



Date: 9/9/22

Virtual Meeting

CATASTROPHE RISK (E) SUBGROUP

Monday, September 26, 2022

12:00 – 1:00 p.m. ET / 11:00 a.m. – 12:00 p.m. CT / 10:00 – 11:00 a.m. MT / 9:00 – 10:00 a.m. PT

ROLL CALL

| | | | |
|-----------------------------|-------------|-------------------|----------------|
| Wanchin Chou, Co-Chair | Connecticut | Anna Krylova | New Mexico |
| Robert Ridenour, Vice Chair | Florida | Alex Vajda | New York |
| Laura Clements | California | Tom Botsko | Ohio |
| Judy Mottar | Illinois | Andrew Schallhorn | Oklahoma |
| Travis Grassel | Iowa | Will Davis | South Carolina |
| Gordon Hay | Nebraska | Miriam Fisk | Texas |

NAIC Support Staff: Eva Yeung

AGENDA

1. Consider Adoption of its Summer National Meeting Minutes Attachment A
— *Wanchin Chou (CT)*
2. Consider Adoption of Proposal 2022-08-CR (Independent Model Review Instructions) — *Wanchin Chou (CT)* Attachment B
3. Discuss Convective Storm Modeling and Risk-Based Capital (RBC) charge development process— *Wanchin Chou (CT)*
4. Discuss Any Other Matters Brought Before the Subgroup— *Wanchin Chou (CT)*
5. Adjournment

Draft: 8/17/22

Property and Casualty Risk-Based Capital (E) Working Group
and the Catastrophe Risk (E) Subgroup
Portland, Oregon
August 9, 2022

The Property and Casualty Risk-Based Capital (E) Working Group of the Capital Adequacy (E) Task Force met in Portland, OR, Aug. 10, 2022, in joint session with the Catastrophe Risk (E) Subgroup of the Property and Casualty Risk-Based Capital (E) Working Group of the Capital Adequacy (E) Task Force. The following Working Group members participated: Tom Botsko, Chair (OH); Wanchin Chou, Vice Chair (CT); Robert Ridenour (FL); Judy Mottar (IL); Anna Krylova (NM); Miriam Fisk (TX); and Amy Malm (WI). The following Subgroup members participated: Wanchin Chou, Chair (CT); Robert Ridenour, Vice Chair (FL); Laura Clements (CA); Judy Mottar (IL); Anna Krylova (NM); Tom Botsko (OH); Andrew Schallhorn (OK); and Miriam Fisk (TX). Also participating were: Travis Grassel (IA); and John Rehagen (MO).

1. Adopted the Subgroup's June 14 and April 19 Minutes

Mr. Chou said the Subgroup met June 14 and April 19. During these meetings, the Subgroup took the following action: 1) adopted its Spring National Meeting minutes; 2) exposed proposal 2022-04-CR, which is the U.S. and non-U.S. lists of wildfire events for a 30-day public comment period ending July 13; 3) adopted proposal 2021-17-CR MOD, which provides an exemption to those companies where the modeling requirements would impose a cost and compliance burden that represent an outsized cost relative to the incremental benefit of providing the modeled data during the for informational purposes period; 4) discussed the independent model review instructions in the Rcat; 5) evaluated other catastrophe risk for possible inclusion in the Rcat component; and 6) heard a presentation from the International Society of Catastrophe Managers (ISCM) regarding different programs to elevate the catastrophe risk profession that the ISCM offers.

Mr. Ridenour made a motion, seconded by Ms. Clements, to adopt the Subgroup's June 14 (Attachment Five-A) and April 19 (Attachment Five-B) minutes. The motion passed unanimously.

2. Adopted the Working Group's June 24, June 7, and April 26 Minutes

Mr. Botsko said the Working Group met June 24, June 7, and April 26. During these meetings, the Working Group took the following action: 1) adopted its Spring National Meeting minutes; 2) adopted proposal 2021-17-CR MOD, which provides an exemption to those companies where the modeling requirements would impose a cost and compliance burden that represent an outsized cost relative to the incremental benefit of providing the modeled data during the for informational purposes period; 3) adopted proposal 2022-01-P, which removes the trend test for information-only wordings in the PR033 footnote; 4) adopted proposal 2022-02-P, which provides a routine annual update to the Line 1 premium and reserve industry underwriting factors in the property/casualty (P/C) risk-based capital (RBC) formula; 5) exposed affiliated investments instructions and structures for a 60-day public comment period ending June 25; 6) forwarded the referral regarding the reinsurer designation equivalent rating factors to the Blanks (E) Working Group; and 7) heard updates on current P/C RBC projects from the American Academy of Actuaries (Academy).

Ms. Mottar made a motion, seconded by Mr. Ridenour, to adopt the Working Group's June 24 (Attachment Five-C), June 7 (Attachment Five-D), and April 26 (Attachment Five-E) minutes. The motion passed unanimously.

3. Adopted Proposal 2022-04-CR (2013–2021 Wildfire Event Lists)

Mr. Chou said the U.S. and non-U.S. lists of wildfire events were exposed for a 30-day public comment period ending July 13. He stated that the Subgroup received one comment letter from the Swiss Re America Holding Corporation (Swiss Re) during the exposure period. He said Swiss Re believed that the insurance direct incurred losses for the Southern California Woolsey Wildfires in 2018 should be \$2.9 billion based on the reports from the California Department of Insurance (DOI). Without objection from the Subgroup, Mr. Chou said the incurred losses amount for this event is updated to \$2.9 billion.

Mr. Schallhorn made a motion, seconded by Ms. Clements, to adopt proposal 2022-04-CR (Attachment Seven). The motion passed unanimously.

4. Adopted the 2022 P/C RBC Newsletter

Mr. Botsko said the 2022 P/C RBC newsletter reflects the adopted proposals and editorial changes for year-end 2022. He said the newsletter appears different from past years; the purpose of the adoption is to consider the content of the newsletter, as the format will later be revised. He said when the formatting of the newsletter is complete, it will be posted to the Working Group's web page.

Mr. Ridenour made a motion, seconded by Ms. Krylova, to adopt the 2022 P/C RBC newsletter (Attachment Five-F). The motion passed unanimously.

5. Referred the Affiliated Investment Instructions and the RBC Structure to the Capital Adequacy (E) Task Force

Mr. Botsko said during its April 26 meeting, the Working Group exposed the affiliated investment instructions and blanks changes for a 60-day public comment period. There were no comments received. He also commented that the Life Risk-Based Capital (E) Working Group received one comment letter from American Council of Life Insurers (ACLI) regarding the issue of non-admission. He said this issue will be discussed at the Capital Adequacy (E) Task Force meeting.

Mr. Chou made a motion, seconded by Mr. Ridenour, to refer the P/C affiliated instructions and blanks to the Capital Adequacy (E) Task Force for discussion. The motion passed unanimously.

6. Exposed Proposal 2022-07-P (PR035 Line of Business)

Mr. Botsko said proposal 2022-07-P provides consistency of the lines of business categories used in the Annual Statement, Underwriting and Investment Exhibit, Part 1B and RBC Report, PR035.

The Working Group and the Subgroup agreed to expose proposal 2022-07-P for a 30-day public comment period ending Sept. 8.

7. Exposed Proposal 2022-08-CR (Independent Model Review Instructions)

Mr. Chou said during the April 19 meeting, the Subgroup determined that a further clarification to the instructions is necessary, as better instructions will not only lighten the burdens but also provide a more consistent modeling review process among the states. He also stated that the instructions were revised with assistance from the Independent Model Review Ad Hoc Group, which was established by the Subgroup earlier. He also indicated that the proposed revised instructions are to capture the spirit of the own model permission review and clarify the requirements expected from the company who submits its own model for permission.

The Working Group and the Subgroup agreed to expose proposal 2022-08-CR for a 30-day public comment period ending Sept. 8.

8. Heard Updates on Current P/C RBC Projects from the Academy

David Traugott (Academy) said this presentation (Attachment Five-G) provides a brief update on the Academy report, which expects to be released in September. He also stated that this update describes the methodology and presents sample results that will be finalized in the report. He said this report focuses on: 1) the Investment Income Adjustment (IIA) factor; 2) updated adjustment of indicated premium risk factors for catastrophes; 3) alternative safety margins for consideration by the Working Group; and 4) the combined impact of these changes, including updated risk factors provided in the Academy April 2021 report.

9. Discussed 2021 RBC Statistics

Mr. Botsko said the 2021 P/C RBC statistics were run on July 1. He said there were 2,511 P/C RBC filings loaded onto the NAIC database, up from 2,477 in 2020. He stated that there were 35 companies that triggered an action level in 2021: 1) eight were in a company action level; 2) three were in a regulatory action level; 3) six were in an authorized control level (ACL); and 4) 18 were in a mandatory control level. Also, there were 17 companies that triggered the trend test, and the ACL and total adjusted capital (TAC) amounts increased from 2020 to 2021. Mr. Botsko indicated that there were a few categories that were highlighted in boldface, representing new categories in the statistical report (Attachment Five-H) to create consistency across life, P/C, and health statistical reports.

10. Discussed the Working Group and Subgroup's Working Agenda

Mr. Chou summarized the changes of the Subgroup's 2022 working agenda, which included the following substantial changes: 1) changing the expected completion date to the item of "evaluate other catastrophe risks for possible inclusion in the charge" to 2023 or later; and 2) eliminating the following items: a) "implement wildfire peril in the Rcat component"; and b) "evaluate the possibility of modifying exemption criteria for different cat perils in the PR027 interrogatories." Mr. Botsko said the Working Group: 1) added a new item of "changing the RBC PR035 Line of Business categories"; and 2) eliminated the "remove the trend test footnote in PR033" item from the 2022 working agenda.

11. Evaluated Other Catastrophe Risks for Possible Inclusion in the Rcat Component

Mr. Chou said as was recalled in the last Subgroup meeting, the flood peril may not be warranted due to the materiality aspect based on the industry inputs. The Subgroup agreed that it is worth it to review the possibility of including the severe convective storms as the next peril for the Rcat component. Mr. Chou also anticipated that the Subgroup would follow a development approach like the wildfire peril. Lastly, he said he expects that the new peril will be implemented in the Rcat component for informational purposes only in 2024 RBC reporting. He also encouraged all the subject matter experts (SMEs) and volunteers to join the new ad hoc group so this project will be completed in time.

12. Heard a Presentation from the NOAA Regarding Forecasting and Resilience: Severe Thunderstorms 25'

Harold E. Brooks (National Oceanic and Atmospheric Administration—NOAA) provided a brief overview on Forecasting and Resilience: Severe Thunderstorms (Attachment Five-I). He said the severe thunderstorms in the U.S. include: 1) tornados; 2) hails greater than one inch; and 3) winds greater than 50 mph. He also stated that it could happen anywhere but particularly between the Rockies and Appalachians. In addition, he presented some useful information on tornado resilience and hail protection.

13. Discussed Other Matters

Mr. Chou said the Subgroup will schedule several closed calls between the Subgroup members and the individual modeling vendors in the future to discuss the wildfire impact analysis that the vendors performed last year. He stated that a summary of the calls will be provided in the Subgroup meeting afterwards.

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

SharePoint/NAIC Support Staff Hub/ Member Meetings/E Cmte/CADTF/2022-2-Summer/PCRBCWG

9Capital Adequacy (E) Task Force

RBC Proposal Form

- | | | |
|---|---|---|
| <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 checked="" type="checkbox"/> Catastrophe Risk (E) Subgroup | <input type="checkbox"/> Investment 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"/> P/C RBC (E) Working Group | <input type="checkbox"/> RBC Investment Risk & Evaluation (E) Working Group |

| | |
|--|---|
| DATE: <u>7/13/2022</u> | <u>FOR NAIC USE ONLY</u> |
| CONTACT PERSON: <u>Eva Yeung</u> | Agenda Item # <u>2022-08-CR</u> |
| TELEPHONE: <u>816-783-8407</u> | Year <u>2023</u> |
| EMAIL ADDRESS: <u>eyeung@naic.org</u> | <u>DISPOSITION</u> |
| ON BEHALF OF: <u>Catastrophe Risk (E) Subgroup</u> | <input type="checkbox"/> ADOPTED _____ |
| NAME: <u>Wanchin Chou</u> | <input type="checkbox"/> REJECTED _____ |
| TITLE: <u>Chair</u> | <input type="checkbox"/> DEFERRED TO _____ |
| AFFILIATION: <u>Connecticut Department of Insurance</u> | <input type="checkbox"/> REFERRED TO OTHER NAIC GROUP _____ |
| ADDRESS: <u>153 Market Street</u> | <input checked="" type="checkbox"/> EXPOSED <u>8/9/22</u> |
| <u>Hartford, CT 06103</u> | <input type="checkbox"/> OTHER (SPECIFY) _____ |

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

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

DESCRIPTION OF CHANGE(S)

Instructions to obtain permission to use the own model on PR027A, PR027B, PR027C, PR027, AND PR027INT are revised.

REASON OR JUSTIFICATION FOR CHANGE **

The instructions were implemented in 2019 and there are confusions in the instructions which need to be clarified. The revised instructions proposed is to capture the spirit of the own model permission review and clarify the requirements expected from the company who submits its own model for permission.

Additional Staff Comments:

8/9/22 - The Subgroup agreed to expose this proposal for a 30-public comment period ending Sept. 8.

** This section must be completed on all forms.

Revised 7-2022

**CALCULATION OF CATASTROPHE RISK CHARGE RCAT
PR027A, PR027B, PR027C, PR027, AND PR027INT**

Detail Eliminated To Conserve Space

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 use of the own model is reasonable considering the nature, scale, and complexity of the insurer's catastrophe risk; 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 ~~and the model has been used for at least the last 3 years;~~
3. ~~The perils included in the RBC Catastrophe Risk Charge have been validated by the insurer and that these perils include both US and global exposures, where applicable; 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.~~
45. The own model ~~has been~~was developed using reasonable data and assumptions ~~and that model results used in determining the RBC Catastrophe Risk Charge reflect exposure data that is no older than six months;~~
56. ~~The insurer has individuals with experience in developing, testing and validating internal models or engages third parties with such experience.~~ 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. ~~For each peril included in the RBC Catastrophe Risk Charge, the validation report should attest that the projected losses are a reasonable quantification of the exposure of the reporting entity.~~ 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.
67. 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.
78. If the own model has been approved or accepted by the non-U.S. ~~group~~lead supervisor for use in the determination of regulatory capital, the insurer must submit evidence, if available, from the non-US ~~group-wide~~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 ~~group-wide~~lead supervisor should also be provided for questions on the approval/acceptance process.

If the lead 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~~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 domestic state.

Detail Eliminated To Conserve Space