* should be reported separately. Multiply the amount in Column 4 for each designation by the reserve factors provided in Columns 5, 7 and 9, and report the products by designation in Columns 6, 8 and 10, respectively.

Lines 26 through 32 – Derivative Instruments

Report the book/adjusted carrying value exposure to counterparty credit risk associated with the use of derivative instruments, net of acceptable collateral, for all counterparties by each SVO designation, from Schedule DB, Part D, Section 1, Column 8. Multiply the amount in Column 4 for each designation by the reserve factors provided in Columns 5, 7 and 9, and report the products by designation in Columns 6, 8 and 10, respectively.

Line 34 – Total

Column 6 must be reported on Page 29, Line 7, Column 1.

Column 8 must be reported on Page 29, Line 10, Column 1.

EQUITY AND OTHER INVESTED ASSET COMPONENT –
BASIC CONTRIBUTION, RESERVE OBJECTIVE AND MAXIMUM RESERVE CALCULATIONS

This supporting form is used to calculate the basic contribution, reserve objective and maximum reserve targets for the common stock, real estate and other invested assets sub-components of the equity component of the AVR. Instructions apply to the general account and to the separate accounts, if applicable.

Column 5 – Basic Contribution Factor

These factors, on average, will provide an amount that approximates expected annual losses.

Include: The reserve factor calculated for mortgage loans.

Column 7 – Reserve Objective Factor

These factors are set to provide an accumulation level estimated to cover, in the aggregate, about 85% of the distribution of losses for each asset category.

Include: The reserve factor calculated for mortgage loans.

Column 9 – Maximum Reserve Factors

These factors define the largest amount that may be accumulated in the AVR. They operate to limit the level of AVR in periods of unusual capital gains or when voluntary reserves are added to the AVR.

Include: The reserve factor calculated for mortgage loans.

Line 1 – Unaffiliated Common Stocks – Public, excluding NAIC Fixed Income-Like SEC Registered Funds Designated by SVO

Report the book/adjusted carrying value of all publicly issued common stock, including mutual funds, unit investment trusts, closed-end funds and ETFs (reported as common stock) in unaffiliated companies in Columns 1 and 4. Exclude money market mutual funds appropriately reported on Schedule E, Part 2 and exclude mutual funds designated by SVO, unit investment trusts designated by SVO and closed-end funds designated by SVO (Schedule D, Part 2, Section 2, Lines 5319999999, 5519999999 and 5719999999 respectively, collectively "SVO-identified mutual funds, unit investment trusts and closed-end funds"). Note that these SVO-identified mutual funds, unit investment trusts and closed-end funds predominantly hold bonds or preferred stocks and are captured in NAIC Fixed Income-Like SEC Registered Fund List maintained by the SVO. ~~.~~ Multiply Column 4 by the reserve factor calculated for Columns 5, 7 and 9, and report the products in Columns 6, 8 and 10, respectively.

See Footnote (a) on the Annual Statement Blank for reference on the minimum and maximum reserve factors for Line 1, Column 7 and 9.

The reserve factor is equal to 15.8% times the company's weighted average portfolio beta. The weighted average portfolio beta is the market value weighted average of four (4) portfolio betas, one from the end of the prior year and the remaining from the first three (3) quarters of the current year. Calculation of this weighted average portfolio beta is illustrated in the following worksheet:

Line 15 – Subsidiary, Controlled or Affiliated Common Stocks – Certain Other Subsidiaries

Report the book/adjusted carrying value of all subsidiary, controlled or affiliated company common stocks owned that have been valued according to *SSAP No. 97—Investments in Subsidiary, Controlled and Affiliated Entities* in Columns 1 and 4. Multiply Column 4 by the reserve factors provided in Columns 5, 7 and 9 and report the products in Columns 6, 8 and 10, respectively.

Line 16 – Subsidiary, Controlled or Affiliated Common Stocks – Other

Report that portion of the book/adjusted carrying value of all common stocks of all subsidiary, controlled or affiliated companies, that have not been included on Lines 4 through 15, in Columns 1 and 4. Multiply Column 4 by the reserve factors provided in Columns 5, 7 and 9 and report the products in Columns 6, 8 and 10, respectively.

Line 17 – Total Common Stocks, excluding NAIC Fixed Income-Like SEC Registered Funds Designated by SVO

Column 1 should agree with Page 2, Line 2.2, Column 3 plus Schedule DL, Part 1, Column 6, Line 5989999999 minus Schedule D, Part 2, Section 2, Lines 5319999999, 5519999999 and 5719999999. The Columns 6, 8 and 10 amounts, respectively, must be reported on the Asset Valuation Reserve Page, Lines 7, 10 and 9, respectively, Column 4.

Lines 18 through 20 – Real Estate

Categorize the real estate as indicated on Lines 18 through 20. Real estate reported in Schedule DL, Part 1, Line 9209999999 would also be included in this section. Report the sum of Columns 1, 2 and 3 in Column 4. Multiply the amount in Column 4 by the reserve factors provided in Columns 5, 7 and 9 and report the products in Columns 6, 8 and 10, respectively.

NOTE: Related party encumbrances are loans from the reporting entity and the amount reflected in Column 2 should be deducted in Column 2 in the corresponding section of the AVR worksheet. If the real estate entity to which the loan was made is not wholly owned by the reporting entity, the related party encumbrance amount reflected in Column 2 should be based on the reporting entity's ownership percentage. The amount of the third-party encumbrances without recourse to be reflected in Column 3 is limited to the extent that the maximum reserve (Column 6) should not exceed the sum of the book/adjusted carrying value (Column 1) plus related party encumbrances (Column 2) and third-party encumbrances with recourse which are included in Column 3.

Line 21 – Total Real Estate

The Columns 6, 8 and 10 amounts must be combined with Line 83, Columns 6, 8 and 10 amounts and reported on the Asset Valuation Reserve Page, Lines 7, 10 and 9, Column 5.

Lines 22 through 28 – Other Invested Assets with Underlying Characteristics of Bonds

Report the book/adjusted carrying value of all Schedule BA assets owned where the characteristics of the underlying investment are similar to bonds (Lines 0199999, 0299999, 0599999, 0699999, 0999999, 1099999, 1399999, and 1499999) that have been valued according to the *Purposes and Procedures Manual of the NAIC Investment Analysis Office* in Columns 1 and 4. Follow the SVO guidelines and categorize these assets into NAIC designations one through six as directed by the NAIC Securities Valuation Office instructions, except those exempt obligations (as listed in the AVR instructions for Line 2) which should be reported separately. Multiply the amount in Column 4 for each designation by the reserve factors provided in Columns 5, 7 and 9 and report the products by designation in Columns 6, 8 and 10, respectively.

Draft: 6/30/25

Risk-Based Capital Investment Risk and Evaluation (E) Working Group
Virtual Meeting
June 23, 2025

The Risk-Based Capital Investment Risk and Evaluation (E) Working Group of the Capital Adequacy (E) Task Force met June 23, 2025. The following Working Group members participated: Philip Barlow, Chair (DC); Thomas Reedy, Vice Chair (CA); Wanchin Chou (CT); Ray Spudeck and Carolyn Morgan (FL); Carrie Mears, Kevin Clark, and Mike Yanacheak (IA); Matt Cheung (IL); Roy Eft (IN); Ben Slutsker (MN); William Leung and Danielle Smith (MO); Andrea Johnson (NE); Jennifer Li (NH); Bob Kasinow and William B. Carmello (NY); Dale Bruggeman and Tom Botsko (OH); Rachel Hemphill (TX); Doug Stolte (VA); Steve Drutz and Katy Bardsley (WA); and Amy Malm (WI).

1. Adopted its Spring National Meeting Minutes

Drutz made a motion, seconded by Reedy, to adopt the Working Group's March 24 minutes *(see NAIC Proceedings – Spring 2025, Capital Adequacy (E) Task Force, Attachment Five).* The motion passed unanimously.

2. Received Comments on the ACLI's RBC Principles for Bond Funds Presentation and the NAIC's Memorandum of Bond Funds Reported in 2023 Annual Statement Filings

Barlow said that during the Working Group's Feb. 11 meeting, the Working Group exposed the American Council of Life Insurers' (ACLI's) risk-based capital (RBC) principles for bond funds presentation and the NAIC's memorandum of bond funds reported in 2023 annual statement filings. The Working Group received three comment letters, which were discussed during the Spring National Meeting. As a result of the discussions, the Working Group directed NAIC staff to draft a formal RBC proposal for the life RBC formula only. Since then, the Working Group has received nine additional comment letters. The majority of the commenters support aligning the RBC treatment of Securities Valuation Office (SVO)-designated funds across all types of businesses.

Siddharth Chakravarty (Coaction Specialty Insurance) presented his comment letter (Attachment XX). Chakravarty said Coaction Specialty Insurance is a small insurance company that commonly uses funds as investment vehicles. The comment letter expressed support for the alignment of RBC treatment as in the ACLI's presentation but requested that such treatment be applied for both life and non-life insurers.

Matt Hill (Premera Blue Cross) presented his comment letter (Attachment XX). Hill said Premea Blue Cross is a small insurance company with less than $5 billion in assets under management. He said his company commonly uses funds to gain access to certain asset classes and views the current RBC treatment for funds as less advantageous for non-life insurance companies. As such, his comment letter expressed support for the alignment of RBC treatment for fund types across all types of business.

Jeannine Heal (PineBridge Investments—PineBridge) presented a comment letter on behalf of Helen Remeza (PineBridge) (Attachment XX). Heal said PineBridge Investments manages 120 insurer portfolios globally, with $45 billion in assets under management. She said the topic of bond fund RBC alignment is important to her clients. Heal pointed out how this topic is especially important to her property/casualty (P/C) insurer clients, who are primarily small insurance companies that heavily use funds as investment vehicles. The letter expanded on PineBridge's initial comment letter presented in March and provided further details on how the current RBC treatment has created a disproportionate burden for non-life insurers, and therefore, PineBridge expressed support for promoting consistent RBC treatment for bond funds across all insurer types.

Joe Engelhard (Alternative Credit Council—ACC) presented his comment letter (Attachment XX). Engelhard said the ACC represents over 250 asset managers globally who oversee over $2 trillion in assets under management. The ACC's March comment letter presented during the Spring National Meeting strongly supported the ACLI's presentation. Engelhard said the ACC believes the principles identified by the ACLI are equally applicable to non-life insurers and submitted another comment letter to express support for broadening the scope of the harmonization to all insurer types.

Keith Bell (Travelers) presented his comment letter (Attachment XX). Bell said the comment letter laid out differences between life and P/C RBC formulas and presented impact analysis for a non-life insurer with a well-balanced portfolio of directly held investments. He concluded that the proposed RBC alignment for this insurer would be minor or even negligible. Due to this finding, Travelers does not support the presentation. That said, Bell acknowledged that the RBC impact would be meaningful should the company own its investments through fund structures, which is typically the case for smaller insurers who rely on asset managers to manage their portfolios. Given this, Bell requested that the Working Group allow optionality should the alignment project be applied to all types of business.

Chou said that while he understood the current RBC disparity may have more impact on the smaller insurers, he believed cost and benefit analysis should be performed to ensure changes are truly justifiable. He recalled that this topic was first discussed in 2018, and an analysis was performed at that time that suggested alignment was unnecessary. He requested a refreshed analysis to help the Working Group proceed.

Barlow asked if Bell could provide examples of optionality in RBC formulas. Bell said the catastrophe risk charge calculation allows filers' discretion. Bell said Travelers would like to have optionality because it interpreted the proposal as mandating insurers to file investments with the SVO. Mears clarified that mandatory filing with the SVO is neither the intent of the proposal nor the current practice with life insurers. Mears said filing with the SVO is optional, and the proposal for life insurers is to allow risk charges commensurate with the risk as represented by the SVO designations. Without any SVO designations, the investment will simply be treated as it currently is. Julie Gann (NAIC) concurred. She supplemented with another scenario of optionality: NAIC staff were made aware in the past that certain insurers did not report their investments as SVO-designated, even though SVO designations were obtained. Despite potential inconsistencies in reporting, it is not likely that anything will be enforced against that, as the filers potentially face more conservative capital charges and, therefore, do not pose a concern for the regulators.

Barlow asked Bell if the clarifications helped. Bell said the optionality helps, and his company can also rely on others' SVO filings to obtain better RBC treatment. He said the extra work to identify those instances and ensure correct filing is also manageable.

3. Exposed Proposal 2025-12-IRE (SVO Funds Alignment Project)

Barlow said a formal proposal 2025-12-IRE was drafted for life RBC only. He asked if the Working Group has an opinion on expanding the scope to include non-life formulas. Leung stated his support. Chou expressed reservations, especially because the proposal was drafted specifically for life. Barlow said he is indifferent about having referral(s) sent to health and P/C RBC working groups versus a centralized effort, and he sought Working Group members' opinions. Drutz said that as the chair of Health Risk-Based Capital (E) Working Group, he has no issue with exposure, but he seeks to ensure the health RBC changes are aligned with life's, preferably with the Health Risk-Based Capital (E) Working Group's participation. Botsko agreed. He said that as chair of the Property and Casualty Risk-Based Capital (E) Working Group, he would appreciate the Working Group's participation in weighing up all the positive and negative feedback gathered so far.

Hearing no objection from the Working Group members, interested regulators, or interested parties, Barlow exposed proposal 2025-12-IRE for a 30-day public comment period ending July 23. He also directed NAIC staff to send formal referrals to the Health Risk-Based Capital (E) Working Group and Property and Casualty Risk-Based Capital (E) Working Group, which will go through due processes when deliberating the applicability of the RBC alignment project to the respective RBC formulas.

4. Discussed Other Matters

Barlow said the Working Group is not planning to meet in person at the Summer National Meeting. The Working Group plans to receive an update from the American Academy of Actuaries (Academy) on the topic of the collateralized loan obligation (CLO) RBC project Sept. 8.

Having no further business, the Risk-Based Capital Investment Risk and Evaluation (E) Working Group adjourned.

SharePoint/NAIC Support Staff Hub/Committees/E CMTE/CADTF/2025-2-Summer/IRE/RBCIREWG 06-23-25 SPGNM Minutes TPR'd.docx

PREMERA | BLUE CROSS

Attachment 6
Premera Blue Cross
PO Box 327 – MS 341
Seattle, WA 98111-0327

NAIC
1101 K Street, N.W., Suite 650
Washington, DC 20005

August 5, 2025

Dear Chair and members of Property and Casualty Risk-Based Capital (E) Working Group (Health Risk-Based Capital (E) Working Group),

While we support the principle of developing a proposal for harmonization that includes assigning bond-like treatment to SVO designated funds, we urge the Working Group to expand this from Life companies only to all insurer types.

Industry research notes that 96% of SVO-designated mutual funds and a significant amount of private funds reside on non-life insurance balance sheets. However, for fixed income funds, as a P&C insurer, presently we are subject to punitive RBC charges, i.e., Schedule D-2 Equity charge to mutual funds and Schedule BA charge to private funds. At the same time, Life insurers have been benefiting from bond-like treatment for SVO designated private funds and will likely be able to apply the same to mutual funds given the exposure draft. This inconsistency disadvantages us as a P&C (Health).

There are capital efficiency considerations to our investment decisions. We utilize fund vehicles such as ETFs and mutual funds for certain fixed income exposures due to their liquidity, diversification, operational and expense efficiencies. We also invest in private funds for access to other types of private fixed income exposure. In our view, the ability to invest in fixed income funds and to receive fair RBC treatment commensurate with the associated SVO designation is critical for leveling market access. This is primarily true for smaller insurers, where cost or complexity issues render funds as the only reasonable vehicle, but also impacts larger insurers seeking to access more niche strategies for similar benefit.

In our opinion, this movement furthers the guiding RBC principle of "equal capital for equal risk" and agrees with the recent Principles-Based Bond Definition initiative that stressed "substance over form." Aligning these metrics improves solvency assessments for all insurance lines, not just Life companies where this has been exposed.

Sincerely,

David Ratliff, CFA
VP, Treasury & Investments

PineBridge® INVESTMENTS

September 29, 2025

TO: NAIC Property and Casualty Risk-Based Capital (E) Working Group ("P&C RBC WG")
CC: NAIC Risk-Based Capital Investment Risk and Evaluation (E) Working Group ("IRE WG"); Valuation of Securities (E) Task Force

Subject: Harmonization of RBC Treatment for Investment Funds for P&C Insurers

Dear Chair and members of Property and Casualty Risk-Based Capital (E) Working Group,

We commend the NAIC for its continued efforts to align the Risk-Based Capital ("RBC") treatment of investment funds. We are grateful to the P&C RBC WG for addressing the referral from the IRE WG regarding the harmonization across life and non-life insurers.

We appreciate the time and effort the NAIC has dedicated to this important issue. Over the last decade, investment funds have increasingly enabled insurers to access a broader and more diversified range of asset classes, many of which were previously difficult for insurers to access, especially smaller insurers. Notable examples include insurer participation in loan markets and infrastructure projects, which are now more accessible through fund structures due to their operational efficiencies and diversification benefits.

The initiative to harmonize RBC treatment for funds aligns funds risk assessment with the NAIC's Securities Valuation Office ("SVO") designation and supports certain NAIC guiding principles:

- **Substance Over Form**: Regardless of the legal form (e.g., ETF, mutual fund, or private fund), if the underlying portfolio carries the same investment risk as measured by SVO designation, the RBC charge should be applied consistently.
- **Equal Capital for Equal Risk**: RBC charges for fixed income funds should reflect the credit risk of the aggregate underlying portfolio on a look-through basis. Accordingly, fixed income funds should receive bond-like RBC treatment.

The NAIC noted that non-life insurers currently face more conservative RBC charges for funds; and non-life insurers, if aligned with life insurers, would have the option to use SVO designation for RBC relief at their discretion.[1] Specifically,

- **Mutual funds and private funds with an existing designation**. A non-life insurer would apply a bond-like RBC commensurate with the SVO designation, which is more accurate than the existing framework that assigns a flat 15% or 20% RBC charge. We also believe covariance adjustments do not fully mitigate the current punitive RBC charges to these funds.
- **Other funds.** If a fund lacks an SVO designation, the insurer or the fund manager may seek one. If no action is taken, the existing RBC charge remains unchanged and conservatively applied.

[1] The NAIC RBC IRE Working Group June 23, 2025 meeting minutes stated "filers potentially face more conservative capital charges," and "filing with the SVO is optional, and the proposal for life insurers is to allow risk charges commensurate with the risk as represented by the SVO designations."

- **Asset Concentration Factor**. Applying look-through treatment for asset concentration, consistent with the life insurance industry's implementation proposal, would also be beneficial for non-life insurers.

Sincerely yours,
PineBridge Insurance Solutions and Strategies

United Educators

7700 Wisconsin Ave #500
Bethesda, MD 20814

(301) 907-4908
www.ue.org

United Educators Insurance, A Reciprocal Risk Retention Group

October 6, 2025

Dear Chair and members of **Property and Casualty Risk-Based Capital (E) Working Group (Health Risk-Based Capital (E) Working Group)**,

I am the Chief Financial Officer and Chief Investment Officer of United Educators, a Reciprocal Risk Retention Group writing general and specialty liability products for the education space. UE supports developing a proposal for granting bond-like treatment to SVO designated funds for RBC purposes. However, we urge the Working Group to expand this treatment beyond Life companies to all insurer types, including P&C insurers like United Educators.

According to industry research, that 96% of SVO-designated mutual funds and a significant percentage of private funds reside on non-life insurance balance sheets. However, as a P&C carrier, for fixed income funds UE is presently subject to punitive RBC charges related to these funds, *i.e.*, Schedule D-2 Equity charge to mutual funds and Schedule BA charge to private funds. By contrast, Life insurers have been benefiting from bond-like treatment for SVO designated private funds and are on track to apply the same to mutual funds. This inconsistency disadvantages us as a P&C carrier, and we do not believe there is any fundamental difference that would justify this unequal treatment.

There are capital efficiency considerations to our investment decisions. We utilize fund vehicles for certain fixed income exposures due to their liquidity, diversification, operational and expense efficiencies. In our view, the ability to invest in fixed income funds and to receive fair RBC treatment commensurate with the associated SVO designation is critical for leveling market access. This is primarily true for smaller insurers like United Educators, where cost or complexity issues render funds as the only reasonable vehicle. However, it also impacts larger insurers seeking to access certain investment strategies for similar benefits.

In our view, expanding the favorable treatment of SVO designed funds for RBC purposes would be consistent with NAIC's guiding principles of "equal capital for equal risk" and "substance over form." Aligning non-life funds' RBC treatment with the life industry improves the consistency and accuracy of solvency assessments for all insurance lines, not just life insurers.

Sincerely yours,

Sean Barnes
Chief Investment Officer & Chief Financial Officer
United Educators Insurance, A Reciprocal Risk Retention Group

167 Fleet Street, London
EC4A 2EA, United Kingdom
info@aima.org

aima.org

October 6, 2025

NAIC Property and Casualty Risk-Based Capital (E) Working Group ("P&C RBC WG")
National Association of Insurance Commissioners (NAIC)
1100 Walnut Street, Suite 1500
Kansas City, MO 64106

Via Electronic Submission

Subject: Letter in support of IRE referral regarding the Securities Valuation Office (SVO) Fund Risk-Based Capital (RBC) Alignment Project

Dear Chair and Members of the P&C RBC WG,

The Alternative Credit Council1, the private credit affiliate of the Alternative Investment Management Association Ltd (AIMA), appreciates the opportunity to comment on the NAIC's continuing work to improve the consistency of Risk-Based Capital ("RBC") treatment for investment funds across the insurance industry.

[1] The Alternative Credit Council (ACC) is a global body that represents asset management firms in the private credit and direct lending space. It currently represents 250 members that manage over US$2 trillion of private credit assets. The ACC is an affiliate of AIMA and is governed by its own board, which ultimately reports to the AIMA Council. ACC members provide an important source of funding to the economy. They provide finance to mid-market corporates, SMEs, commercial and residential real estate developments, infrastructure, and the trade and receivables business. The ACC's core objectives are to provide guidance on policy and regulatory matters, support wider advocacy and educational efforts and generate industry research to strengthen the sector's sustainability and wider economic and financial benefits. Alternative credit, private debt or direct lending funds have grown substantially in recent years and are becoming a key segment of the asset management industry. The ACC seeks to explain the value of private credit by highlighting the sector's wider economic and financial stability benefits.

We commend the P&C RBC WG, the NAIC Risk-Based Capital Investment Risk and Evaluation (E) Working Group ("IRE WG"), and the Valuation of Securities (E) Task Force for their thoughtful engagement on this important issue. This initiative is commendable as it aims to enhance regulatory consistency, align economic risk, and ensure capital adequacy across bond exchange-traded funds (ETFs), SEC-registered bond mutual funds, and private bond funds.

This change is necessary because the current RBC framework applies different charges to bond funds with substantially similar economic risks. For instance, bond ETFs receive the appropriate bond charges, whereas bond mutual funds and private funds held by P&C insurers face higher equity or Schedule BA RBC charges, despite investing in bonds. These discrepancies disincentivize efficient capital allocation. The proposed unified treatment eliminates this disparity, ensuring that RBC charges reflect the underlying economic risks inside the fund.

We believe several core principles should guide RBC treatment of investment funds. First, the framework should reflect substance over form. Regardless of whether a fund is structured as a mutual fund, ETF, or private fund, if the underlying portfolio carries the same investment risk the RBC charge should be applied consistently. Second, the principle of equal capital for equal risk should apply, with RBC charges reflecting the credit risk of the aggregate underlying portfolio on a look-through basis. Funds investing primarily in fixed income instruments should receive bond-like RBC treatment. The current approach imposes disproportionately conservative charges on P&C companies – for example, flat 15%–20% factors – that do not align with the actual investment risks of the underlying bonds. Finally, we support the IRE WG proposed approach where funds eligible for SVO analysis using a WARF methodology can receive consistent capital treatment across legal forms.

Applying these principles in practice would mean that where a mutual fund, ETF, or private fund has an SVO designation, non-life insurers should be permitted to apply bond-like RBC charges consistent with that designation, rather than the current non-economic equity or Schedule BA RBC factor. Look-through treatment for asset concentration should also be extended to P&C insurers so that risk assessment is proportional and accurate. Importantly, adopting the proposed framework will allow the NAIC to apply consistent RBC treatment to substantially similar risks.

The ACC strongly supports the NAIC's initiative to modernize and harmonize RBC treatment of funds across fund types and across life and non-life insurers. By applying consistent, risk-based principles that reflect underlying economic substance, the NAIC can reduce unnecessary capital charges, improve comparability, and foster a more robust insurance investment framework.

We welcome the opportunity to engage further with the Working Group as you refine these proposals. Please contact me at Jkrol@aima.org or Joe Engelhard, Head of Private Credit & Asset Management Policy, Americas, at jengelhard@aima.org if you have any questions or would like to discuss these topics in more detail.

Sincerely,

Jiří Król
Global Head of Alternative Credit Council

Capital Adequacy (E) Task Force
RBC Proposal Form

☐ Capital Adequacy (E) Task Force ☒ Health RBC (E) Working Group ☐ Life RBC (E) Working Group
☐ Catastrophe Risk (E) Subgroup ☐ P/C RBC (E) Working Group ☐ Longevity Risk (A/E) Subgroup
☐ Variable Annuities Capital. & Reserve (E/A) Subgroup ☐ Economic Scenarios (E/A) Subgroup ☐ RBC Investment Risk & Evaluation (E) Working Group

DATE: 11/4/2025	**FOR NAIC USE ONLY**
CONTACT PERSON: Derek Noe	Agenda Item # 2025-15-CA
TELEPHONE: 816-783-8973	Year 2026
EMAIL ADDRESS: dnoe@naic.org	**DISPOSITION**
ON BEHALF OF: Health Risk-Based Capital (E) Working Group	**ADOPTED:**
NAME: Steve Drutz	☐ TASK FORCE (TF) _____
TITLE: Chief Financial Analyst/Chair	☐ WORKING GROUP (WG) _____
AFFILIATION: WA Office of Insurance Commissioner	☐ SUBGROUP (SG) _____
ADDRESS: 5000 Capital Blvd SE	**EXPOSED:**
Tumwater, WA 98501	☐ TASK FORCE (TF) _____
	☐ WORKING GROUP (WG) _____
	☐ SUBGROUP (SG) _____
	REJECTED:
	☐ TF ☐ WG ☐ SG _____
	OTHER:
	☐ DEFERRED TO _____
	☐ REFERRED TO OTHER NAIC GROUP
	☐ (SPECIFY) _____

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

☒ Health RBC Blanks ☒ Property/Casualty RBC Blanks ☒ Life and Fraternal RBC Blanks
☒ Health RBC Instructions ☒ Property/Casualty RBC Instructions ☒ Life and Fraternal RBC Instructions
☒ Health RBC Formula ☒ Property/Casualty RBC Formula ☒ Life and Fraternal RBC Formula
☐ OTHER _____

DESCRIPTION/REASON OR JUSTIFICATION OF CHANGE(S)

Changes to the structure of pages XR013, XR014, PR019, PR020, PR022, PR025, LR019, and LR020 based on the recommendations from the Academy's H-2 Underwriting Risk Report.

The Academy presented their *H2-Underwriting Risk Component and Managed Care Credit Calculation in the Health Risk-Based Capital Formula Report* to the Health Risk-Based Capital Working Group at their April 30, 2025 meeting. The report presented a revised structure to more closely align the underwriting risk pages with the lines of business as presented in the Analysis of Operations of the Health Annual Statement. The report also advised to change the implementation in the Life and Property and Casualty RBC to mirror the line of business changes in Health.

This proposal also implements a new alternative risk charge based on the recommendation from the Academy that the multiple of maximum individual risk be eliminated.

Additional Staff Comments:

LR029 Line (42) and PR022 Line (5) now include Title XVIII Medicare and Title XIX Medicaid as part of total health premium.

Income adjustment factor instructions and values will be updated during the annual Investment Income Adjustment review.

** **This section must be completed on all forms.** **Revised 2-2023**

LRBC FORMULA APPLICATION FOR P&C COMPANY'S A&H BUSINESS
PR019 – PR026

If the reporting company writes 5% or more of its premiums in A&H lines in 2023, 2024 or 2025, this section of the formula must be completed. To determine if that applies, take the sum of Lines 13, 14 and 15 of the Underwriting and Investment Exhibit Part 1B Column 6 and divide by Line 35 Column 6, and round to three decimals for each individual year. If the result is at least 0.050 in any year, this exhibit and the appropriate Schedule P adjustment must be completed.

If the company writes less than 5% of its premiums in A&H lines in 2023, 2024 and 2025, disregard this section.

PR019 - Health Premiums

Basis of Factors

Risk-based capital factors for health insurance are applied to medical, disability income, long-term care insurance and other types of health insurance premiums and claim reserves with an offset for premium stabilization reserves. For health coverage that does not fit into one of the defined categories for risk-based capital, the "Other Health" category is to be used.

Medical Insurance Premium

The business is subdivided by product into categories for individual coverages and for group and credit coverages depending on the risk related to volatility of claims. The factors were developed from a model that determines the minimum amount of surplus needed to protect the company against a worst-case scenario for each type of coverage. The results of the model were then translated into either a uniform percentage or a two-tier formula to be applied to premium. The two-tier formula reflects the decreased risk of a larger in-force block. The formula includes several changes starting in 1999 for some types of health insurance. These changes add several additional worksheets and are designed to keep the RBC amounts for health coverage consistent regardless of the RBC formula used. If the company has Comprehensive Medical business, Medicare Supplement, Dental & Vision business, or Stand-Alone Medicare Part D coverage through a PDP arrangement, it will be directed to these additional worksheets. The instructions for including paid health claims in the various categories of the Managed Care Discount Factor Calculation can be found in the instructions to PR021 Underwriting Risk – Managed Care Credit. Appendix 1 - Commonly Used Health Insurance Terms has been added to these instructions. Appendix 2 of these instructions lists commonly used terms of Stand-Alone Medicare Part D coverage. If the company has any of the three mentioned types of medical insurance, it will also be required to complete additional parts of the formula for Health Credit Risk (PR013) and Health Administrative Expenses portion in PR022.

Disability Income Premium

Prior to 2001, the individual disability income factors were based on models of the disability risk completed by several companies with significant experience in this line. The group long-term disability income risk was modeled based on methodology similar to that used by one of the largest writers of this business. The pricing risk was addressed principally as the delayed reaction to increases in incidence of new claims and to the lengthening of claims from slower recoveries than assumed.

Starting in 2001, new categories and new factors are applicable to all types of disability income premiums. These factors are based on new data and apply a model similar to that used for other health premium risk to that data.

All premium should be reported on a net of reinsurance basis.

Specific Instructions for Application of the Formula

The total of all earned premium categories PR019 Health Premiums, Line (3626), Column (1) should equal the total in ~~Schedule H~~ U&I, Part 1, Line 13.1 through 15.92, Column 41 of the Annual Statement. Earned premium for each of these coverages should be from underlying company records. Earned premium may be reported in ~~Schedule H~~U&I for Administrative Services Contract (ASC) and/or the Federal Employees Health Benefit Program (FEHBP) which are included in order that Line (3626) will equal the total in ~~Schedule H~~U&I. As such, there is no RBC factor applied to any premium reported on lines (2214), (3223) or (3424). For some of the coverages, two tier formulas apply. The calculations for these coverages shown below will not appear on the RBC filing software but will automatically be calculated by the software.

Line (1)
Health premiums for comprehensive (medical and hospital), which includes expense reimbursement hospital/medical coverage) written on individual contracts are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The premiums are carried forward to page PR020 Underwriting Risk – Premium Risk for Comprehensive Medical, Medicare Supplement and Dental & Vision, Column (1) Line (1.1). ~~Medicaid Pass-Through Payments reported as premium in the annual statement filing should be excluded from the premium amounts reported in Line 1 and reported in Line (3.3) and (10.3), respectively.~~

Line (2)
Health premiums for Title XVIII Medicare written on individual contracts are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The premiums are carried forward to page PR020 Underwriting Risk – Premium Risk for Comprehensive Medical, Medicare Supplement and Dental & Vision, Column (3) Line (1.1).

Line (3)
Health premiums for Title XIX Medicaid written on individual contracts are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The premiums are carried forward to page PR020 Underwriting Risk – Premium Risk for Comprehensive Medical, Medicare Supplement and Dental & Vision, Column (4) Line (1.1).

Line (~~4~~2)
Health premiums for Medicare supplement written on individual contracts are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The premiums are carried forward to page PR020 Underwriting Risk – Premium Risk for Comprehensive Medical, Medicare Supplement and Dental & Vision, Column (5~~2~~) Line (1.1).

Line (5~~3~~)
Health premiums for ~~dental or~~ vision coverage written on individual contracts are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The premiums are carried forward to page PR020 Underwriting Risk – Premium Risk for Comprehensive Medical, Medicare Supplement and Dental & Vision, Column (6~~3~~) Line (1.1).

Line (6)
Health premiums for Dental coverage written on individual contracts are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The premiums are carried forward to page PR020 Underwriting Risk – Premium Risk for Comprehensive Medical, Medicare Supplement and Dental & Vision, Column (7) Line (1.1).

Line (7~~3~~.1)
Health premium for Stand-Alone Medicare Part D coverage written on individual contracts - includes beneficiary premium (standard coverage portion), direct subsidy, low-income subsidy (premium portion), Part D Payment Demonstration amounts and risk corridor payment adjustments. See Appendix 2 for definition of these terms. This does not include Medicare-Advantage prescription drug coverage (MA-PD) premiums which are to be included in Line (2~~1~~). No RBC requirement is calculated in Column (2). The premium is carried forward to page PR020 Underwriting Risk – Premium Risk for Comprehensive Medical, Medicare Supplement and Dental & Vision, Column (8~~4~~) Line (1.1).

Line (7~~3~~.2)
Health incurred claims for Supplemental benefits within Stand-Alone Medicare Part D coverage written on individual contracts that is beneficiary payment (supplemental benefit portion) – e.g., coverage in the coverage gap, use of co-pays of less value than the minimum regulatory coinsurance and reduced deductible. This does not include the low-income subsidy (cost sharing portion) which is not a component of reported revenue. RBC is calculated for Supplemental benefits within Stand-Alone Medicare Part D Coverage on PR019.

Line (7~~3~~.3)
Medicaid pass-through payments reported as premium ~~and excluded from Line (1) should be reported in Line (3.3)~~.

Line (8~~4~~) and Line (19~~1~~)
There is a factor for certain types of limited benefit coverage (Hospital Indemnity, which includes a per diem for intensive care facility stays, and Specified Disease) which includes both a percent of earned premium on such insurance (3.5%) and a flat dollar amount ($50,000) to reflect the higher variability of small amounts of business.

Line (9~~5~~) and Line (20~~12~~)

There is a factor for accidental death and dismemberment (AD&D) insurance (where a single lump sum is paid) which depends on several items:

1. The maximum amount of retained risk for any single claim;
2. $300,000 if three times the maximum amount of retained risk is larger than $300,000;
3. 5.5% of earned premium to the extent the premium for AD&D is less than or equal to $10,000,000; and
4. 1.5% of earned premium in excess of $10,000,000.

There are places for reporting the total amount of earned premium and the maximum retained risk on any single claim. The actual RBC amount will be calculated automatically as the sum of (a) the lesser of items 1 and 2; plus (b) items 3 plus 4.

Line (106) and Line (2113)
A 5% factor for Other Accident coverage provides for any accident based contingency other than those contained in Lines (95) or (2012). For example, this line should contain all the premium for policies that provide coverage for accident only disability or accident only hospital indemnity. The premium for policies that contain AD&D in addition to other accident only benefits should be shown on this line.

Line (117)
Health premiums for comprehensive (medical and hospital), which includes expense reimbursement hospital/medical coverage) written on group contracts are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The premiums are carried forward to page PR020 Underwriting Risk – Premium Risk for Comprehensive Medical, Medicare Supplement and Dental & Vision, Column (21) Line (1.2).

Line (12)
Health premiums for Title XVIII Medicare written on individual contracts are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The premiums are carried forward to page PR020 Underwriting Risk – Premium Risk for Comprehensive Medical, Medicare Supplement and Dental & Vision, Column (3) Line (1.2).

Line (13)
Health premiums for Title XIX Medicaid written on individual contracts are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The premiums are carried forward to page PR020 Underwriting Risk – Premium Risk for Comprehensive Medical, Medicare Supplement and Dental & Vision, Column (4) Line (1.2).

Line (148)
Health premiums for ~~dental or~~ vision coverage written on group contracts are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The premiums are carried forward to page PR020 Underwriting Risk – Premium Risk for Comprehensive Medical, Medicare Supplement and Dental & Vision, Column (63) Line (1.2).

Line (15)
Health premiums for dental coverage written on group contracts are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The premiums are carried forward to page PR020 Underwriting Risk – Premium Risk for Comprehensive Medical, Medicare Supplement and Dental & Vision, Column (7) Line (1.2).

Line (169)
The American Academy of Actuaries submitted a report to the Health Risk-Based Capital (E) Working Group in 2016 to apply a tiered risk factor approach to the Stop-Loss Premium. The premiums for this coverage should not be included within Comprehensive Medical or Other Health Coverages (Line (25)). It is not expected that the transfer of risk through the various managed care credits will reduce the risk of stop-loss coverage. Medical Stop-Loss exhibits a much higher variability than Comprehensive Medical. A factor of 35% will be applied to the first $25,000,000 in premium and a factor of 25% will be applied to the premium in excess of $25,000,000. Stop-loss premiums should be reported on a net basis.

Line (170)
Health premiums for Medicare supplement written on group contracts are entered in Column (1) for this line, but no RBC Requirement is calculated in Column (2). The premiums are carried forward to page PR020 Underwriting Risk – Premium Risk for Comprehensive Medical, Medicare Supplement and Dental & Vision, Column (52) Line (1.2).

Line (180.1)

Health premium for Stand-Alone Medicare Part D coverage written on group contracts only if the plan sponsor has risk corridor protection for the contracts - includes beneficiary premium (standard coverage portion), direct subsidy, low-income subsidy (premium portion), Part D Payment Demonstration amounts and risk corridor protection payments. See Appendix 2 for definition of these terms. Stand-Alone Medicare Part D coverage written on group contracts without risk corridor protection is reported in Line (325) Other Health. This does not include Medicare-Advantage prescription drug coverage (MA-PD) premiums which are to be included in Line (169). No RBC requirement is calculated in Column (2). The premium is carried forward to page PR020 Underwriting Risk – Premium Risk for Comprehensive Medical, Medicare Supplement and Dental & Vision, Column (84) Line (1.2).

Line (180.2)

Health Incurred Claims for Supplemental benefits within Stand-Alone Medicare Part D coverage written on group contracts that is beneficiary payment (supplemental benefit portion) – e.g., coverage in the coverage gap, use of co-pays of less value than the minimum regulatory coinsurance and reduced deductible where the plan sponsor has risk corridor protection for the group contract's standard benefit design coverage. This does not include the low-income subsidy (cost-sharing portion) which is not a component of reported revenue. RBC is calculated for Supplemental benefits within Part D Coverage on PR019.

Line (180.3)

Medicaid pass-through payments reported as premium ~~and excluded from Line (7) should be reported in Line (10.3)~~.

Lines (2315) through (3424)

Disability income premiums are to be separately entered depending on category (Individual and Group). For Individual, a further split is between noncancellable (NC) or other (GR, etc.) For Group, the further splits are between Credit Monthly Balance, Credit Single Premium (with additional reserves), Credit Single Premium (without additional reserves), Group Long-Term (benefit periods of two years or longer) and Group Short-Term (benefit periods less than two years). For long-term care insurance, premiums are reported separately for Individual noncancellable, Individual (other than NC) and Group LTCI. The RBC factors vary by the amount of premium reported such that a higher factor is applied to amounts below $50,000,000 for similar types. Starting in 2001, in determining the premiums subject to the higher factors, individual disability income noncancellable and other is combined. All types of Group and Credit are combined in a different category from Individual. For long-term care, all types (Individual and Group) are combined.

The following table describes the calculation process used to assign RBC charges to disability income business. The reference to line numbers (e.g., Line 815) represent the actual line numbers used in the formula page, but the subdivisions of those lines [e.g., a), b), etc.] do not exist in the formula page. The total RBC Requirement shown in the last (Total) subdivision of each line will be included in Column (2) for that line in the formula page.

		Annual Statement Source	Statement Value	Factor	RBC Requirement
	Disability Income Premium				
Line (2315)	Noncancellable Disability Income - Individual Morbidity	Earned Premium included in U&I Part 1, Column 4 Line 15.3 ~~Schedule H, Part 1, Column 21, Line 2,~~ in part			
a)	First $50 Million Earned Premium of Line (2315)	Company Records		X 0.350 =	
b)	Over $50 Million Earned Premium of Line (2315)	Company Records		X 0.150 =	
c)	Total Noncancellable Disability Income - Individual Morbidity	a) of Line (2315) + b) of Line (2315), Column (2)			
Line (2416)	Other Disability Income – Individual Morbidity	Earned Premium included in U&I Part 1, Column 4 Line 15.3 ~~Schedule H, Part 1, Column 21, Line 2,~~ in part			
a)	Earned Premium in Line (2416) [up to $50 million less premium in a) of Line (2315)]	Company Records		X 0.250 =	
b)	Earned Premium in Line (2416) not included in a) of Line (2416)	Company Records		X 0.070 =	
c)	Total Other Disability Income - Individual Morbidity	a) of Line (2416) + b) of Line (2416), Column (2)			
Line (2517)	Disability Income - Credit Monthly Balance	Earned Premium included in U&I Part 1, Column 4 Line 15.3 ~~Schedule H, Part 1, Column 21, Line 2,~~ in part			
a)	First $50 Million Earned Premium of Line (2517)	Company Records		X 0.200 =	
b)	Over $50 Million Earned Premium of Line (2517)	Company Records		X 0.030 =	
c)	Total Disability Income - Credit Monthly Balance	a) of Line (2517) + b) of Line (2517), Column (2)			
Line (2618)	Disability Income – Group Long Term	Earned Premium included in U&I Part 1, Column 4 Line 15.3 ~~Schedule H, Part 1, Column 21, Line 2,~~ in part			
a)	Earned Premium in Line (2618) [up to $50 million less premium in a) of Line (2517)]	Company Records		X 0.150 =	
b)	Earned Premium in Line (2618) not included in a) of Line (2618)	Company Records		X 0.030 =	
c)	Total Disability Income – Group Long Term	a) of Line (2618) + b) of Line (2618), Column (2)			

		Annual Statement Source	Statement Value	Factor	RBC Requirement
	Disability Income Premium				
Line (27~~19~~)	Disability Income - Credit Single Premium with Additional Reserves	Earned Premium included in U&I Part 1, Column 4 Line 15.3~~Schedule H, Part 1, Column 21, Line 2,~~ in part. This amount to be reported on Health Premiums, Line (27~~19~~)			
a)	Additional Reserves for Credit Disability Plans	PR019 Health Premiums Column (1) Line (37~~27~~)			
b)	Additional Reserves for Credit Disability Plans, Prior Year	PR019 Health Premiums Column (1) Line (38~~28~~)			
c)	Subtotal Disability Income - Credit Single Premium with Additional Reserves	Line (27~~19~~) - a) of Line (27~~19~~) + b) of Line (27~~19~~)			
d)	Earned Premium in c) [up to $50 million less premium in a) of Line (25~~17~~) + a) of Line (26~~18~~)]	Company Records		X 0.100 =	
e)	Earned Premium in c) of Line (27~~19~~) not included in d) of Line (27~~19~~)	Company Records		X 0.030 =	
f)	Total Disability Income - Credit Single Premium with Additional Reserves	d) of Line (27~~19~~) + e) of Line (27~~19~~), Column (2)			
Line (28~~0~~)	Disability Income – Credit Single Premium without Additional Reserves	Earned Premium included in U&I Part 1, Column 4 Line 15.3~~Schedule H, Part 1, Column 21, Line 2,~~ in part			
a)	Earned Premium in Line (28~~0~~) [up to $50 million less premium in a) of Line (25~~17~~) + a) of Line (26~~18~~) + d) of Line (27~~19~~)]	Company Records		X 0.150 =	
b)	Earned Premium in Line (28~~0~~) not included in a) of Line (28~~0~~)	Company Records		X 0.030 =	
c)	Total Disability Income – Credit Single Premium without Additional Reserves	a) of Line (28~~0~~) + b) of Line (28~~0~~), Column (2)			
Line (29~~1~~)	Disability Income – Group Short Term	Earned Premium included in U&I Part 1, Column 4 Line 15.3~~Schedule H, Part 1, Column 21, Line 2,~~ in part			
a)	Earned Premium in Line (29~~1~~) [up to $50 million less premium in a) of Line (25~~17~~) + a) of Line (26~~18~~) + d) of Line (27~~19~~) + a) of Line (28~~0~~)]	Company Records		X 0.050 =	
b)	Earned Premium in Line (29~~1~~) not included in a) of Line (29~~1~~)	Company Records		X 0.030 =	
c)	Total Disability Income – Group Short Term	a) of Line (29~~1~~) + b) of Line (29~~1~~), Column (2)			
Line (31~~22~~)	Noncancellable Long-Term Care Premium – Rate risk	Earned Premium (U&I Part 1, Column 4 Line 15.7~~Schedule H, Part 1, Column 23, Line 2~~, in part)		X 0.100 =	

Line (~~2~~35)

Most Health Premium will have been included in one of the prior lines. In the event that some coverage does not fit into any of these categories, "Other Health" category is applied with a 12% factor, which is from 1998 formula for Other Limited Benefits Anticipating Rate Increases. Stop-loss premiums are addressed separately in Line (16~~9~~).

Stop-Loss Electronic-Only Tables

The Health Risk-Based Capital (E) Working Group revised the stop-loss factors in 2017. The American Academy of Actuaries submitted a report to the Health Risk-Based Capital (E) Working Group and suggested that the factors be revised based on data from 1998-2008. The Health Risk-Based Capital (E) Working Group agreed to continue analyzing the stop-loss factors as a result of the changes to life-time maximum amounts included in the Federal Affordable Care Act.

Electronic Table 1 – Stop-Loss Interrogatories

The interrogatories are designed to gather the information by product type and will be reviewed on a go-forward basis. The data will be used in the continued evaluation of the factors. The data collected will be collected on a one-year run-out basis. For example, the RBC filed at year-end **2018**, will reflect the incurred data for calendar year **2017** run-out through December 31, **2018**.

For those insurers where the stop-loss gross premium written is both under $2,000,000 and is less than 10% of the insurer's total gross premium written are exempt from completing Table 1.

The categories used in the interrogatories are separated as follows:

Product Type

Specific Stop-Loss (including aggregating specific) = This coverage was included in the 1998 to 2008 factor development.
Aggregate Stop-Loss = This coverage was included in the 1998 to 2008 factor development.
HMO Reinsurance = Specific reinsurance of an HMO's commercial, Medicare, Medicaid or Point of Service products. This coverage was not included in the 1998 to 2008 factor development.
Provider Excess = Specific excess written on Providers including IPAs, hospitals, clinics. This coverage was not included in the 1998 to 2008 factor development.
Medical Excess Reinsurance = Specific reinsurance of an insurance company's medical business (first dollar or self-insured). This coverage was not included in the 1998 to 2008 factor development.

Please do not include quota share or excess reinsurance written on stop-loss business.

Calendar Year - Submit experience information for the calendar year preceding the year for which the RBC report is being filed; e.g., the RBC report filed for **2019** should provide experience information for calendar year **2018** with run-out through December 31, **2019**. If the contract year does not follow a calendar year (e.g., 7/1-6/30), the impact on the interrogatories would be spread across two years in the same manner it would be reported in two annual statements (i.e., half of premium and the applicable portion of the liability/expense would hit the first year, the remainder would hit the second year). Report based on the calendar year even if the calendar year includes two separate contracts (For example: Contract 1 started on 7/1/2017 and ran through 6/30/2018. Contract 2 started on 7/1/2018 and ran through 6/30/2019. The 2018 calendar year experience information would be comprised of the experience information in Contract 1 from 1/1/2018 through 6/30/2018 AND Contract 2 from 7/1/2018 to 12/31/2018.). Contracts that do not follow a calendar year should NOT be excluded.

Total [Gross/Net] Premium - This is the [gross/net] premium revenue, [before/after] ceded reinsurance and including commissions. Report the data as reported for the prior calendar year including amounts paid for the prior year through the end of the current calendar year. Do not adjust for any anomalies in the experience.
Total Gross Claims + Expenses =

Total Gross Claims - These are the gross incurred claims, before ceded reinsurance. Do not adjust for any anomalies in the experience. Claims are defined as claims incurred during prior calendar year and paid through the end of the current calendar (reporting) year, plus any remaining gross claim liability. .

+

Expenses – These are the gross incurred expense during the prior calendar year and paid through the end of the current reporting year plus any incurred expenses that are unpaid as of the end of the run-out period. Premium tax amounts should be included in the expense amounts; however, income taxes would be excluded.

Gross Combined Ratio - This is equal to (Total Gross Claims + Expenses) / Total Gross Premium.

Premiums Net of Reinsurance – This is the net premium revenue, net of reinsurance. Report data as reported in the annual statement and do not adjust for any anomalies in the experience.

Total Net Claims + Expenses =

Total Net Claims - These are the net incurred claims after ceded reinsurance. Do not adjust for any anomalies in the experience. Claims are defined as claims incurred during prior calendar year and paid through the end of the current calendar (reporting) year, plus any remaining net claim liability.

+

Expenses – These are the net incurred expenses during the prior calendar year and paid through the end of the current reporting year plus any incurred expenses that are unpaid as of the end of the run-out period. Premium tax amounts should be included in the expense amounts; however, income taxes would be excluded.

Net Combined Ratio – This is equal to (Total Net Claims + Expenses)/Premiums Net of Reinsurance.

Table 2a – Calendar Year Specific Stop-Loss Contracts by Group Size and Table 2b – Calendar Year Aggregate Stop-Loss Contract by Group Size

For those insurers where the stop-loss gross premium written is both under $2,000,000 and is less than 10% of the insurer's total gross premium written are exempt from completing Table 2.

Table 2a should reflect the specific stop-loss data and Table 2b should reflect the aggregate stop-loss data.

Report the number of groups, average specific attachment point and average aggregate attachment as of December 31st of the calendar (reporting) year. If the contract does not follow a calendar year (e.g. 7/1-6/30), report the policies written during the year of the annual statement and in effect at the end of the calendar year.

The number of covered lives in a group (group size) should be based on the size of the group as of December 31 of the calendar year. The number of covered lives counted should include all enrolled members (that is, total number of lives insured, including dependents).

Number of Groups – list the number of groups for each stop-loss contract based on the number of covered lives in the group.

Average Specific Attachment Point (Table 2a) - The average should be weighted by the number of covered lives in the respective group size bracket, excluding the count of covered lives within the denominator where specific/aggregate coverage was not provided.

Example: Average Specific Attachment Point ($) (Table 2a, 50-99 Covered Lives in Group) =

(Sum of Specific Attachment Points X Reported Lives) / (Sum of Reported Lives)

Insured Group	Specific Att Point ($)	Aggregate Att (%)	Number of Lives	Include Exclude	Reason to Exclude
1	$ 200,000	115%	90	Include	
2	$ 100,000	120%	60	Include	
3	$ 50,000	140%	40	Exclude	Not in Group Size Band
4	$ 120,000	N/A	50	Include	

Calculation: (200,000 x 90 + 100,000 x 60 + 120,000 x 50) / (90 + 60 + 50)

= $150,000

Average Aggregate Attachment Percentage (Table 2b) – Is based on expected claims. Subgroups that have separate stop-loss contracts should be aggregated in terms of determining the group size. The average should be weighted by expected claims in the respective group size bracket, excluding the expected claims within the denominator where aggregate coverage was not provided.

Example: Average Aggregate Attachment Percentage (%) (Table 2b, 50-99 Covered Lives in Group) =
(Sum of Expected Claims x Attachment Percentage %) / (Sum of Expected Claims)

Insured Group	Specific Att Point ($)	Aggregate Att (%)	Expected Claims	Number of Lives	Include Exclude
1	$ 200,000	115%	$ 500,000	90	Include
2	$ 100,000	120%	$ 300,000	60	Include
3	$ 50,000	140%	$ 200,000	40	Exclude
4	$ 120,000	N/A	$ 400,000	50	Exclude

Calculation: (500,000 x 115% + 300,000 x 120%) / (500,000 + 300,000)
= 116.7%

Footnote – The number of covered lives for stop-loss coverage is reported in the Accident and Health Policy Experience Exhibit for Year (April 1st filing) in Column 13, Section C. Other Business, Line 2.

If stop-loss policies are sold on a Per Employee Per Month basis and the actual number of covered lives is unknown, it would be reasonable to estimate the number of covered lives if the exact information is not administratively available to the reporting entity. This method of estimation may be similar to estimations provided for the Accident and Health Policy Experience Exhibit for Year. If estimated, an explanation of the method used to estimate the number of covered lives should be provided in the footnote.

PR020 - Underwriting Risk – Premium Risk for Comprehensive Medical, Medicare Supplement and Dental and Vision

(Underwriting Risk – Experience Fluctuation Factor in the LRBC Formula)

The underwriting risk generates the RBC requirement for the risk of fluctuations in underwriting experience. The credit that is allowed for managed care in this worksheet comes from PR021 Underwriting Risk - Managed Care Credit.

The columns are as follows:

Column (1) – Comprehensive (Hospital & Medical) Individual Policies that provide fully insured indemnity, HMO, PPO, or Fee for Service coverage for hospital, medical, and surgical expenses. This category excludes Short-Term Medical Insurance, the Federal Employees Health Benefit Program and non-comprehensive coverage such as basic hospital only, medical only, hospital confinement indemnity, surgical, outpatient indemnity, specified disease, intensive care, and organ and tissue transplant coverage as well as any other coverage described in the other categories of this exhibit.

Column (2) – Comprehensive (Hospital & Medical) Group Policies that provide fully insured indemnity, HMO, PPO, or Fee for Service coverage for hospital, medical, and surgical expenses. This category excludes Short-Term Medical Insurance, the Federal Employees Health Benefit Program and non-comprehensive coverage such as basic hospital only, medical only, hospital confinement indemnity, surgical, outpatient indemnity, specified disease, intensive care, and organ and tissue transplant coverage as well as any other coverage described in the other categories of this exhibit.

Column (3) – Title XVIII Medicare Policies issued as Medicare Advantage Plans providing Medicare benefits to Medicare eligible beneficiaries created by title XVIII of the Social Security Act of 1965. This includes Medicare Managed Care Plans (i.e., HMO and PPO) and Medicare Private Fee-for-Service Plans. This also includes all Medicare Part D Prescription Drug Coverage through a Medicare Advantage product and whether sold directly to an individual or through a group.

Column (4) – Title XIX Medicaid Policies issued in association with the Federal/State entitlement program created by Title XIX of the Social Security Act of 1965 that pays for medical assistance for certain individuals and families with low incomes and resources.

Column (5) – Medicare Supplement. Policies that qualify as Medicare Supplement policy forms as defined in the NAIC Medicare Supplement Insurance Minimum Standards Model Act. This includes standardized plans, pre-standardized plans and Medicare select. Does not include Medicare (Title XVIII) or Medicaid (Title XIX) risk contracts.

Column (6) – Vision Policies providing for vision only coverage issued as stand-alone vision or as a rider to a medical policy that is not related to the medical policy through premiums, deductibles or out-of-pocket limits. Does not include self-insured business, federal employees health benefit plans (FEHBP), or Medicare and Medicaid programs.

Column (7) – Dental Policies providing for dental only coverage (dental treatment benefits such as routine dental examinations, preventive dental work, and dental procedures needed to treat tooth decay and diseases of the teeth and jaw) issued as stand-alone dental or as a rider to a medical policy that is not related to the medical policy through premiums, deductibles or out-of-pocket limits. If dental benefits are part of a comprehensive medical plan, then include data under comprehensive/major medical category. Does not include self-insured business, as well as federal employee's health benefits plans (FEHBP), or Medicare and Medicaid programs.

Column (8) – Stand-Alone Medicare Part D Coverage. This includes both individual coverage and group coverage of Medicare Part D coverage where the plan sponsor has risk corridor protection. See INT 05-05: Accounting for Revenue under Medicare Part D Coverage for definition of these terms. Medicare drug benefits included in major medical plans or benefits that do not meet the above criteria are not to be included in this line. Supplemental benefits within Medicare Part D (benefits in excess of the standard benefit design) are addressed separately on page PR019. Employer-based Part D coverage that is in an uninsured plan as defined in *SSAP No. 47—Uninsured Plans* is not to be included here

Description from *Life Risk-Based Capital Report Including Overview & Instructions*:

Underwriting risk is present when the next dollar of unexpected claims payments comes directly out of the company's capital and surplus. It represents the risk that the portion of premiums intended to cover medical expenses will be insufficient to pay such expense. For example, an insurer may charge an individual $100 in premium in exchange for a guaranty that all medical costs will be paid by the insurer. If the individual incurs $101 in claims costs, the company's surplus will decline because it did not charge a sufficient premium to pick up the additional risk for that individual.

There are other arrangements where the insurer is not at risk for excessive claims payments, such as when an insurer agrees to serve as a third-party administrator for a self-insured employer. The self-insured employer pays for actual claims costs, so the risk of excessive claims experience is borne by the self-insured employer, not the insurer. The underwriting risk section of the RBC formula, therefore, requires some adjustments to remove non-risk business (both premiums and claims) before the RBC requirement is calculated.

For Stand-Alone Medicare Part D Coverage, the reduction in uncertainty comes from two federal supports. The reinsurance coverage is optional in that a plan sponsor may elect to participate in the Part D Payment Demonstration. The risk corridor protection is expected to have less impact after the first few years. To allow flexibility within the RBC formula, Lines (10.1) through (10.4) of PR021 will be used to give credit for the programs in which the plan sponsor participates. While all PDPs will have formularies and may utilize other methods to reduce uncertainty, for the near future no other managed care credits are allowed for this coverage.

Claims Experience Fluctuation

The RBC requirement for claims experience fluctuation is based on the greater of the following calculations:

A. Underwriting risk revenue times the underwriting risk claims ratio times a set of factors.

or

B. An alternate risk charge that addresses the risk of catastrophic claims on any single individual. The alternate risk charge is calculated for each type of health coverage~~, but only the largest value is compared to the value from A. above for that type~~. ~~The alternate risk charge is equal to a multiple of the maximum retained risk on any single individual in a claims year. The maximum retained risk (level of potential claim exposure) is capped at two times the maximum or $1,500,000 for Comprehensive Medical; two times the maximum or $50,000 for each of Medicare Supplement business and dental coverage and six times the maximum or $1,500,000 for Stand-Alone Medicare Part D coverage.~~ The maximum retained risk (level of potential claim exposure) is $500,000 per line for medical coverage; $50,000 for all other coverage except Medicare Part D coverage and $150,000 for Medicare Part D coverage.

Line (1) through Line (19~~8~~)

There are ~~four~~ eight lines of business used in the property/casualty RBC formula for calculating the RBC requirement in this worksheet. Other health coverages will continue to use the factors on PR019 Health Premiums. The four lines of business are Column (1) Comprehensive Medical ~~and Hospital~~Individual; Column (2) Comprehensive Medical Group; Column (3) Title XVIII Medicare; Column (4) Title XIX Medicaid; Column (5~~2~~) Medicare Supplement; Column (6~~3~~) ~~Dental &~~ Vision; Column (7) Vision; and Column (8~~4~~) Stand-Alone Medicare Part D coverage. Each of the ~~four~~ eight lines of business has its own column in the Underwriting Risk – Premium Risk table. The categories listed in the columns of this worksheet include premiums plus all risk revenue that is received from another health entity in exchange for medical services provided to such Health entity's members. ~~The descriptions of the items are as follows:~~

~~Comprehensive Medical & Hospital~~
~~Includes policies providing for medical coverages including hospital, surgical, major medical, Medicare risk coverage (but NOT Medicare Supplement), and Medicaid risk coverage. This includes Medicare Advantage, with or without prescription drug benefits. This category DOES NOT include administrative services contracts (ASC) or administrative services only (ASO) contracts, or any non-underwritten business. These programs are reported in PR022 Underwriting Risk – Other, Business Risk section of the formula. Neither does it include Federal Employees Health Benefit Program (FEHBP) business, which is reported on Line (3) of PR022 Underwriting Risk – Other. The alternative risk charge, which is twice the maximum retained risk after reinsurance on any single individual, cannot exceed $1,500,000.~~

~~Medical Only (non-hospital professional services)~~
~~Include in Comprehensive Medical.~~

~~Medicare Supplement~~
~~This is business reported in the Medicare Supplement Insurance Experience Exhibit of the annual statement. Medicare risk business is reported under comprehensive medical and hospital.~~

~~Dental & Vision~~
~~These are premiums for policies providing for dental or vision only coverage issued as stand-alone dental or vision or as a rider to a medical policy that is not related to the medical policy through deductibles or out-of-pocket limits.~~

~~Stand-Alone Medicare Part D Coverage~~
~~Includes policies and contracts providing the standard coverage for individuals enrolled in Stand-Alone Medicare Part D and the insurance is a federally approved PDP with risk corridor protection. It does not include risk revenue for Supplemental benefits within Stand-Alone Medicare Part D coverage that is a portion of the PDP's approved package. It does not include employer coverage unless the coverage meets the above criteria. Where there is a federal subsidy to the employer in lieu of risk corridor protection, the premiums are to be reported as "Other Health."~~

~~Other Health Coverages~~
~~Include in the appropriate line on PR019 Health Premiums.~~

The following paragraphs explain the meaning of each line of the worksheet table for computing the experience fluctuation underwriting risk RBC.

Line (1) Premium

This is the amount of money charged by the insurer for the specified benefit plan. It is the earned premium, net of reinsurance. It does not include receipts under administrative services only (ASO) contracts; or administrative services contracts (ASC); or any non-risk business; or premium for the Federal Employees Health Benefit Programs (FEHBP), which has a risk factor relating to incurred claims reported separately under PR022 Underwriting Risk – Other, Line (3).

NOTE: Where premiums are paid on a monthly basis, they are generally fully earned at the end of the month for which coverage is provided. In cases where the mode of payment is less frequent than monthly, a portion of the premium payment will be unearned at the end of any given reporting period.

For Stand-Alone Medicare Part D Coverage, this will include only certain amounts paid by the individual, an employer or CMS. See Appendix 2 for details of what is and is not premium income.

The Line 1.3 sources for each column are given in the table below:

PR020 Column	**Annual Statement Source**
Comprehensive Medical Individual	U&I Part 1, Column 4 Line 13.1
Comprehensive Medical Group	U&I Part 1, Column 4 Line 13.2
Title XVIII Medicare	U&I Part 1, Column 4 Line 15.6
Title XIX Medicaid	U&I Part 1, Column 4 Line 15.5
Medicare Supplement	U&I Part 1, Column 4 Line 15.4
Vision	U&I Part 1, Column 4 Line 15.1
Dental	U&I Part 1, Column 4 Line 15.2
Stand-Alone Medicare Part D Coverage	Company Records, Earned Premium Net of Reinsurance

~~Line (2) Title XVIII Medicare~~
~~This is the earned amount of money charged by the insurer (net of reinsurance) for Medicare risk business where the insurer, for a fee, agrees to cover the full medical costs of Medicare subscribers. This includes the premium and federal government's direct subsidy for prescription drug coverage under MA-PD plans.~~

~~Line (3) Title XIX Medicaid~~
~~This is the earned amount of money charged by the insurer for Medicaid risk business where the insurer, for a fee, agrees to cover the full medical costs of Medicaid subscribers. Revenue from Stand-Alone Medicare Part D coverage under the low-income subsidy (cost sharing portion) and low-income subsidy (premium portion) are not included in this line.~~

Line (24) Other Health Risk Revenue
Earned amounts charged by the reporting company as a provider or intermediary for specified medical (e.g., full professional, dental, radiology, etc.) services provided to the policyholders or members of another insurer or health insurance company (Health). Unlike premiums, which are collected from an employer group or individual member, risk revenue is the prepaid (usually on a capitated basis) payments, made by another insurer or health insurance company to the company in exchange for services to be provided or offered by such organization. Payments to providers under risk revenue arrangements are included in the RBC calculation as underwriting risk revenue and are included in the calculation of managed care credits. Exclude fee-for-service revenue received by the company from a health entity. This revenue is reported in the business risk section of the formula as health ASO/ASC and limited risk revenue.

Line (3) Medicaid Pass-Through Payments Reported as Premiums.
Amount is equal to the total amount reported in PR019 Lines 7.3 and Line 18.3

Line (~~4~~5) Underwriting Risk Revenue
~~The sum of~~ Line~~s~~ (1~~.3~~)~~+~~ Lines (2) – Line (3)~~through (4)~~.

Line (~~5~~6) Net Incurred Claims

Claims incurred (paid claims + change in unpaid claims) during the reporting year (net of reinsurance) that are arranged for or provided by the insurer. Paid claims include capitation and all other payments to providers for services to covered lives, as well as reimbursement directly to insureds (or their providers) for covered services. Paid claims also include salaries paid to company employees that provide medical services to covered lives and related expenses. This line does not include ASC payments or Federal Employees Health Benefit Program (FEHBP) claims.

PR020 Column	**Annual Statement Source**
Comprehensive Medical Individual	U&I Part 2, Column 7 Line 13.1
Comprehensive Medical Group	U&I Part 2, Column 7 Line 13.2
Title XVIII Medicare	U&I Part 2, Column 7 Line 15.6
Title XIX Medicaid	U&I Part 2, Column 7 Line 15.5
Medicare Supplement	U&I Part 2, Column 7 Line 15.4
Vision	U&I Part 2, Column 7 Line 15.1
Dental	U&I Part 2, Column 7 Line 15.2
Stand-Alone Medicare Part D Coverage	Company Records

~~Column (1) claims come from Annual Statement, Schedule H, Part 5 Column 1+2+7+8 Line D1 less the amounts reported as incurred claims for Administrative Services Contracts (ASC) in Line (8) of PR013 and Federal Employee Health Benefit Plan (FEHBP) in Line (3) of PR022. Column (2) claims come from Schedule H, Part 5, Column 3, Line D1. Column (3) dental and vision claims come from Schedule H, Part 5, Columns 4+5, Line D11.)~~

For Stand-Alone Medicare Part D Coverage, net incurred claims should reflect claims net of reinsurance coverage (as defined in Appendix 2). Where there has been prepayment under the reinsurance coverage, paid claims should be offset from the cumulative deposits. Unpaid claim liabilities should reflect expected recoveries from the reinsurance coverage – for claims unpaid by the PDP or for amounts covered under the reinsurance coverage that exceed the cumulative deposits. Where there has not been any prepayment under the reinsurance coverage, unpaid claim liabilities should reflect expected amounts still due from CMS.

Line (6) Medicaid Pass-Through Payments Reported as Claims.
Medicaid pass-through payments that were included as claims reported in Line (5)

Line (7) Fee-for-Service Offset
Report fee-for-service revenue that is directly related to medical expense payments. The fee-for-service line does not include revenue where there is no associated claim payment (e.g., fees or charges to nonmember/insured of the company where the provider of the service receives no additional compensation from the company) and when such revenue was excluded from the pricing of medical benefits.

Line (8) Underwriting Risk Incurred Claims
Line (5~~6~~) – Line (6) – ~~minus~~ Line (7).

Line (9) Underwriting Risk Claims Ratio
Line (8) / Line (4~~5~~). If either Line (4~~5~~) or Line (8) is zero or negative, Line (9) is zero.

Line (10) Underwriting Risk Factor for Initial Amounts of Premium. Factor applied to the first $25,000,000 in premium for columns (1), (2), (3), (4), and (8) and applied to the first $3,000,000 in premium for columns (5), (6), (7),

Line (11) Underwriting Risk Factor for Excess of Initial Amount. Factor applied to premium in excess of $25,000,000 in premium for columns (1), (2), (3), (4), and (8) and applied to premium in excess of $3,000,000 in premium for columns (5), (6), (7),

Line (12) Income Adjustment Factor

~~Line (10) Underwriting Risk Factor~~
~~A weighted average factor based on the amount reported in Line (5), Underwriting Risk Revenue.~~

	~~$0 - $3 Million~~	~~$3 - $25 Million~~	~~Over $25 Million~~
~~Comprehensive Medical~~	~~0.1427~~0.1440	~~0.1427~~0.1440	~~0.0832~~0.0844
~~Medicare Supplement~~	~~0.0973~~0.0987	~~0.0596~~0.0609	~~0.0596~~0.0609
~~Dental & Vision~~	~~0.1143~~0.1153	~~0.0706~~0.0716	~~0.0706~~0.0716
~~Stand-Alone Medicare Part D Coverage~~	~~0.251~~	~~0.251~~	~~0.151~~

Line (13) Composite Underwriting Risk Factor
A weighted average factor based on the amount reported in Line (4), Underwriting Risk Revenue.

Line (14~~1~~) Base Underwriting Risk RBC
Line (4~~5~~) x Line (9) x Line (13~~0.3~~).

Line (15~~2~~) Managed Care Discount
For Comprehensive Medical & Hospital Individual, Comprehensive Medical & Hospital Group, Title XVIII Medicare, Title XIX Medicaid, Medicare Supplement (including Medicare Select), Vision, and Dental, a managed care discount, based on the type of managed care arrangements an organization has with its providers, is included to reflect the reduction in the uncertainty about future claims payments attributable to the managed care arrangements. The discount factor is from Column (3), Line (12) of PR021 Underwriting Risk - Managed Care Credit. An average factor based on the combined results of these ~~three~~ categories ~~is used for all three~~.

For Stand-Alone Medicare Part D Coverage, a separate managed care discount (or federal program credit) is included to reflect only the reduction in uncertainty about future claims payments attributable to federal risk arrangements. The discount factor is from Column (4), Line (12) of PR021 Underwriting Risk - Managed Care Credit.

Line (16~~3~~) Base RBC After Managed Care Discount
Line (14~~1~~) x Line (15~~2~~).

~~Line (14) RBC Adjustment for Individual~~
~~The average Experience Fluctuation Risk charge is increased by 20% for the portion relating to Individual Medical Expense premiums in Column (1). Other types of health coverage do not differentiate between Individual and Group. The additional time necessary to develop sufficient data to make a premium filing with states and then to implement the premium increase was modeled to calculate this factor.~~

~~Line (15) Maximum Per-Individual Risk After Reinsurance~~
~~This is the maximum loss after reinsurance for any single individual. Where specific stop-loss reinsurance protection is in place, the maximum per individual risk after reinsurance is equal to the highest attachment point on such stop-loss reinsurance, subject to the following:~~

- ~~Where coverage under non-proportional reinsurance or stop-loss protection with the highest attachment point is capped at less than $750,000 per insured for Comprehensive Medical and $25,000 for the other three lines, the maximum retained loss will be equal to such attachment point plus the difference between the coverage maximum per claim and $750,000 or $25,000, whichever is applicable.~~

- ~~Where the non-proportional reinsurance or stop-loss protection is subject to participation by the company, the maximum retained risk as calculated above will be increased by the company's participation in claims in excess of the attachment point, but not to exceed $750,000 for Comprehensive Medical and $25,000 for the other three coverages.~~

~~If there is no specific stop-loss or reinsurance in place, enter the largest amount payable (within a calendar year) or $9,999,999 if there is no limit.~~

~~Examples of the calculation are presented below:~~

~~EXAMPLE 1 (Insurer provides Comprehensive Care):~~

~~Highest Attachment Point (Retention)~~	~~$100,000~~	
~~Reinsurance Coverage~~	~~90% of $500,000 in excess of $100,000~~	
~~Maximum Reinsured Coverage~~	~~$600,000 ($100,000 + $500,000)~~	
~~Maximum Retained Risk =~~	~~$100,000~~	~~deductible~~
	~~+$150,000~~	~~($750,000 - $600,000)~~
	~~+$50,000~~	~~(10% of $500,000 coverage layer)~~
	~~=$300,000~~	

~~EXAMPLE 2 (Insurer provides Comprehensive Care):~~

~~Highest Attachment Point (Retention)~~	~~$75,000~~	
~~Reinsurance Coverage~~	~~90% of $1,000,000 in excess of $75,000~~	
~~Maximum Reinsured Coverage~~	~~$1,075,000 ($75,000 + $1,000,000)~~	
~~Maximum Retained Risk =~~	~~$75,000~~	~~deductible~~
	~~+$0~~	~~($750,000 - $1,075,000)~~
	~~+$67,500~~	~~(10% of $675,000 coverage layer)~~
	~~=$142,500~~	

Line (17~~6~~) Alternate Risk Charge

$500,000 for Columns (1), (2), (3), and (4); $50,000 for Columns (5), (6), and (7); and $150,000 for Column (8).~~Twice the amount in Line (15), subject to a maximum of $1,500,000 for comprehensive medical and $50,000 for Medicare Supplement and Dental. Six times the amount in Line (15), subject to maximum of $150,000 for Stand-Alone Medicare Part D Coverage.~~

Line (18~~7~~) Net Alternate Risk Charge

~~The largest value from Line (16) is retained for that column in line (17) and all others are ignored.~~ Columns (1), (2), (3), and (4) equal to Line (17); Column (5) is Max[0, $50,000 - C(1) L(18) - C(2) L(18) - C(3) L(18) - C(4) L(18)]; Columns (6) and (7) are Max[0, $50,000 - C(1) L(18) - C(2) L(18) - C(3) L(18) - C(4) L(18) - C(5) L(18)]; and Column (8) is Max[0, $150,000 - C(1) L(18) - C(2) L(18) - C(3) L(18) - C(4) L(18) - C(5) L(18) - C(6) L(18) - C(7) L(18)]

Line (19~~8~~) Net Underwriting Risk RBC

The maximum of Line (164) and Line (187).

HEALTH PREMIUMS PR019

			(1)		(2) RBC
	Medical Insurance Premium - Individual	Annual Statement Source	Statement Value	Factor	Requirement
(1)	Comprehensive (Medical and Hospital)	**Earned Premium (U&I Part 1, Column 4 Line 13.1)**	0	†	XXX
(2)	**Title XVIII Medicare**	**Earned Premium (U&I Part 1, Column 4 Line 15.6 in part)**	0	†	**XXX**
(3)	**Title XIX Medicaid**	**Earned Premium (U&I Part 1, Column 4 Line 15.5 in part)**	0	†	**XXX**
(4)	Medicare Supplement	**Earned Premium (U&I Part 1, Column 4 Line 15.4 in part)**	0	†	XXX
(5)	**Vision**	**Earned Premium (U&I Part 1, Column 4 Line 15.1 in part)**	0	†	XXX
(6)	**Dental**	**Earned Premium (U&I Part 1, Column 4 Line 15.2 in part)**	0	†	**XXX**
(7.1)	Stand-Alone Medicare Part D Coverage	**Earned Premium (U&I Part 1, Column 4 Line 15.9 in part)**	0	†	XXX
(7.2)	Supplemental Benefits within Stand-Alone Part D Coverage (Claims Incurred)	Company Records	0	0.500	0
(7.3)	Medicaid Pass-Through Payments Reported as Premium	Company Records	0	0.020	0
(8)	Hospital Indemnity and Specified Disease	**Earned Premium (U&I Part 1, Column 4 Line 15.9 in part)**	0	0.035 *	0
(9)	AD&D (Maximum Retained Risk Per Life 0)	**Earned Premium (U&I Part 1, Column 4 Line 15.9 in part)**	0	‡	0
(10)	Other Accident	**Earned Premium (U&I Part 1, Column 4 Line 15 in part)**	0	0.050	0
	Medical Insurance Premium - Group and Credit				
(11)	Comprehensive (Medical and Hospital)	**Earned Premium (U&I Part 1, Column 4 Line 13.2)**	0	†	XXX
(12)	**Title XVIII Medicare**	**Earned Premium (U&I Part 1, Column 4 Line 15.6 in part)**	0	†	**XXX**
(13)	**Title XIX Medicaid**	**Earned Premium (U&I Part 1, Column 4 Line 15.5 in part)**	0	†	**XXX**
(14)	**Vision**	**Earned Premium (U&I Part 1, Column 4 Line 15.1 in part)**	0	†	XXX
(15)	**Dental**	**Earned Premium (U&I Part 1, Column 4 Line 15.2 in part)**	0	†	**XXX**
(16)	Stop Loss and Minimum Premium	**Earned Premium (U&I Part 1, Column 4 Line 15.9 in part)**	0	¥	0
(17)	Medicare Supplement	**Earned Premium (U&I Part 1, Column 4 Line 15.4 in part)**	0	†	XXX
(18.1)	Stand-Alone Medicare Part D Coverage (see instructions for limits)	**Earned Premium (U&I Part 1, Column 4 Line 15.9 in part)**	0	†	XXX
(18.2)	Supplemental benefits within Stand-Alone Part D Coverage (Claims Incurred)	Company Records	0	0.500	0
(18.3)	Medicaid Pass-Through Payments Reported as Premium	Company Records	0	0.020	0
(19)	Hospital Indemnity and Specified Disease	**Earned Premium (U&I Part 1, Column 4 Line 15.9 in part)**	0	0.035 *	0
(20)	AD&D (Maximum Retained Risk Per Life 0)	**Earned Premium (U&I Part 1, Column 4 Line 15.9 in part)**	0	‡	0
(21)	Other Accident	**Earned Premium (U&I Part 1, Column 4 Line 15 in Part)**	0	0.050	0
(22)	Federal Employee Health Benefit Plan	**Earned Premium (U&I Part 1, Column 4 Line 15.8)**	0	0.000	0
	Disability Income Premium				
(23)	Noncancellable Disability Income - Individual Morbidity	**Earned Premium (U&I Part 1, Column 4 Line 15.3 in part)**	0	‡	0
(24)	Other Disability Income - Individual Morbidity	**Earned Premium (U&I Part 1, Column 4 Line 15.3 in part)**	0	‡	0
(25)	Disability Income - Credit Monthly Balance Plans	**Earned Premium (U&I Part 1, Column 4 Line 15.3 in part)**	0	‡	
(26)	Disability Income - Group Long-Term	**Earned Premium (U&I Part 1, Column 4 Line 15.3 in part)**	0	‡	0
(27)	Disability Income - Credit Single Premium with Additional Reserve	**Earned Premium (U&I Part 1, Column 4 Line 15.3 in part)**	0	‡	0
(28)	Disability Income - Credit Single Premium without Additional Reserve	**Earned Premium (U&I Part 1, Column 4 Line 15.3 in part)**	0	‡	0
(29)	Disability Income - Group Short-Term	**Earned Premium (U&I Part 1, Column 4 Line 15.3 in part)**	0	‡	0
(30)	**Total Disability Income**	**Earned Premium (U&I Part 1, Column 4 Line 15.3)**	0		
	Long-Term Care				
(31)	Noncancellable Long-Term Care Premium - Rate Risk**	**Earned Premium (U&I Part 1, Column 4 Line 15.7 in part)**	0	0.100	0
(32)	Other Long-Term Care Premium ‡ ‡	**Earned Premium (U&I Part 1, Column 4 Line 15.7 in part)**	0	0.000	0 ‡ ‡
(33)	**Total Long-Term Care**	**Earned Premium (U&I Part 1, Column 4 Line 15.7)**	0		
	Health Premium with Limited Underwriting Risk				
(34)	ASC Business with Premium Revenue	**Earned Premium (U&I Part 1, Column 4 Line 15.9 in part)**	0	0.000	0
	Other Health				
(35)	Other Health	**Earned Premium (U&I Part 1, Column 4 Line 14 and 15.9 in part)**	0	0.120	0
(36)	Total Earned Premiums	Sum of Lines **(1) through (22) excluding (7.3) and (18.3), Line (30), and Line (32)**	0		0
	C(1), **L(36)** should equal **U&I Part 1 Column 4 Lines 13.1 through 15.9**				
(37)	Additional Reserves for Credit Disability Plans	Company records	0	§	
(38)	Additional Reserves for Credit Disability Plans, prior year	Company records	0	§	

† The premium amounts in these lines are transferred to PR020 Underwriting Risk – Premium Risk for Comprehensive Medical, Medicare Supplement, Dental & Vision and Stand-Alone Medicare Part D Coverage Lines (1.1) and (1.2) for the calculation of risk-based capital. The premium amounts are included here to assist in the balancing of total health premium. If managed care arrangements have been entered into, the company may also complete PR021 Underwriting Risk – Managed Care Credit. In which case, the company will also need to complete PR012 Health Credit Risk in the formula. If there are amounts in any of lines (1), (2), (3), (7), (8) or (10) on page PR019 Health Premiums, the company will also be directed to complete the Health Administrative Expense portion of PR023.

‡ The two tiered calculation is illustrated in the risk-based capital instructions for PR019 Health Premiums.

‡ ‡ The balance of the RBC requirement for Long Term Care - Morbidity Risk is calculated on Page PR023. The premium is shown to allow totals to check to **U&I Part 1**.

* If there is premium included on either or both of these lines, the RBC value in Column (2) will include 3.5% of such premium and $50,000 (included in the line with the larger premium).

** The factor applies to all Noncancellable premium.

§ These amounts are used to adjust the premium base for single premium credit disability plans that carry additional tabular reserves.

¥ A factor of .350 will be applied to the first $25,000,000 in Column (1), Line **(16)** and a factor of .250 will be applied to the remaining premium in excess of $25,000,000.

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

UNDERWRITING RISK - PREMIUM RISK FOR COMPREHENSIVE MEDICAL, MEDICARE SUPPLEMENT AND DENTAL & VISION PR020

(Experience Fluctuation Risk in Life RBC Formula)

		(1)	(2)	(3)	(4)	(5)
		Comprehensive Medical Individual	Comprehensive Medical Group	Title XVIII-Medicare	Title XIX-Medicaid	Medicare Supplement
(1.1)	Individual Premium	0	0	0	0	0
(1.2)	Group Premium	0	0	0	0	0
(1.3)	Total Premium	0	0	0	0	0
(2)	Other Health Risk Revenue†	0	0	0	0	XXX
(3)	Medicaid Pass-Through Payments Reported as Premium	XXX	XXX	XXX	0	XXX
(4)	Underwriting Risk Revenue = Lines (1.3) + (2) - (3)	0	0	0	0	0
(5)	Net Incurred Claims	0	0	0	0	0
(6)	Medicaid Pass-Through Payments Reported as Claims	XXX	XXX	XXX	0	XXX
(7)	Fee-for-Service Offset†	0	0	0	0	XXX
(8)	Underwriting Risk Incurred Claims = Lines (5) – (6) – (7)	0	0	0	0	0
(9)	Underwriting Risk Claim Ratio (8)/(4)	0	0	0	0	0
(10)	Underwriting Risk Factor for Initial Amounts Of Premium‡	0.1440	0.1440	0.1440	0.1440	0.0987
(11)	Underwriting Risk Factor for Excess of Initial Amount‡	0.0844	0.0844	0.0844	0.0844	0.0609
(12)	Income Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000
(13)	Composite Underwriting Risk Factor	A1	A1	A1	A1	A2
(14)	Base Underwriting Risk RBC = Line (4) x Line (9) x Line (13)	0	0	0	0	0
(15)	Managed Care Discount Factor = PR021 Line (12)	0	0	0	0	0
(16)	Base RBC After Managed Care Discount = Line (14) x Line (15)	0	0	0	0	0
(17)	Alternate Risk Charge*	0	0	0	0	0
(18)	Net Alternate Risk Charge	0	0	0	0	B1
(19)	Net Underwriting Risk RBC (Maximum of Line (16) or Line (18))	0	0	0	0	0

† Source is company records unless already included in premiums.

Initial Premium Amount‡					
	Comprehensive (Hospital & Medical) - Individual	Comprehensive (Hospital & Medical) - Group	Title XVIII - Medicare	Title XIX - Medicaid	Medicare Supplement
	$25,000,000	$25,000,000	$25,000,000	$25,000,000	$3,000,000

§ ~~Formula applies only to Column (1), for all other columns Line (14) should equal Line (13).~~

* The Line (17) Alternate Risk Charge is calculated as follows:

Alternate Risk Charge*					
	Comprehensive (Hospital & Medical) - Individual	Comprehensive (Hospital & Medical) - Group	Title XVIII - Medicare	Title XIX - Medicaid	Medicare Supplement
	$500,000	$500,000	$500,000	$500,000	$50,000

£ ~~Applicable only if Line (16) for a column equals Line (16) for Column (5), otherwise zero.~~

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

PR020 Formulas

Cell Label	Formula
A1	=Line 12 x {Min[Line (4) x Line (10), 25,000,000 x Line (1)] + Max[0, (Line
A2	=Line 12 x {Min[Line (4) x Line (10), 3,000,000 x Line (1)] + Max[0, (Line (
B1	=Max[0, 50,000 - C(1) L(18) - C(2) L(18) - C(3) L(18) - C(4) L(18)]
B2	=Max[0, 50,000 - C(1) L(18) - C(2) L(18) - C(3) L(18) - C(4) L(18) - C(5) L(1
B3	=Max[0, 150,000 - C(1) L(18) - C(2) L(18) - C(3) L(18) - C(4) L(18) - C(5) L(

(4) - 25,000,000) x Line (11)] } / Line (4)
4) - 3,000,000) x Line (11)] } / Line (4)

UNDERWRITING RISK - OTHER AND TOTAL NET HEALTH PREMIUM RBC PR022

			(1) Amount	Factor	(2) RBC Requirement
	Rate Guarantees & Federal Employees Health Benefits	Data Source			
(1)	Business with Rate Guarantees Between 15-36 Months	Company Records	0	0.024	0
(2)	Business with Rate Guarantees Over 36 Months	Company Records	0	0.064	0
(3)	Federal Employees Health Benefit Program (FEHBP) Claims Incurred	Company Records	0	0.020	0
(4)	Total, Rate Guarantees & Federal Employees Health Benefits	L(1) + L(2) + L(3)	0		0
	Administrative Expenses for Certain A&H Coverages				
(5)	Total Accident and Health Premiums	PR019 Health Premiums Column (1) Line (**36**)	0		
(6)	Accident and Health Premiums from Underwriting Risk	PR020 Underwriting Risk Column (**9**) Line (**1.3**)	0		
(7)	Accident and Health Premiums Factor	L(6)/L(5)	0.000		
(8)	Administrative Expenses for Health Insurance	Company Records	0		
(9)	Less Administrative Expenses for Administrative Service Contracts (ASC) included in Line (8)	Company Records	0		
(10)	Less Administrative Expenses for Administrative Services Only (ASO) Business included in Line (8)	Company Records	0		
(11)	Less Administrative Expenses for Commissions and Premium Taxes	Company Records	0		
(12)	Net Administrative Expenses	L(8) - L(9) - L(10) - L(11)	0		
(13)	Composite Health Administrative Expense Risk Factor	(7% of L(6) up to $25 million + 4% of excess)/L(6)	0.000		
(14)	Administrative Expense Component for Health	L(12) x L(7) x L(13)			0
	Health ASO/ASC				
(15)	Administrative Expenses for ASC Business	Company Records*	0	0.020	0
(16)	Administrative Expenses for ASO Business	Company Records*	0	0.020	0
(17)	Total Health ASO/ASC	L(15) + L(16)	0		0
(18)	Total Underwriting Risk - Other	L(4) + L(14) + L(17)			0
	Total Net Health Premium RBC				
(19)	Total Health Premium RBC	L(18) + PR019 C(2) L(**36**) + PR020 C(**9**) L(**19**)			
(20)	Premium Concentration Factor	PR018 C(20) L(14)			1.000
(21)	Total Net Health Premium RBC	L(19) x L(20)			0

* Line (15) should be greater than or equal to Line (9). Line (16) should be greater than or equal to Line (10).

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

PREMIUM STABILIZATION RESERVES PR025

		Data Source	(1) Statement Value	Factor	(2) RBC Requirement
	Group & Credit Health Premium Stabilization Reserves Reported				
(1)	Stabilization Reserves and Experience Rating Refunds	Company Records	0	0.500	0
(2)	Provision for Experience Rating Refunds	Company Records	0	0.500	0
(3)	Reserve for Group Rate Credits	Company Records	0	0.500	0
(4)	Reserve for Credit Rate Credits	Company Records	0	0.500	0
(5)	Premium Stabilization Reserves	Company Records	0	0.500	0
(6)	Total of Preliminary Premium Stabilization Reserve Credit	Sum of Lines (1) through (5)	0		0
	Group & Credit Health Risk-Based Capital				
(7)	Maximum Risk-Based Capital	PR024 Health Claim Reserves Column (2) Line (2) + PR019 Health Premiums Column (2) Lines **(16), (19), (20), (21), (25), (26), (27), (28) and (29)** + [PR020 Underwriting Risk- Premiums Risk **Column (9) Line (19) - Column (8) Line (19)** x **Column (9) Line (1.2) / Column (9) Line (1.3)**]	0		
(8)	Final Premium Stabilization Reserve Credit	Column (2) Line (6), but not more than Column (1) Line (7)	0	-1.000	0

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

Property and Casualty Risk-Based Capital
Premium and Loss Concentration Factors

American Academy of Actuaries Risk Based Capital Committee

American Academy of Actuaries

Introduction

- This Report is presented by the American Academy of Actuaries (Academy) Risk Based Capital (RBC) Committee (The Committee)
- This Report is presented to the National Association of Insurance Commissioners (NAIC) Property/Casualty Risk Based Capital Working Group
- The Report addresses the Premium and Loss Concentration Factors (PCF/LCF) in the RBC Formula.

This presentation is a high-level summary. Refer to the final report for explanations of the methodology and implications of the analysis that produced the results presented here.

The analysis and conclusions in this Report reflect the opinions of the committee members and do not necessarily reflect the views of their employers or the actuarial organizations in which they are members.

Key Terms: Concentration and Diversification Credit in RBC Formula

- Concentration Ratio:

  The Premium/Reserve amount in the "largest" Line of Business (LOB) divided by the total Premium/Reserve amount. We call this the **CoMaxLine%.**

- Degree of diversification = 100% – concentration ratio%

  Company with 2 LOB (75% and 25% LOB Premium)
  Concentration = 75% (largest LOB)
  Diversification = 25% (100% – 75%)

- PCF/LCF depends on a parameter we call the **Maximum Diversification Credit (MDC), currently 30%**

  PCF/LCF = (1.0-MDC) + MDC*CoMaxLine%
  Diversification Credit = 1.0- PCF/LCF

Scope of Analysis

The scope of our work is:

- Evaluate the MDC:
  - It determines the total diversification credit, and
  - It is a key parameter in the diversification by company.
- Assess whether the linear relationship of diversification credit to CoMaxLine% is reasonable.
- Evaluate other issues arising.

IMPACT

Findings

Finding 1:

The committee believes that MDCs of **45% for premium and 65%** for reserves are reasonable selections that are better supported by the data than the **current 30% MDC**. We refer to these as the indicated MDCs.

There are reasonable alternative MDC selections, which we discuss later in this presentation.

Impact of revised MDC—45% and 65%

Part 1

Indicated Change in RBC Value by Type of Company					
(1)	(2)	(3)	(4)	(5)	(6)
Row	Type of Company	ACL - $ Billions (2022)	% Change		
			Premium Risk Charge	Reserve Risk Charge	ACL
1	Commercial	84.4	-11.7%	-21.6%	-13.4%
2	Med Prof Liab	2.9	-3.4%	-8.0%	-1.9%
3	NOC	0.7	-3.1%	-6.5%	-2.2%
4	Personal	100.2	-9.2%	-18.2%	-2.1%
5	Reinsurance	9.5	-11.4%	-22.3%	-2.4%
6	Workers Comp	7.5	-4.5%	-10.0%	-5.7%
7	Total	205.3	-10.0%	-20.0%	-6.9%

Part 2

Number and % Cos by Size of Change		
(7)	(8)	(9)
% Change in ACL	# Cos.	% Cos
Less than -50%	0	0%
-35% to -50%	0	0%
-25% to -35%	46	3%
-15% to -25%	202	11%
-5% to -15%	500	28%
0% to -5%	676	37%
0%	393	22%
Greater than 0%	0	0%
Total	1,817	100%

59%

Part 3

Div Band	% Chng
(10)	(11)
0	0.0%
1	-0.7%
2	-3.2%
3	-7.1%
4	-10.5%
5	-16.6%
All	-6.4%

Impact is higher for more diversified companies.

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DATA

Companies by Size and Diversification Level—Premium-1

Number of Companies by Co Size/Diversification ($billions)						
Div/Size	A	B	C	D	E	All
0	5,067	3,303	2,003	1,393	1,065	12,831
1	1,509	1,728	2,017	1,637	1,013	7,904
2	1,478	1,717	1,804	1,812	1,091	7,902
3	1,318	1,605	1,752	1,801	1,426	7,902
4	878	1,496	1,703	1,789	2,036	7,902
5	219	619	1,189	2,037	3,838	7,902
All	10,469	10,468	10,468	10,469	10,469	52,348

Premium by Co Size/Diversification ($billions)						
Div/Size	A	B	C	D	E	All
0	3	13	26	69	438	549
1	1	7	27	78	356	469
2	1	7	25	90	714	837
3	1	6	25	89	1,821	1,942
4	1	6	23	88	2,173	2,291
5	0	3	17	109	5,156	5,284
All	7	42	142	523	10,659	11,373

Premium concentrated in larger companies:

C3-E5:
34% of companies;
84% of premium

E5 alone:
7% of companies;
39% of premium

Size E
20% of companies
94% of premium

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Companies by Size and Diversification Level—Premium-2

Modeled diversification by Size/Diversification Band ($millions)						
Div Band	Size					
	A	B	C	D	E	Total
0	0.0	0.0	0.0	0.0	0.0	0.0
1	0.0	0.0	0.1	0.5	1.6	2.2
2	0.0	0.1	0.4	1.6	11.2	13.4
3	0.0	0.2	0.6	2.4	41.4	44.6
4	0.0	0.2	0.8	3.1	74.3	78.5
5	0.0	0.1	0.7	4.9	252.7	258.4
Total	0.1	0.7	2.7	12.4	381.3	397.1

Based on Modeled Risk before and after diversification, before IIA

Diversification credit is concentrated in large diversified companies.

C3-E5:
34% of companies
84% of premium
96% of diversification credit

E5 alone:
7% of companies
39% of premium
64% of diversification credit

Size E:
20% of companies
94% of premium
96% of diversification credit

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BASE ANALYSIS

Indicated MDC—Sample Size "D"/Diversification 5

	(1)	(2)	(3)
#	Item	Premium	Reserves
1	Observed Risk - 87.5th Percentile	15.8%	25.9%
2	Modeled Risk - 87.5th Percentile before diversification credit	21.0%	38.0%
3	Indicated Diversification Credit[1.0-(1)/(2)]%	25.0%	32.0%
4	Average Diversification Credit (Current Formula)	21.0%	19.2%
5	Indicated Maximum Credit [(3)/(4)]*30%	36%	50%

The indicated diversification is the 'difference' between the observed risk and the modeled risk before diversification credit.

The indicated diversification credit is larger than the diversification credit produced by CoMaxLine% approach with a 30% MDC.

An MDC of 36% for premium and 50% for reserves would 'equalize' the modeled risk and observed risk for this Size/ Diversification cell, implying:

PCF = 0.64 + 0.36 * CoMaxLine%
LCF = 0.50 + 0.50 * CoMaxLine%

Indicated MDC—Weighted Average of C3-E5

Premium

Divers Band Quintiles	Indicated Max Diversification Credit (Part 5) Size Band Quintiles A	B	C	D	E
0					
1	-2614%	26%	-17%	328%	348%
2	-500%	-63%	2%	86%	87%
3	-405%	3%	28%	33%	68%
4	-206%	28%	42%	44%	67%
5	-413%	-23%	38%	36%	52%
All	-890%	0%	51%	80%	76%
	C3-E5 Unweighted		45.1%	Weighted	45.9%
	StdDev		13.5%	StdDev	12.9%

(Part 5) = 0.30 * (Part 3)/(Part 4)

Reserves

Divers Band Quintiles	Indicated Max Diversification Credit (Part 5) Size Band Quintiles A	B	C	D	E
0					
1	-1739%	-2109%	394%	628%	1190%
2	-491%	-229%	43%	215%	367%
3	-232%	-73%	26%	96%	160%
4	-91%	-36%	22%	64%	83%
5	-165%	-2%	36%	50%	61%
All	-554%	-145%	73%	107%	121%
	C3-E5 Unweighted		66.5%	Weighted	66.3%
	StdDev		40.5%	StdDev	37.5%

(Part 5) = 0.30 * (Part 3)/(Part 4)

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Premium Indicated MDC—By Size and Diversification

Div Band	Size Band		
	A	B	C
1	-2614%	26%	-17%
2	-500%	-63%	2%
3	-405%	3%	
4	-206%	28%	
5	-413%	-23%	
All	-890%	0%	

Alternative Average	Indicated MDC
Using 6-cell averge D3.E5 (Largest)	50%
Using 6-cell average C4.E5 (Most diversified)	48%
Using 4-cell average D4.E5	50%

Div Band	Size Band	
	D	E
1	328%	348%
2	86%	87%

Div Band	Size Band		
	C	D	E
3	28%	33%	68%
4	42%	44%	67%
5	38%	36%	52%
	C3-E5	Wtd	45.9%
		StdDev	12.9%

1. Small companies indicate higher Line 4 factors.

That 'disconnect' appears as negative MDCs, i.e., a diversification surcharge.

2. Specialized companies, low diversification companies, indicate lower Line 4 factors.

That disconnect appears as a very high indicated MDC.

3. We focus on larger/more diversified companies.

There is a smaller, but still not small, variation in the indicated MDC in this group.

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Reserve Indicated MDC—By Size and Diversification

Div Band	Size Band A	B	C
1	-1739%	-2109%	394%
2	-491%	-229%	43%
3	-232%	-73%	
4	-91%	-36%	
5	-165%	-2%	
All	-554%	-145%	

Alternative Average	Indicated MDC
Using 6-cell averge D3.E5 (Largest)	80%
Using 6-cell average C4.E5 (Most diversified)	55%
Using 4-cell average D4.E5	64%

Div Band	Size Band D	E
1	628%	1190%
2	215%	367%

Div Band	Size Band C	D	E
3	26%	96%	160%
4	22%	64%	83%
5	36%	50%	61%
	C3-E5	Wtd	66.3%
		StdDev	37.5%

The variation in indicated MDC is qualitatively the same for reserve risk as for premium risk.

The variation in indicated MDC in the C3-E5 cells is wider for reserve risk than for premium risk.

For example, the 9-cell average is similar to the 6-cell and 4-cell averages for premium risk, but the alternatives vary much more widely for reserve risk.

This makes the selection of MDC less clear-cut than desirable.

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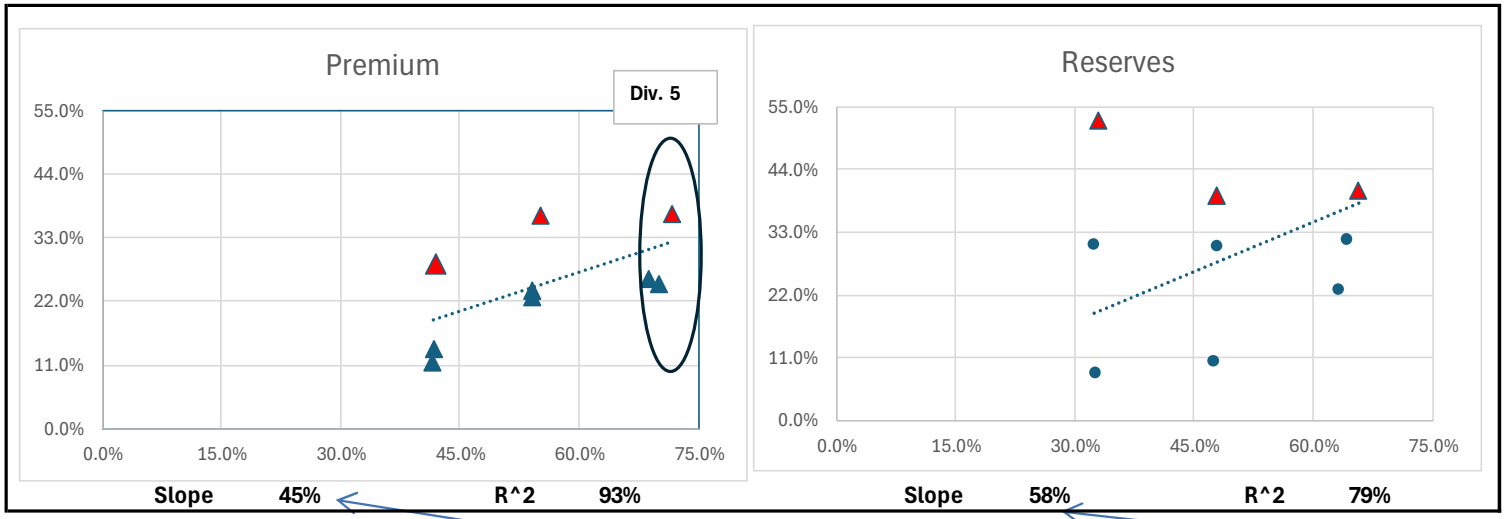
TEST LINEAR RELATIONSHIP

REGRESSION

Regression Analysis of CoMaxLine% Approach
Is indicated Credit Linear with respect to CoMaxLine%?



Y-Axis = Indicated Risk Charge

X-Axis = Diversification Index (1-CoMaxLine%)

Slope = Indicated maximum diversification credit

Regression of diversification Index vs. indicated risk charge.

Size E shown with red triangles.

Note that these are generally outliers.

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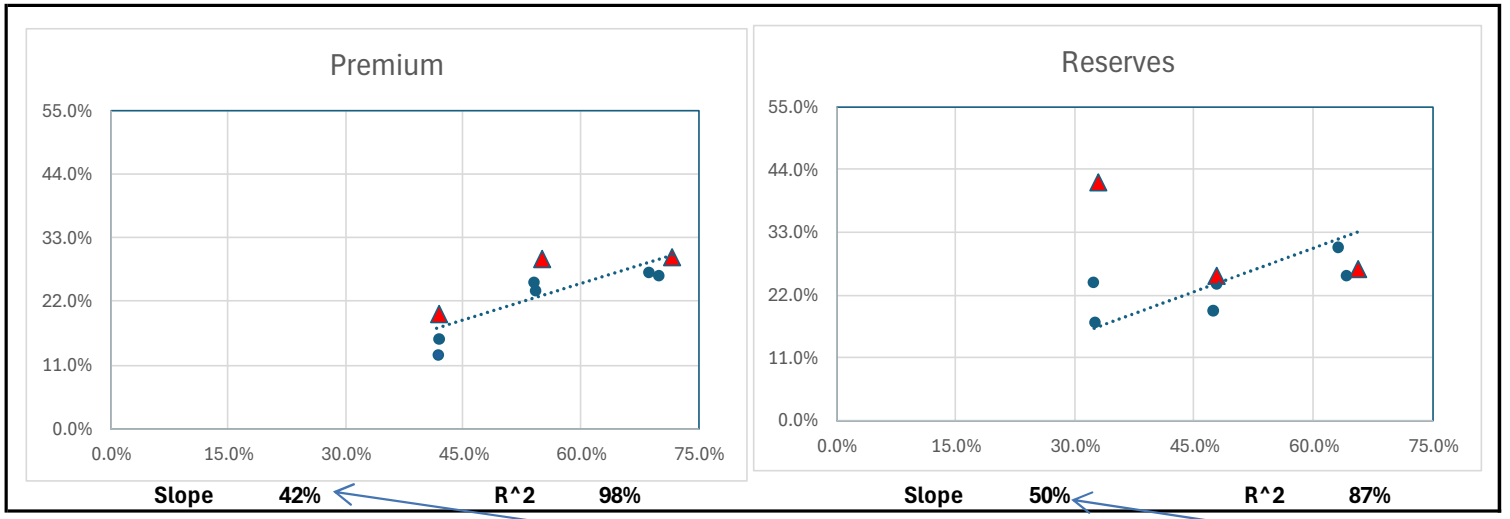
Regression Analysis of CoMaxLine% Approach- After Size Adjustment



Y-Axis = Indicated Risk Charge

X-Axis = Diversification Index (1-CoMaxLine%)

Slope = Indicated maximum diversification credit

Regression of diversification Index vs. indicated risk charge.

Size E shown with Red triangles.

Variability is reduced for all size bands after size adjustment.

Apart from reserves Div 3, Size E is more in line with other sizes.

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Finding 2

Finding 2:

While the linear relationship between diversification credit and CoMaxLine% is not exact, considering the alternatives, the Committee believes it is a reasonable approximation, especially for more diversified companies.

ALTERNATIVE INDICATED MDCs

Time Periods and Use of RBC Data—Additional Alternatives 21

(1)	(2)	(3)
Label	Indicated MDC	
	Premium	Reserves
Base indicated MDC	46%	66%
Early 15 Years vs. Recent 15		
Yrs - 1988-2002	42%	58%
Yrs - 2003-2017	63%	85%
Use RBC Two-Year LOB Data		
AS + RBC	56%	59%

1. Time frame:
Earlier period indicated MDC is lower-→greater between line dependency.

Two factors that might contribute are lower catastrophe activity and higher inflation/ interest rates in the earlier period.

2. RBC data:
Line 4 calibration used RBC data to calibrate "risk factors for Two-Year LOBs and AS data to calibrate risk factors for Ten-Year LOB risk factors.

Calibrating dependency involves combining Two-Year and Ten-Year LOBs, and there are technical issues in melding those data sources.

We lack sufficient transparency in the RBC data to evaluate the reasons for the observed difference in MDC indications, so we rely on AS data.

Alternative Indicated MDCs—Summary

Item	Alternative Method	Indicated MDC	
		Premium	Reserve
1	Base indicated MDC	46%	66%
2	Use Size Adjusted Line 4 Factors	42%	56%
3	Using combined RBC and Annual Statement data to calibrate indicated MDCs	**56%**	59%
4	Using 6-cell averge D3.E5 (Largest)	**50%**	**80%**
5	Using 6-cell average C4.E5 (Most diversified)	**48%**	55%
6	Using 4-cell average D4.E5	**50%**	64%
7	Regression analysis	45%	58%
8	Early years only (1988-2002)	42%	58%
9	Recent years only (2003-2017)	**64%**	**85%**
	Yellow= MDC lower than row 1		
	Green = MDC higher than row 1		

This summarizes the alternatives we have discussed.

These are reasonable alternatives for the NAIC to consider.

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QUALITATIVE CONSIDERATIONS

Qualitative Considerations

Theoretical Framework

1. Diversification Metrics / Risk Theory vs Ratemaking and Risk Classification

Technical Issues

2. Order of Operations—IIA and Diversification Credit

As with every analysis

3. Calibration Safety Level

1a. Why Use CoMaxLine% and Not "Something Better"?

We reviewed and considered the conclusion from the two 2019 Casualty Actuarial Society (CAS) Dependency and Calibration Working Party (DCWP) reports on alternative diversification formulas.

DCWP considered alternatives to CoMaxLine%, including:

- The Correlation Factor approach,
- The CoMaxLine% approach using LOB risk, rather than LOB premium/serves ("volume"), and
- The Herfindahl-Hirschman Index (HHI), rather than CoMaxLine%.

1b. Why Use CoMaxLine% and Not "Something Better"

DCWP found that alternatives to CoMaxLine%:

- Do not produce very different results, by company,
- Do not indicate greater accuracy, and
- Are not theoretically more appropriate in the context of the RBC Formula.

1c. Why Correlation Approach in Not Theoretically Better than CoMaxLine% in RBC

Individual Company Capital Modeling (ICCM): Grounded in Risk Theory

Company-specific risk charges relate to risks underwritten by the insurer.

Multiple risks combined with **correlation relationships**.

Unlike the ICCM, the RBC Formula is calibrated from and applies to a heterogeneous population of insurers.

The ICCM risk correlation assumptions do not generally apply.

1d. Where ICCM Correlation Fails for RBC—Example

Risk Theory Ideal (ICCM)

Company-specific correlation mode→ homogeneous risk distributions.

[Company 1A] → LOB A (σA)
[Company 1B] → LOB B (σB)
↓ ↓
Combined in Risk Theory: ↓
[Company 2: A+B] → Combined Risk = $\sqrt{(\sigma A^2 + \sigma B^2 + 2\rho\sigma A\sigma B)}$

If correlation ρ < 1, diversification lowers total risk: **Risk(A + B) < Risk(A) + Risk(B).**

RBC Reality		
Co	**LOBs**	LOB Risk Factors / Comment
1A	A only	LOB A = 5%—Specialist, lower risk
1B	B only	LOB B = 6%—Specialist, lower risk
2	**A + B**	LOB A = 6%, LOB B = 7%—Multi-line, higher indicated risk; correlation breaks

More generally, risk for any LOB can depend on insurer characteristics and the particular LOBs it writes.

1e. Our Calibration Framework is Like Ratemaking and Risk Classification

Our Framework is more akin to Ratemaking and Risk Classification. We:

- Measure the extent to which companies writing more LOBs have lower indicated risk charges than companies writing fewer LOBs, "diversification."
- Calculate the overall average credit for diversification.
- We allocate that credit to individual companies based on a reasonable method.

The "reason" companies writing more LOBs may have lower risk charges includes risk theory diversification, but may also include other variables, favorable or unfavorable, aligned with writing more LOBs, e.g., size, riskier sub-lines of business, geographic diversification, deeper controls, less specialization… The "reason" does not affect the indicated credit.

2. Apply IIA Before or After Diversification Credit

Current:

Diversification Credit calibrated with data before IIA.

Diversification Credit applied after IIA

Alternative

No change

Diversification Credit applied before IIA.

Alternative requires a change to the Formula.

Alternative produces higher diversification credits/Lower RBC values

Alternative appears logical, but requires further research.

Impact

Item	Premium	Reserve
% Diversification Credit	39%	62%
% Risk Charge	-7%	-11%
% Reserve/Premium	-1%	-2%

3. Calibration Safety Level

Adopting an increase in the indicated MDCs reduces the implied safety level in RBC Values.

We do not measure that reduction nor determine whether the total RBC is appropriate for regulatory purposes. That is beyond the scope of this Report.

Adopting a change to the RBC Formula implies an NAIC assessment, possibly judgmental, that the resulting safety level remains appropriate, and that no offset is required.

Note: Since the implementation of the RBC Formula, some changes have increased the implied safety level (e.g., RCAT set at the 1-in-100 safety level and the addition of the operational risk charge at 3% of RBC); Other changes decreased the implied safety level (e.g., reduced fixed income risk charges for assets and reduced reinsurance credit risk charges).

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