

## Capital Adequacy (E) Task Force RBC Proposal Form

- |                                                                               |                                                                       |                                                                             |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------|
| <input type="checkbox"/> Plenary                                              | <input checked="" type="checkbox"/> Financial Condition (E) Committee |                                                                             |
| <input type="checkbox"/> Capital Adequacy (E) Task Force                      | <input type="checkbox"/> Health RBC (E) Working Group                 | <input type="checkbox"/> Life RBC (E) Working Group                         |
| <input type="checkbox"/> Catastrophe Risk (E) Subgroup                        | <input type="checkbox"/> P/C RBC (E) Working Group                    | <input type="checkbox"/> Longevity Risk (A/E) Subgroup                      |
| <input type="checkbox"/> Variable Annuities Capital. & Reserve (E/A) Subgroup | <input type="checkbox"/> Economic Scenarios (E/A) Subgroup            | <input type="checkbox"/> RBC Investment Risk & Evaluation (E) Working Group |

<p style="text-align: right;"><b>DATE:</b> <u>5/28/2024</u></p> <p><b>CONTACT PERSON:</b> <u>Steve Broadie</u></p> <p><b>TELEPHONE:</b> <u>847-736-8258</u></p> <p><b>EMAIL ADDRESS:</b> <u>steve.broadie@apci.org</u></p> <p><b>ON BEHALF OF:</b> <u>American Property Casualty Insurance Assoc</u></p> <p><b>NAME:</b> <u>Steve Broadie</u></p> <p><b>TITLE:</b> <u>Vice Present, Financial &amp; Counsel</u></p> <p><b>AFFILIATION:</b> <u>American Property Casualty Insurance Assoc</u></p> <p><b>ADDRESS:</b> _____</p>	<p style="text-align: center;"><b>FOR NAIC USE ONLY</b></p> <p>Agenda Item # <u>2024-20-CR MOD</u> Year <u>2024</u></p> <p style="text-align: center;"><b>DISPOSITION</b></p> <p><b>ADOPTED:</b></p> <p><input type="checkbox"/> Plenary _____</p> <p><input checked="" type="checkbox"/> Financial Condition (E) <u>8/2/2024</u></p> <p><input type="checkbox"/> TASK FORCE (TF) _____</p> <p><input type="checkbox"/> WORKING GROUP (WG) _____</p> <p><input type="checkbox"/> SUBGROUP (SG) _____</p> <p><b>EXPOSED:</b></p> <p><input type="checkbox"/> TASK FORCE (TF) _____</p> <p><input type="checkbox"/> WORKING GROUP (WG) _____</p> <p><input type="checkbox"/> SUBGROUP (SG) _____</p> <p><b>REJECTED:</b></p> <p><input type="checkbox"/> TF <input type="checkbox"/> WG <input type="checkbox"/> SG _____</p> <p><b>OTHER:</b></p> <p><input type="checkbox"/> DEFERRED TO _____</p> <p><input type="checkbox"/> REFERRED TO OTHER NAIC GROUP _____</p> <p><input type="checkbox"/> (SPECIFY) _____</p>
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### IDENTIFICATION OF SOURCE AND FORM(S)/INSTRUCTIONS TO BE CHANGED

- |                                                  |                                                                        |                                                              |
|--------------------------------------------------|------------------------------------------------------------------------|--------------------------------------------------------------|
| <input type="checkbox"/> Health RBC Blanks       | <input checked="" type="checkbox"/> Property/Casualty RBC Blanks       | <input type="checkbox"/> Life and Fraternal RBC Blanks       |
| <input type="checkbox"/> Health RBC Instructions | <input checked="" type="checkbox"/> Property/Casualty RBC Instructions | <input type="checkbox"/> Life and Fraternal RBC Instructions |
| <input type="checkbox"/> Health RBC Formula      | <input checked="" type="checkbox"/> Property/Casualty RBC Formula      | <input type="checkbox"/> Life and Fraternal RBC Formula      |
| <input type="checkbox"/> OTHER _____             |                                                                        |                                                              |

### DESCRIPTION/REASON OR JUSTIFICATION OF CHANGE(S)

The Solvency Workstream of the Climate & Resiliency (EX) Task Force was tasked with considering the development of climate scenario analysis. The workstream held three public panels on the topic in 2022 and in 2023 learned that commercial CAT modelers have products known as "Climate Conditioned Catalogs" that reflect adjusted frequency and severity for certain time horizons (e.g. 2040 or 2050) that if compared side by side with existing RBC data in PR027 would provide an estimate of climate change for hurricane and wildfire. The information is intended to be useful for domestic regulators holding conversations with insurers that may have a greater degree of risk levels for these perils.

### Additional Staff Comments:

**\*\* This section must be completed on all forms.**

**Revised 2-2023**

**CALCULATION OF CATASTROPHE RISK CHARGE RCAT  
PR027A, PR027B, PR027C, PR027, PR027B2, PR027C2, PR027B3, PR027C3  
AND PR027INT**



Detail Eliminated to Conserve



**DISCLOSURE OF CLIMATE IMPACT ON CATASTROPHE EXPOSURE  
PR027B2, PR027B3, PR027C2, PR027C3**

These disclosures aim at collecting the impact of climate related risks on the modeled losses for the perils of hurricane and wildfire that have been used in PR027B and PR027C respectively. These disclosures will be effective for YE 2024, YE 2025 and YE 2026 reporting. The intent of these disclosures is for informational purposes only and not to determine a new RCAT charge.

An insurer may elect to provide its response as either time-based or frequency-based, with the insurer responding to yes-no questions to indicate which approach is taken along with additional corresponding questions (if any). The impact should be estimated using the following specific instructions:

- For any approach used, the insurer must assume a static in-force book for business at year end (no changes to book of business, to reinsurance strategy, or to total insured value (TIV) inflation over the projected time horizon).
- For a time-based approach:
  - Representative Concentration Pathway (RCP) represents a set of projections that are meant to serve as an input for climate modeling, pattern scaling and atmospheric chemistry modeling. For purposes of these instructions, companies should utilize an RCP of 4.5 (or equivalent SSP).
  - The impact should be assessed separately under two-time horizons 2040 and 2050.
  - The impact can be modeled using either a Climate Conditioned Catalog developed by a commercial CAT model vendor or equivalent view of climate risk internally developed by the insurer or that is the result of adjustments made by the insurer to vendor provided catalogs to represent the own view of climate risk.
  - The two interrogatories PR027B2 for 2040 and 2050 should be populated for hurricane and the two interrogatories PR027C2 for 2040 and 2050 should be populated for wildfire.
- For a frequency-based approach:
  - The impact should be modeled using both a 50% frequency increase for major hurricanes (Category 3 and higher, but only for wind losses) and all wildfire events, and a 10% increase in frequency for major hurricanes and all wildfire events.
  - The impact should be modeled using the same commercial CAT model or an equivalent model internally developed by the insurer used to develop the insurer's RCAT charge
  - The modeling assumptions should be the same as those used in the RCAT charge. For the hurricane peril, the adjustments should be constrained to wind frequency only—no adjustments should be made for other sub perils.
  - The two interrogatories PR027B3 10% and 50% should be populated for hurricane and the two interrogatories PR027C3 10% and 50% should be populated for wildfire.

The same basic information is required to be completed for these PR027B2 and PR027C2 and PR027B3 and PR027C3 as the previous pages PR027B and PR027C, including specifically as follows:

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.

For a time-based approach, in addition, the insurer should provide the following information about the view of climate risk used to determine the climate conditioned modeled losses under each time horizon:

- If a Climate Conditioned Catalog developed by a commercial CAT model vendor is used, provide name and version of the catalog.
- If it is internally developed by the company or developed in collaboration with external climate specialists and/or reinsurance brokers, provide a brief description of assumptions/adjustments made including the sources of climate science research used

**DISCLOSURE OF CLIMATE IMPACT ON EXPOSURE FOR HURRICANE PR027B2**  
 (For Informational Purposes Only)

**Climate Impact on Modeled Losses - 2040**

Hurricane	Reference	(1) Direct and Assumed	(2) Net	3† Ceded Amounts Recoverable
(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	Company Records			

**View of climate impact used:**

(4)  
Y/N

(5a) Was a Climate Conditioned Catalog developed by a commercial cat model vendor used?

(5b) If the answer is yes, provide name and version of the catalog:

(5c) Was this internally developed by the company or developed in collaboration with external climate specialists and/or reinsurance brokers?

(5d) If the answer is yes, provide a brief description of assumptions/adjustments made, including the sources of climate science research used:

(6a) Were the modeled losses calculated using the same commercial vendor/catastrophe model, or a combination of models used to calculate the CAT Risk Charge.

(6b) If the answer is no, provide a brief description of the combination of models used:

† 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).

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

**DISCLOSURE OF CLIMATE IMPACT ON EXPOSURE FOR HURRICANE PR027B2**  
 (For Informational Purposes Only)

**Climate Impact on Modeled Losses - 2050**

Hurricane	Reference	(1) Direct and Assumed	(2) Net	3† Ceded Amounts Recoverable
(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	Company Records			

View of climate impact used: (4)  
Y/N

(5a) Was a Climate Conditioned Catalog developed by a commercial cat model vendor used? [Redacted]

(5b) If the answer is yes, provide name and version of the catalog: [Redacted]

(5c) Was this internally developed by the company or developed in collaboration with external climate specialists and/or reinsurance brokers? [Redacted]

(5d) If the answer is yes, provide a brief description of assumptions/adjustments made, including the sources of climate science research used: [Redacted]

(6a) Were the modeled losses calculated using the same commercial vendor/catastrophe model, or a combination of models used to calculate the CAT Risk Charge. [Redacted]

(6b) If the answer is no, provide a brief description of the combination of models used: [Redacted]

† 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).

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

**DISCLOSURE OF CLIMATE IMPACT ON EXPOSURE FOR HURRICANE PR027B2**  
 (For Informational Purposes Only)

Climate Impact on Modeled Losses - 10% Frequency Adjustment

Hurricane	Reference	(1) <u>Direct and Assumed</u>	(2) <u>Net</u>	3† <u>Ceded Amounts Recoverable</u>
(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	Company Records			

† 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).

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

**DISCLOSURE OF CLIMATE IMPACT ON EXPOSURE FOR HURRICANE PR027B2**  
 (For Informational Purposes Only)

Climate Impact on Modeled Losses - 50% Frequency Adjustment

Hurricane	Reference	(1) <u>Direct and Assumed</u>	(2) <u>Net</u>	3† <u>Ceded Amounts Recoverable</u>
(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	Company Records			

(6) The impact should be modeled using the same commercial CAT model or an equivalent model internally developed by the insurer used to develop the insurer’s RCAT charge.

† 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).

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

**DISCLOSURE OF CLIMATE IMPACT ON EXPOSURE FOR WILDFIRE PR027C2**  
 (For Informational Purposes Only)

**Climate Impact on Modeled Losses - 2040**

Wildfire	Reference	(1) Direct and Assumed	(2) Net	3† Ceded Amounts Recoverable
(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	Company Records			

**View of climate impact used:**

(4)  
Y/N

(5a) Was a Climate Conditioned Catalog developed by a commercial cat model vendor used?

(5b) If the answer is yes, provide name and version of the catalog:

(5c) Was this internally developed by the company or developed in collaboration with external climate specialists and/or reinsurance brokers?

(5d) If the answer is yes, provide a brief description of assumptions/adjustments made, including the sources of climate science research used:

(6a) Were the modeled losses calculated using the same commercial vendor/catastrophe model, or a combination of models used to calculate the CAT Risk Charge.

(6b) If the answer is no, provide a brief description of the combination of models used:

† 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).

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



**DISCLOSURE OF CLIMATE IMPACT ON EXPOSURE FOR WILDFIRE PR027C2**  
 (For Informational Purposes Only)

**Climate Impact on Modeled Losses - 2050**

Wildfire	Reference	(1) Direct and Assumed	(2) Net	3† Ceded Amounts Recoverable
(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	Company Records			

**View of climate impact used:**

(4)  
Y/N

(5a) Was a Climate Conditioned Catalog developed by a commercial cat model vendor used?

(5b) If the answer is yes, provide name and version of the catalog:

(5c) Was this internally developed by the company or developed in collaboration with external climate specialists and/or reinsurance brokers?

(5d) If the answer is yes, provide a brief description of assumptions/adjustments made, including the sources of climate science research used:

(6a) Were the modeled losses calculated using the same commercial vendor/catastrophe model, or a combination of models used to calculate the CAT Risk Charge.

(6b) If the answer is no, provide a brief description of the combination of models used:

† 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).

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

**DISCLOSURE OF CLIMATE IMPACT ON EXPOSURE FOR WILDFIRE PR027C3**  
 (For Informational Purposes Only)

Climate Impact on Modeled Losses - 10% Frequency Adjustment

Wildfire	Reference	(1) <u>Direct and Assumed</u>	(2) <u>Net</u>	3† <u>Ceded Amounts Recoverable</u>
(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	Company Records			

(6) The impact should be modeled using the same commercial CAT model or an equivalent model internally developed by the insurer used to develop the insurer's RCAT charge.

† 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).

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

**DISCLOSURE OF CLIMATE IMPACT ON EXPOSURE FOR WILDFIRE PR027C3**  
 (For Informational Purposes Only)

Climate Impact on Modeled Losses - 50% Frequency Adjustment

Wildfire	Reference	(1) <u>Direct and Assumed</u>	(2) <u>Net</u>	3† <u>Ceded Amounts Recoverable</u>
(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	Company Records			

(6) The impact should be modeled using the same commercial CAT model or an equivalent model internally developed by the insurer used to develop the insurer’s RCAT charge.

† 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).

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