Capital Adequacy (E) Task Force
RBC Proposal Form

☐ Capital Adequacy (E) Task Force
☒ 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: 7/6/26

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Agenda Item #2026-13-CR
Year 2027

DISPOSITION

ADOPTED:
☒ TASK FORCE (TF) 11/03/2026
☒ WORKING GROUP (WG) 10/28/2026
☒ SUBGROUP (SG) 10/28/2026
EXPOSED:
☐ TASK FORCE (TF)
☒ WORKING GROUP (WG) 7/9/2026
☒ SUBGROUP (SG) 7/9/2026
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)

Building on the precedent set by the 2023 severe convective storm review, an ad hoc group was re-established and began a new evaluation cycle this year, 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. Four vendors—Moody Risk Management Solutions (RMS), Verisk Extreme Event Solutions, KCC, and CoreLogic joined together with the Ad Hoc Group to review the models. Starting in early March, the group collaborated with all four vendors to conduct a second round of impact analysis using consistent exposure inputs. In April through June, the group reconvened to address feedback from the impact analysis presentations. The findings indicated that all four commercial vendor models met the reasonableness criteria identified under ASOP No. 38 and are appropriate for use in the risk-based capital charge. To reach this conclusion, the Ad Hoc Group assessed several metrics, including: 1) catastrophe model expertise; 2) catastrophe model components, including hazard, vulnerability, and financial components, with each vendor; 3) overall loss magnitude, including hail as a percentage of total severe convective storm risk; 4) exceedance probability (EP) curve shape; 5) regional allocation of risk, including Tornado Alley versus the Southeast; 6) spatial view of hazard; 7) vulnerability ranges between best and worst property attributes; and 8) secondary property attributes and market trends.

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

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Additional Staff Comments:

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

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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~~ (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~~ Cotality, KCC, RMS, and Verisk for ~~earthquake, hurricane, and wildfire only~~earthquake, hurricane, wildfire, and severe convective storm, the ARA HurLoss Model (hurricane), 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 Cotality, KCC, RMS, and Verisk~~: AIR, CoreLogic, RMS, KCC~~ for ~~earthquake, hurricane, and wildfire only~~earthquake, hurricane, wildfire, and severe convective storm, ARA HurLoss (hurricane), 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~~ Cotality, KCC, RMS, and Verisk for ~~earthquake, hurricane, and wildfire only~~earthquake, hurricane, wildfire, and severe convective storm, ARA HurLoss (hurricane)), 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, hurricane, ~~and~~ wildfire, and severe convective storm 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 – Cotality, KCC, RMS, and Verisk~~AIR, CoreLogic, RMS, and KCC~~ for ~~earthquake, hurricane, and wildfire only~~earthquake, hurricane, wildfire, and severe convective storm, ARA HurLoss (hurricane); 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.

The Interrogatory on page (PR027INT) supports an exemption from filing the catastrophe risk charge.

Any company qualifying for exemption from the earthquake risk charge must identify the particular criteria from among (1a), (1b), (2) and (3) that provides its qualification for exemption, and may leave the other three items from this group of four possible qualifications for exemption blank; except identification of criteria (3) as the basis for the exemption requires a further answer to (3a) and (3b).). If an insurer does not write or assume earthquake risks leaving no gross exposure, enter an "X" in PR027INT interrogatory 3, with no need to fill in (3a) and (3b). If the company qualifies for exemption from the earthquake risk charge, page PR027A and line (1) on PR027 may be left blank.

Any company qualifying for exemption from the hurricane risk charge must identify the particular criteria from among (4a), (4b), (5) and (6) that provides its qualification for exemption, and may leave the other three items from this second group of four possible qualifications for exemption blank. If an insurer does not write or assume hurricane risks leaving no gross exposure, enter an "X" in PR027INT interrogatory 6.If the company qualifies for exemption from the hurricane risk charge, page PR027B and line (2) on PR027 may be left blank.

Any company qualifying for exemption from the wildfire risk charge must identify the particular criteria from among (7a), (7b), (8), (9), and (10) that provides its qualification for exemption and may leave the other four items from this third group of five possible qualifications for exemption blank. If an insurer does not write or assume wildfire risks leaving no gross exposure, enter an "X" in PR027INT interrogatory 9. If the company qualifies for exemption from the wildfire risk charge, page PR027C and line (3) on PR027 may be left blank.

Any company qualifying for exemption from the convective storms risk charge must identify the particular criteria from among (11a), (11b), and (12) that provides its qualification for exemption and may leave the other four items from this ~~fourth~~ two group of three possible qualifications for exemption blank. If the company qualifies for exemption from the convective storms risk charge, page PR027D and line (4) on PR027 may be left blank.

In general, the following conditions will qualify a company for exemption: if it uses an intercompany pooling arrangement or quota share arrangement with U.S. affiliates covering 100% of its earthquake, hurricane, wildfire and convective storms risks such that there is no exposure for these risks; if it has a ratio of Insured Value – Property to surplus as regards policyholders of less than 50%; or if it writes Insured Value – Property that includes hurricane, earthquake and/or wildfire coverage in catastrophe-prone areas representing less than 10% of its surplus as regards policyholders.

"Insured Value – Property" includes aggregate policy limits for structures and contents for policies written and assumed in the following annual statement lines – Fire, Allied Lines, Earthquake, Farmowners, Homeowners, and Commercial Multi-Peril.

"Catastrophe-Prone Areas in the U.S." include:

i. For hurricane risks, Hawaii, District of Columbia and states and commonwealths bordering on the Atlantic Ocean and/or the Gulf of Mexico including Puerto Rico.

ii. For earthquake risk or for fire following earthquake, any of the following commonwealth or states: Alaska, Hawaii, Washington, Oregon, California, Idaho, Nevada, Utah, Arizona, Montana, Wyoming, Colorado, New Mexico, Puerto Rico, and geographic areas in the following states that are in the New Madrid Seismic Zone - Missouri, Arkansas, Mississippi, Tennessee, Illinois and Kentucky.

iii. For wildfire risk, California, Idaho, Montana, Oregon, Nevada, Wyoming, Colorado, New Mexico, Washington, Arizona, and Utah.

Specific Instructions for Application of the Formula

Column (1) – Direct and Assumed Modeled Losses – These are the direct and assumed modeled losses per the first footnote. Include losses only; no loss adjustment expenses. For companies that are part of an inter-company pooling arrangement, the losses in this column should be consistent with those reported in Schedule P, i.e. losses reported in this column should be the gross losses for the pool multiplied by the company's share of the pool.

Column (2) – Net Modeled Losses – These are the net modeled losses per the footnote. Include losses only; no loss adjustment expenses.

Column (3) - Ceded Amounts Recoverable – These are the modeled losses ceded under any reinsurance contract. Include losses only, no loss adjustment expenses, and should be associated with the Net Modeled Losses.

Column (4) - Ceded Amounts with Zero Credit Risk Charge – Per the footnote, 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).

Column (6) – Amount – These are automatically calculated based on the previous columns.

Column (7) - RBC Requirement – A factor of 1.000 is applied to the reported modeled catastrophe losses calculated on both AEP and OEP basis, and a factor of 0.018 is applied to the reinsurance recoverables. The RBC Requirement is based on either AEP reported results or OEP reported results (not both), consistent with the way the company internally evaluates and manages its modeled net catastrophe risk.

Column (5) – Y/N – Please indicate "Y" for OEP basis and "N" for AEP basis. This column should not be blank.

CALCULATION OF CATASTROPHE RISK CHARGE FOR CONVECTIVE STORMS PR027D

~~(For Informational Purposes Only)~~

Convective Storms	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	0	0	0	0
(2) Worst Year in 100	Company Records	0	0	0	0
(3) Worst Year in 250	Company Records	0	0	0	0
(4) Worst Year in 500	Company Records	0	0	0	0

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

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

Disclosure in lieu of model-based reporting:

	(8) Direct and Assumed	(9) Net
(11) For a company qualifying for the exemption under PR027INT D (14), complete 11a through 11c below:		
a. Provide the company's gross and net 1-in-100-year Convective Storms losses on a best estimate basis in lieu of model-based reporting.		

b. Provide details on how the company estimated the amounts shown in 11a.

c. Provide a narrative disclosure about how the company manages its Convective Storms risk.

Lines (1)-(4): 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~~ Cotatility, KCC, RMS, Verisk, 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).

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

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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 + L(4)^2)	0
~~(5a)~~	~~Total Catastrophe Risk (R_{cat} For Informational Purposes O~~	~~SQRT(L(1)^2 + L(2)^2 +L(3)^2+L(4)^2)~~	~~0~~

Lines 3 and 4a are for informational purposes only