

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 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 for earthquake and hurricane only, RMS, KCC, the ARA HurLoss Model (hurricane only), or the Florida Public Model for hurricane, 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 for earthquake and hurricane only, RMS, KCC, ARA HurLoss (hurricane only), or the Florida Public Model for hurricane. 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 for earthquake and hurricane only, RMS, KCC, ARA HurLoss (hurricane only)), or the Florida Public Model for hurricane, 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 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 for earthquake and hurricane only, RMS, KCC, ARA HurLoss (hurricane only); or the Florida Public Model (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), (12), (13) and (14) that provides its qualification for exemption and may leave the other four items from this fourth group of five possible qualifications for exemption blank. If an insurer does not write or assume convective storms risks leaving no gross exposure, enter an "X" in PR027INT interrogatory 13. 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.

DISCLOSURE OF CLIMATE CONDITIONED CAT EXPOSURE

PR027BI, PR027BII, PR027BIII, PR027BIV, PR027CI, PR027CII, PR027CIII, PR027CIV

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. **The information provided should reflect the annual loss dollars for the given reporting year.**

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 PR027BI and PR027BII for 2040 and 2050 should be populated for hurricane and the two interrogatories PR027CI AND PR027CII 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 PR027BIII and PR027BIV for 10% and 50% should be populated for hurricane and the two interrogatories PR027CIII and PR027CIV for 10% and 50% should be populated for wildfire.

The same basic information is required to be completed for these PR027BI through PR027BIV and PR027C1 through PR027CIV 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.

ATTESTATION RE: CATASTROPHE MODELING USED IN RBC CATASTROPHE RISK CHARGES**PR002**

(1) **Company Name** hereby certifies that the modeled catastrophe losses for earthquake risk, hurricane risk, wildfire risk, and **severe convective storm risk** entered on lines 1 through 4 of Schedule **PR027A, PR027B, PR027C and PR027D** of this Risk-Based Capital Report were determined by applying the same catastrophe models or combination of models to the same underlying exposure data, and using the same modeling assumptions, as the company uses in its own internal risk management process, with the following exceptions:

(1a)

These exceptions, if any, are made for the following reasons:

(1b)

The following describes the company's application of catastrophe modeling to the determination of the Rcat risk charges: (Include which models are used in what combinations for each of the Rcat charges; what key modeling assumptions are used, including but not limited to time dependency, secondary uncertainty, storm surge, demand surge, and fire following earthquake; and the rationale for treatment of each issue or item): (provide attachments if necessary):

(2)

The company further certifies that the underlying exposure data used in the catastrophe modeling process is accurate and complete to the best of our knowledge and ability, with the following limitations:

(3)

The following describes the extent to which the exposure location data is accurate to GPS coordinates; to zip code; and to a level less accurate than zip code: (provide attachments if necessary):

(4)

The following describes the steps taken to validate, to the best of the Company's knowledge and belief, the accuracy and completeness of the exposure data used in the modeling process to determine the Rcat catastrophe risk charges (provide attachments if necessary):

(5)

| Provide an explanation of the methodology used to derive the amounts in columns 3 and 4 of page PR027A, PR027B, PR027C, and PR027D.

(6)

(7) Completed on behalf of:

(7) Completed By:

Last

First

Middle

Title

(7) Email:

(7) Phone:

Date:

CALCULATION OF CATASTROPHE RISK CHARGE FOR EARTHQUAKE PR027A

Earthquake	Reference	<u>Modeled Losses</u>			
		(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) <u>Y/N</u>	
(5) Has the company reported above, its modeled earthquake losses using an occurrence exceedance probability (OEP) basis?					
Reference		(6)	(7)	RBC Requirement (C(6) * Factor)	
(6) Net Earthquake Risk	L(2) C(2)			0 1.000	0
(7) Contingent Credit Risk for Earthquake Risk	L(2) (C(3) - C(4))			0 0.018	0
(8) Total Earthquake 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 Earthquake 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 Earthquake Catastrophe Risk	L(8) C(7) + L(9) C(7)				0

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, Corelogic, RMS, KCC, 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.

CALCULATION OF CATASTROPHE RISK CHARGE FOR HURRICANE PR027B

Hurricane	Reference	<u>Modeled Losses</u>			
		(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	Company Records				
				(5) Y/N	
(6) Has the company reported above, its modeled hurricane losses using an occurrence exceedance probability (OEP) basis?					
Reference		(6)	(7)	<u>RBC Requirement</u>	
(7) Net Hurricane Risk	L(2) C(2)			Amount	Factor
(8) Contingent Credit Risk for Hurricane Risk	L(2) (C(3) - C(4))			0 1.000	0
(9) Total Hurricane 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 0.018	0
(10) Total Hurricane 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 Hurricane Catastrophe Risk	L(9) C(7) + L(10) C(7)			0 1.000	0

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, CoreLogic, RMS, KCC, the ARA HurLoss Model, or the Florida Public Model for hurricane; 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.

DISCLOSURE OF CLIMATE IMPACT ON EXPOSURE FOR HURRICANE PR027BI
(For Informational Purposes Only)

Climate Impact on Modeled Losses - 2040

Hurricane	Reference	(1) <u>Direct and Assumed</u>	(2) <u>Net</u>	(3)† <u>Ceded Amounts Recoverable</u>	(4) <u>Y/N</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				
View of climate impact used:					
(6a) Was a Climate Conditioned Catalog developed by a commercial cat model vendor used?					
(6b) If the answer is yes, provide name and version of the catalog:					
(7a) Was this internally developed by the company or developed in collaboration with external climate specialists and/or reinsurance brokers?					
(7b) If the answer is yes, provide a brief description of assumptions/adjustments made, including the sources of climate science research used:					
(8a) Were the modeled losses calculated using the same commercial vendor/catastrophe model, or a combination of models used to calculate the CAT Risk Charge.					
(8b) 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 PR027BII
(For Informational Purposes Only)

<u>Climate Impact on Modeled Losses - 2050</u>				
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			
View of climate impact used:				
(6a) Was a Climate Conditioned Catalog developed by a commercial cat model vendor used?				
(6b) If the answer is yes, provide name and version of the catalog:				
(7a) Was this internally developed by the company or developed in collaboration with external climate specialists and/or reinsurance brokers?				
(7b) If the answer is yes, provide a brief description of assumptions/adjustments made, including the sources of climate science research used:				
(8a) Were the modeled losses calculated using the same commercial vendor/catastrophe model, or a combination of models used to calculate the CAT Risk Charge.				
(8b) 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 PR027BIII
(For Informational Purposes Only)

Climate Impact on Modeled Losses - 10% Frequency Adjustment

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			

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 HURRICANE PR027BIV
(For Informational Purposes Only)

Climate Impact on Modeled Losses - 50% Frequency Adjustment

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			

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.

CALCULATION OF CATASTROPHE RISK CHARGE FOR WILDFIRE PR027C
(For Informational Purposes Only)

Wildfire	<u>Reference</u>	<u>Modeled Losses</u>			
		(1) <u>Direct and Assumed</u>	(2) <u>Net</u>	(3)† <u>Ceded Amounts Recoverable</u>	(4)†† <u>Ceded Amounts Recoverable</u> <u>with zero Credit Risk Charge</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				
(5) <u>Y/N</u>					
(6) Has the company reported above, its modeled wildfire losses using an occurrence exceedance probability (OEP) basis?					
<u>Reference</u>		(6)	(7)	<u>RBC Requirement</u>	
(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	
<u>Disclosure in lieu of model-based reporting:</u>					
(12) For a company qualifying for the exemption under PR027INT C (10), complete 12a through 12c below:		(8) <u>Direct and Assumed</u>	(9) <u>Net</u>		
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, 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).

DISCLOSURE OF CLIMATE IMPACT ON EXPOSURE FOR WILDFIRE PR027CI
(For Informational Purposes Only)

Climate Impact on Modeled Losses - 2040

Wildfire	Reference	(1) <u>Direct and Assumed</u>	(2) <u>Net</u>	(3)† <u>Ceded Amounts Recoverable</u>	(4) <u>Y/N</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				

View of climate impact used:

(6a) Was a Climate Conditioned Catalog developed by a commercial cat model vendor used?

(6b) If the answer is yes, provide name and version of the catalog:

(7a) Was this internally developed by the company or developed in collaboration with external climate specialists and/or reinsurance brokers?

(7b) If the answer is yes, provide a brief description of assumptions/adjustments made, including the sources of climate science research used:

(8a) Were the modeled losses calculated using the same commercial vendor/catastrophe model, or a combination of models used to calculate the CAT Risk Charge.

(8b) 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 PR027CII
(For Informational Purposes Only)

Climate Impact on Modeled Losses - 2050

Wildfire	<u>Reference</u>	(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				
View of climate impact used:					
(6a) Was a Climate Conditioned Catalog developed by a commercial cat model vendor used?					
(6b) If the answer is yes, provide name and version of the catalog:					
(7a) Was this internally developed by the company or developed in collaboration with external climate specialists and/or reinsurance brokers?					
(7b) If the answer is yes, provide a brief description of assumptions/adjustments made, including the sources of climate science research used:					
(8a) Were the modeled losses calculated using the same commercial vendor/catastrophe model, or a combination of models used to calculate the CAT Risk Charge.					
(8b) 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 PR027CIII
(For Informational Purposes Only)

Climate Impact on Modeled Losses - 10% Frequency Adjustment

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			

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 PR027CIV
(For Informational Purposes Only)

Climate Impact on Modeled Losses - 50% Frequency Adjustment

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			

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.

CALCULATION OF CATASTROPHE RISK CHARGE FOR CONVECTIVE STORMS PR027D
(For Informational Purposes Only)

Convective Storms	Reference	<u>Modeled Losses</u>			
		(1) <u>Direct and Assumed</u>	(2) <u>Net</u>	(3)† <u>Ceded Amounts Recoverable</u>	(4)†† <u>Ceded Amounts Recoverable with zero Credit Risk Charge</u>
(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) Has the company reported above, its modeled convective storms losses using an occurrence exceedance probability (OEP) basis?					
Reference					
(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)			
(6) <u>Amount</u> (7) <u>RBC Requirement</u> <u>(C(6) * Factor)</u>					
(8) <u>Direct and Assumed</u> (9) <u>Net</u>					
(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 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.

CALCULATION OF CATASTROPHE RISK CHARGE PR027

	<u>Reference</u>	<u>(1)</u> <u>RBC Amount</u>
(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 (Rcat)	SQRT(L(1)^2 + L(2)^2)	0
(5a) Total Catastrophe Risk (Rcat 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

INTERROGATORY TO SUPPORT EXEMPTION FROM COMPLETING PR027 (To be completed by companies reporting no RBC charge in either Lines 1 through 4) PR027INT

Place an "X" in the appropriate cell
for the criteria under which the
company is claiming an exemption

A Earthquake Exemption (To be completed by companies reporting no RBC charge in PR027 Line 1) -

- (1) The company has not entered into a reinsurance agreement covering earthquake exposure with a non-affiliate or a non-US affiliate and, either
 - (1a) the company participates in an inter-company pooling arrangement with 0% participation, leaving no net exposure for earthquake risks; Or
 - (1b) the company cedes 100% of its earthquake exposures to its US affiliate(s), leaving no net exposure for earthquake risks
- (2) The Company's Ratio of Insured Value - Property to surplus as regards policyholders is less than 50%
- (3) The company has written Insured Value - Property that includes earthquake coverage in the Earthquake-Prone areas representing less than 10% of its surplus as regards policyholders

For any company qualifying for the exemption under 3 provide details about how the "geographic areas in the New Madrid Seismic Zone" were determined.

- (3a) What resource was used to define the New Madrid Seismic Zone?

- (3b) Was exposure determined based on zip codes or counties in the zone, was it based on all of the earthquake exposure in the identified states or was another methodology used? Describe any other methodology used.

Note: "Earthquake-Prone areas" include any of the following states or commonwealths: 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.

B Hurricane Exemption (To be completed by companies reporting no RBC charge in PR027 Line 2) -

- (4) The company has not entered into a reinsurance agreement covering hurricane exposure with a non-affiliate or a non-US affiliate and, either
 - (4a) the company participates in an inter-company pooling arrangement with 0% participation, leaving no net exposure for hurricane risks; Or
 - (4b) the company cedes 100% of its hurricane exposures to its US affiliate(s), leaving no net exposure for hurricane risks
- (5) The Company's Ratio of Insured Value - Property to surplus as regards policyholders is less than 50%
- (6) The company has written Insured Value - Property that includes hurricane coverage in the Hurricane-Prone areas representing less than 10% of its surplus as regards policyholders

Note: "Hurricane-Prone areas" include Hawaii, District of Columbia and states and commonwealths bordering on the Atlantic Ocean, and/or Gulf of Mexico including Puerto Rico.

C Wildfire Exemption (To be completed by companies reporting no RBC charge in PR027 Line 3) -

- (7) The company has not entered into a reinsurance agreement covering wildfire exposure with a non-affiliate or a non-US affiliate and, either
 - (7a) the company participates in an inter-company pooling arrangement with 0% participation, leaving no net exposure for wildfire risks; Or
 - (7b) the company cedes 100% of its wildfire exposures to its US affiliate(s), leaving no net exposure for wildfire risks
- (8) The Company's Ratio of Insured Value - Property to surplus as regards policyholders is less than 50%
- (9) The company has written Insured Value - Property that includes wildfire coverage in the wildfire-Prone areas representing less than 10% of its surplus as regards policyholders
- (10) The sum of the direct and assumed premium written in wildfire-prone areas across the following Annual Statement lines is less than \$50 million: Fire, Allied Lines, Earthquake, Farmowners, Homeowners, and Commercial Multi-Peril; and the company does not currently utilize NAIC approved third party commercial vendor wildfire catastrophe models.

Note: "Wildfire-Prone areas" include any of the following states: California, Idaho, Montana, Oregon, Nevada, Wyoming, Colorado, New Mexico, Washington, Arizona, and Utah.

D Convective Storms Exemption (To be completed by companies reporting no RBC charge in PR027 Line 4) -

- (11) The company has not entered into a reinsurance agreement covering Convective Storms exposure with a non-affiliate or a non-US affiliate and, either
 - (11a) the company participates in an inter-company pooling arrangement with 0% participation, leaving no net exposure for Convective Storms risks; Or
 - (11b) the company cedes 100% of its convective storms exposures to its US affiliate(s), leaving no net exposure for Convective Storms risks
- (12) The Company's Ratio of Insured Value - Property to surplus as regards policyholders is less than 50%
- (13) The company has written Insured Value - Property that includes Convective Storms coverage in the Convective Storms-Prone areas representing less than 10% of its surplus as regards policyholders
- (14) The sum of the direct and assumed premium written in Convective Storms-prone areas across the following Annual Statement lines is less than \$50 million: Fire, Allied Lines, Earthquake, Farmowners, Homeowners, and Commercial Multi-Peril; and the company does not currently utilize NAIC approved third party commercial vendor convective storm catastrophe models.

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

* Items C and D are for informational purposes only.

INTERROGATORY ON CATASTROPHE RISK REINSURANCE PROGRAM PR027INTA

NOTE: This interrogatory is intended for completion by all property and casualty RBC filers that are exposed to natural catastrophe perils, and is not limited to earthquake, hurricane and wildfire and the associated RCAT exemptions. Insurance entities that participate in group reinsurance programs may respond to the interrogatory at a group level.

(1) Provide an overall narrative description of the natural catastrophe reinsurance program in place at the insurer/group, by peril where appropriate, including elements such as the types of reinsurance coverage in place, attachment points/retention levels, exhaustion limits, reinstatement provisions, etc. When possible and relevant, provide a graphical reinsurance tower as an attachment.

[Redacted]

(2)
Y/N

(2)
(2a) Have there been any significant changes in the reinsurance program structure from the prior year (i.e., change in cost, level of coverage) (Y/N)
If yes, describe any significant changes from the prior year:

[Redacted]

(3)
MM/DD/YYYY

(3) Provide the primary program renewal date (i.e., 1/1/XX or 7/1/XX):

[Redacted]