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INTERINSURANCE EXCHANGE
OF THE AUTOMOBILE CLUB
(Automobile Club of
Southern California)

July 12, 2023

Jon Phenix, Attorney
California Department of Insurance
300 Capitol Mall, 16th Floor
Sacramento, CA 95814
Phone: (916) 492-3705
Email: Jon.Phenix@insurance.ca.gov

RE: Workshop Examining Catastrophe Modeling and Insurance

Dear Mr. Phenix,

The Personal Insurance Federation of California (PIFC) is a statewide trade association that represents nine of the nation's largest property and casualty insurance companies. These companies include State Farm, Farmers, Liberty Mutual Insurance, Progressive, Mercury, Nationwide, Allstate, CONNECT by American Family Insurance and Kemper as well as associate members CHUBB, NAMIC, and Interinsurance Exchange of the Automobile Club (Automobile Club of Southern California). Collectively, these insurance companies write the majority of personal lines auto and home insurance in California.

NAMIC is the largest property/casualty insurance trade association in the country, with more than 1,400 member companies representing 40 percent of the total market. NAMIC supports regional and local mutual insurance companies on main streets across America and many of the country's largest national insurers. NAMIC member companies serve more than 170 million policyholders and write nearly \$225 billion in annual premiums.

We appreciate that the California Department of Insurance (CDI) recognizes that changing technology must play a growing role in our marketplace, to help understand and effectively manage climate risk. We further appreciate the opportunity to collaboratively explore the use of catastrophe models that help insurers better understand, assess, and communicate the risk of wildfires to policyholders and consumers.

General Comments

The California homeowners' insurance market has fallen into a capacity crisis due to a restricted ability to price wildfire risk and significant uncertainty regarding the approval of rate filings. As a result, many carriers who wish to serve California are instead reducing new business capacity and non-renewing wildfire-exposed properties because they cannot receive appropriate returns. Some carriers are leaving the California market altogether. Unfortunately, this capacity crisis is leaving some customers without access to traditional insurance coverage.

A major contributor to the capacity crisis is the challenge insurers face in generating an appropriate return for catastrophe-exposed properties. In particular, the current regulatory misalignments are related to the expected wildfire losses, the net cost of reinsurance, and generating an appropriate return on capital.

As this workshop is focused on catastrophe models, we will focus our comments on that issue; however, allowing the use of catastrophe models alone is not sufficient to address the full scope of the challenges facing California insurers. Therefore, we respectfully request consideration for the net cost of reinsurance in ratemaking and a process to better ensure timely approval of rate filings in the future.

Catastrophe Models Benefit Consumers

Availability, affordability and reliability of insurance coverage are interrelated concepts that combine to form a sustainable homeowners insurance market, as follows:

- *Availability* signifies that there are enough private insurers and reinsurers willing to accept the risk of insuring homeowners in a market.
- *Affordability* signifies that the homeowners are willing and able to pay the premiums charged in order to transfer their risk.
- *Reliability* signifies that the insurers manage their risk properly in order to be solvent and are able to pay claims in case of an event.

We believe that replacing the current catastrophe load methodology promulgated for homeowners' insurance ratemaking in California with modern catastrophe models would increase insurance availability and reliability and could increase affordability over the longer term as well.

Currently, the California Code of Regulations (CCR 2644.5) requires insurers, in the context of a rate filing, to replace all historical catastrophe losses with an average, long-term load based on a minimum of 20 years of data for homeowners' insurance. As applied in practice, this methodology is based on answering the following questions:

- What significant events (wildfire, rainstorms, etc.) were classified as catastrophes?
- What were the insured loss payments for these catastrophic events each year?
- What were the insured loss payments for ordinary non-catastrophe events (kitchen fires, water leaks, liability claims, etc.) each year?

With respect to measuring wildfire risk, this catastrophe load methodology can be viewed as a very simple catastrophe model that could be actuarially sound in the unlikely event that certain conditions were met; however, the California wildfire-risk dynamics are evolving so quickly that this backwards looking methodology cannot keep up with the current risk profile.

Understandably, it is unlikely insurers will rush into a high-risk area to sustain huge losses, in hopes of higher rates down the road.

Although CCR 2644.5 requires that the catastrophe adjustment reflect any changes between the insurer's historical and prospective exposure to catastrophe due to a change in the mix of

business, such an adjustment cannot be reasonably quantified and applied to the data components considered in the simple catastrophe load methodology. In practice, it would be impossible to estimate how to adjust historical loss dollars for a wildfire that occurred in the experience period and did not cause any losses at the time but could cause significant losses today due to new construction within the historical fire perimeter. Further, the regulation does not require or allow an adjustment to reflect changes in the underlying nature of the peril insured, such as we have seen with drought-dried vegetation and increased temperatures.

Modern Catastrophe Models

The best way to make such adjustments would be to employ a modern catastrophe model that incorporates not only historical insurance experience but also scientific knowledge about the underlying hazard, engineering knowledge about the impact of the hazard on buildings, statistical techniques to measure the range of potential outcomes, and a current view of properties exposed to risk.

Catastrophe models have been commonly used since the mid-1990s for measurement of hurricane and earthquake risk in many applications, including pricing insurance and reinsurance products, and managing insurer solvency. They are generally accepted as the basis for primary insurance ratemaking for catastrophic perils in most states. While the CDI has permitted the use of these models for deriving rate relativities, CCR 2644.5 has been applied so as not to permit their use for the calculation of base rates at the portfolio level.

Increasing Insurance Availability

Well-calibrated catastrophe models help insurers understand risk and price it more accurately. With such models, insurers can more accurately charge consumers for the cost of risk transfer, which promotes insurance availability. If insurers are unable to charge the appropriate costs of risk transfer, they have limited recourse, typically to “de-risk” their portfolios via non-renewals and reductions in new business volumes.

The simple catastrophe load methodology promulgated by the California regulations has failed to capture the dynamically changing wildfire risk in California, and insurers have had no acceptable way to demonstrate the premiums needed to insure a portfolio of homes that includes those in the areas where the greatest uncertainty exists. As a result, many insurers have sought to achieve portfolios that are adequately priced as a whole by reducing their exposure in high-risk areas. This is the dynamic that causes availability to be limited in high-risk areas to an extent beyond what would be ordinarily expected in such areas.

Implementing Public Inspection Requirements

This workshop is focused on exploring how to implement the public inspection requirement of Insurance Code section 1861.07 with respect to catastrophe models. Insurance Code section 1861.07 provides:

All information provided to the commissioner pursuant to this article shall be available for public inspection, and the provisions of Section 7929.000 of the Government Code and Section 1857.9 of the Insurance Code shall not apply thereto.

Catastrophe models, as with many complex models, have often been criticized as being “black boxes.” This typically reflects a lack of understanding of the models, or dissatisfaction with the amount of access to the underlying intellectual property of the modeler, or both. This seeming

lack of transparency has been effectively addressed by other regulators and can be addressed in California.

With respect to understanding the models, there are many actuaries and experts in the insurance industry who are familiar with catastrophe models and have developed rigorous protocols for testing model input and output in order to assess the reasonableness, consistency and reliability of results. Insurers often test model results against their actual catastrophic claims in order to better understand their strengths and weaknesses. There is extensive guidance on this subject in ASOP No. 38, Using Models Outside the Actuary's Area of Expertise (Property and Casualty), issued in 2000, and the newly issued ASOP No. 56, Modeling, effective October 1, 2020.

PIFC and NAMIC recommend that for the homeowners' insurance line of business, the use of complex catastrophe models should be required to conform to the standards of practice as set forth by the Actuarial Standards Board and the applicant should have the burden of proving, by a preponderance of the evidence, that the model is based upon the best available scientific information for assessing wildfire frequency, severity, damage and loss, and that the projected losses derived from the model meet all applicable statutory standards.

To ensure there is proper transparency, in keeping with Insurance Code section 1861.07, PIFC and NAMIC believe it would be reasonable for the models themselves to be subject to an external assessment and validation process, outside of the rate application, with appropriate trade secret protection. This could be accomplished through a Catastrophe Model Clearinghouse with potential support from a recent proposal from the National Association of Insurance Commissioners to assist states with technical training to conduct catastrophe model reviews through a catastrophe model 'Center of Excellence'. In this case, an insurer could still be required to treat the output of the model in an agreed upon manner that is subject to public scrutiny and justification pursuant to CIC §1861.05(b) and §1861.07.

Separately, as existing law does not require CDI to approve models, but only rates, another approach CDI might consider is under section 2644.9 (c) requiring a questionnaire and/or certification process insurers must complete. Such a process might include an attestation confirming use of a catastrophe model will not result in excessive, inadequate or unfairly discriminatory rates. Should the department receive consumer or rate complaints or find any other cause to conduct surveillance by the department or a market conduct examination, CDI could conduct a more detailed review of the risk model through additional information provided in response to either:

- 1) requests made by CDI pursuant to its complaint investigations authority (CIC §12921 et seq.), which would then be governed by the confidentiality provisions applicable to requests issued under this authority generally; or
- 2) insurer responses to requests made pursuant to a market conduct examination (CIC §730 et seq.), which would then be governed by confidentiality provisions generally applicable to materials provided pursuant market conduct examinations.

An insurer/modeler's intellectual property is a substantial economic investment of high value, and it is important to prevent any potential misappropriation of sensitive information.

Conclusion

Many states have figured out the proper balance of public transparency and protecting intellectual property. Many details lie ahead on the ultimate solution for allowing catastrophe modeling in California ratemaking, but as catastrophic models become more complex and robust, they will become even more needed to achieve a sustainable homeowners' insurance market in California.

We appreciate the opportunity to participate in the prenotice public discussion examining the benefits of catastrophe models for consumers and providing a more resilient insurance market in California. We look forward to continuing to work with CDI and other interested stakeholders to ensure any proposed catastrophe model regulations meet all appropriate public transparency requirements and serve the needs of all Californians.

Thank you,

A handwritten signature in cursive script, appearing to read "Seren Taylor".

Seren Taylor
Vice President
Personal Insurance Federation of California

A handwritten signature in cursive script, appearing to read "Christian John Rataj".

Christian John Rataj, Esq.
Senior Regional Vice President
National Association of Mutual Insurance Companies