Comments of Consumer Watchdog
Third Workshop Regarding Catastrophe Modeling and Ratemaking (REG-2023-00010)
April 23, 2024

INTRODUCTION

Too many Californians are struggling to obtain and afford insurance on their most significant investment, their homes. Insurance companies are hiking rates, freezing new sales, non-renewing policies and exercising increasing control over decisions about where Californians can and cannot afford to live. The insurance industry blames climate change for their destabilization of the home insurance market and the rising costs being imposed on consumers. They claim California's voter approved consumer protections against price gouging prevent them from assessing the risk of wildfires. Yet insurance companies are turning a blind eye to the significant investments being made by communities and individual property owners to reduce wildfire risk and build resiliency.

A homeowner who recently contacted Consumer Watchdog lives in a Firewise community and has spent thousands of dollars to trim trees, clear underbrush and install hardscape near her property. She is one of the 30,000 individual policyholders State Farm recently announced it would non-renew without consideration of these significant reductions in her wildfire risk.

Insurance companies similarly fail to acknowledge the billions of dollars California, and even the private utilities, have invested in wildfire resilience and forest management to protect communities. That spending directly benefits the insurance industry by reducing the risk they will have to pay large claims in the wake of wildfires.

The industry's solution is the use of black-box catastrophe models to determine how much people will have to pay for insurance. But allowing insurers to use catastrophe models will not solve this crisis. The evidence is clear from states that already allow the use of models. In Florida where catastrophe models have long been in use, home insurance rates are 2-3 times higher than California, insurers have left the state in droves, and Florida's insurance company of last resort has five times the number of policyholders as our FAIR Plan.

Climate-driven weather events have undoubtedly increased, and models used in the right way can help insurance companies better gauge changing climate risk. Yet models are notoriously inaccurate, inconsistent and contain biases that threaten to restore redlining and other notorious discriminatory practices. Catastrophe models will simply be tools for insurance companies to charge more unless California mandates transparency into how they impact prices, imposes rules of the road requiring review and approval of their design and use, and

requires that insurance companies use them to provide consumers and communities with actionable information about their own climate risk.

A public model – **with no need to keep data secret** – would best serve these goals.

We have urged the Commissioner to take this path by supporting the creation of a public California Wildfire Catastrophe Model. The state of Florida launched its public hurricane model in 2007. California's long climate leadership and deep bench of leading academics, engineers, climate scientists and computing experts strongly position the state to create a public model to serve all Californians. A public model would enable us to bake equity, transparency, and accountability into its design and empower consumers and communities to understand and act on their own climate risk. This is the best way to ensure models serve more than the profit motives of the insurance industry and the models' Wall Street owners.

The CDI's proposed catastrophe modeling regulations are instead designed to facilitate the use of black box models by giving in to the demands of the private modeling companies to keep their products secret.

The proposed regulations set up an NDA-protected pseudo review of models that will not enable regulators or the public to confirm insurance companies' use of models is pricing insurance fairly. The regulation does not comply with the insurance consumer protections mandated by the voters in Proposition 103: Public review and justification of everything that goes into an insurance company's prices.

Unaccountably higher premiums will be the result.

Regulations on catastrophe modeling with robust consumer protections would:

- Be fully transparent in accordance with Proposition 103's requirement for public disclosure of catastrophe models.
- Mandate a substantive review and approval of models.
- Identify uniform standards against which a model's reliability and its rate impact will be evaluated.
- Enable regulators and the public to access a model to test both its design, and its impact on a specific insurance company's rate.
- Require all companies disclose the same information for consistent results.
- Require diverse and independent academic and scientific input.
- Preserve participants' due process rights under the APA.

Instead, the proposed catastrophe modeling regulation:

- Uses nondisclosure agreements and closed-door hearings to keep catastrophe model information secret.
- Does not require review or approval of a model's accuracy. Hamstrings approval of a model's impact on rates by withholding model and other needed information from rate review.
- Contains no standards by which to judge a model's validity, and nominal vague standards for a model's impact on rates.
- Does not enable access to a model, or require testing of a model's design or rate impact.
- Contains no guidelines for minimum information to be made public, allowing disclosures to be different for every model.
- Creates no independent panel of experts to review and approve models.
- Exempts model oversight from due process protections under the APA.
- Makes participation by each modeling company voluntary.

By bending over backwards to keep models secret, the proposed regulation will fail to determine if models are reliable, ensure consumers and communities are given the credit they deserve for wildfire mitigation efforts, or confirm models accurately reflect the changing climate risk.

Below we provide greater detail about each of these concerns.

I. PUBLIC TRANSPARENCY: The proposed regulation conflicts with Proposition 103's public disclosure requirement.

Transparency is key to confirming that insurance companies have justified their requests for rate increases. Insurance Code section 1861.07 states that: "All information provided to the commissioner pursuant to this article [Proposition 103] shall be available for public inspection, and the provisions of Section 6254(d) of the Government Code and Section 1857.9 of the Insurance Code [statutes barring disclosure of information the industry considers trade secrets or proprietary] shall not apply thereto."

Section 1861.07 therefore requires public disclosure of any information provided to the Commissioner in connection with review of an insurer's rate application. The creation of a process designed to segregate information about a model to prevent public disclosure is a clear violation of the law.

The California Supreme Court has confirmed that there are no exceptions to the disclosure requirement.[1]

[1] *State Farm Mut. Automobile Ins. Co. v. Garamendi* (2004) 32 Cal.4th 1029, 1043-1044

Mandatory NDAs and sealing the record prioritize secrecy.

The proposed regulation intentionally moves model review out of the public eye in order to exempt models from Proposition 103's transparency requirements. Everyone would be required to sign a nondisclosure agreement (NDA) to participate in model oversight and gain access to information about a model.

The broad NDAs mandated in **proposed Section 2651.10(f)** directly contravene the transparency at the heart of successful rate oversight in California. They center the regulation around preserving secrecy in a key aspect of policyholders' rates, a direct violation of Section 1861.07's disclosure mandate.

Proposed Sections 2651.10(d) and 2651.1(s) also purport to shield the entire administrative record created in the new NDA-protected process from public view (including all evidence, testimony, briefs, pleadings, discovery, and other materials), except the information that is determined to be required to submitted as part of a complete rate application. Such a blanket sealing of the administrative record violates Section 1861.07 requiring that all information submitted to the Commissioner pursuant to Prop 103 shall be made publicly available; and it conflicts with the public disclosure mandates in civil court rules, which presume that court records are open unless required by law to be confidential (see, e.g., Cal. Rules of Court, rule 2.550, 2.551).

As a result, any member of the public, including consumers, lawmakers and journalists, who was not a party to the proceeding (did not sign an NDA) would be barred from accessing any documents, data, legal filings or other information presented.

NDAs will prevent the public from understanding how technology shapes their lives.

Polling by the Pew Research Center finds the public has enormous concerns about the fairness and acceptability of using algorithms to make decisions with important real-world consequences.[2] Across the economy, decisions by algorithms and Artificial Intelligence are creating disadvantage and inequities in Americans' financial lives. The public has a right to understand what's impacting decisions about their futures, but the NDAs mandated by this draft will make certain those decisions will be opaque and the insurance industry unaccountable.

Some of the many questions raised by the proposed regulation's reliance on NDA secrecy include:

[2] Atske, Sara. "Public Attitudes Toward Computer Algorithms | Pew Research Center." *Pew Research Center: Internet, Science & Tech*, 7 July 2020, www.pewresearch.org/internet/2018/11/16/public-attitudes-toward-computer-algorithms.

- What happens when participants disagree on the terms of the NDA? Can an organization that represents consumers be forced to agree to whatever restrictive terms the modeler demanded simply in order to participate?

- If a public interest organization learns of a key flaw in a model, but that information is held secret as part of the PRID, can the organization use that knowledge during rate review when an insurance company seeks to use the model? If an NDA prevents public interest organizations from using the information they learn to challenge an excessive rate, or from sharing their analysis of a model with the public, public participation in a PRID is meaningless and rate review will be severely restricted.

- The proposed regulation specifically bars sharing of information *within* an organization. Could an attorney for an organization that is a participant in a PRID report back to their organization's president about the proceedings? Could a participating reporter report back to their editor? A legislative staffer to their boss?

- Will an organization be barred from publicly discussing their views based on information kept secret by the NDA? A common NDA restriction is to prohibit discussing its terms. Can a list of the data deemed confidential be shared? A description of that data? A critique of the confidentiality decision?

- Would the NDA bar an individual policyholder who was never party to a PRID proceeding from accessing data that an insurance company uses to set their rates?

- A hypothetical scenario that illustrates how an NDA requirement will keep critical information about a model inaccessible:

> A key question about a model's impact on rates concerns the relative weight for each input variable (risk factor) in the model. These weights result from analyses performed within the model based on a dataset used to calibrate the model's initial parameters ("training data"). Depending on a model's construction, small changes to the weights can become highly leveraged, resulting in substantial variability in the model's output. Consumers and their advocates have a legal right to know which risk factors are being used to calculate insurance premiums. They also need to be able to understand the sensitivity of a model's results to changes in risk factor values and their relative weights. Yet details about how a model weights different factors is exactly the kind of information companies protecting a proprietary model are likely to be unwilling to disclose, because it is the kind of information competitors could use to try copying their model.

The proposed regulation also does not set out any baseline requirements about what must be disclosed about every model. This means that the concealed and public data will be different

for every model based on how restrictive of an NDA the model's Wall Street owner is able to demand.

II. ACCOUNTABILITY AND EFFICIENCY: The proposed regulation does not require review or approval of catastrophe models.

The Department has suggested this proposal is intended to require review of proposed models, with full public participation in that process. The current text of the proposed regulation does not require or achieve either.

The regulation splits the Department's model oversight function into three separate phases: first, a superficial, closed-door inquiry into the model; second, a mini-proceeding – also with no public scrutiny – during which the Commissioner will determine that an insurance company's application is "complete" (the subject of a separate regulation the Commissioner has proposed); and, third, the public rate review process required by Proposition 103, in which an insurance company would seek to use the model to justify requests to change its rates.

The first consideration of a proposed model would be during the newly-created "PRID" process.

The text of **Proposed Section 2651.1(n)** states the purpose of a "Pre-application required information determination procedure," or "PRID" procedure is to: "determine all information and data regarding a model that are required to be provided to the Commissioner as part of a complete rate application that relies upon the model for purposes of requesting a proposed rate change pursuant to Insurance Code section 1861.05." In other words, the stated purpose of the PRID as defined in the draft regulation is solely to determine what insurance companies and their modelers must disclose about their model publicly when an insurance company that wants to use the model applies for a rate change under Proposition 103.

This definition is repeated in **Proposed Section 2561.10(b)**.

The new Model Advisor is charged with one job: completing the PRID. The Advisor's only explicit responsibility, and the only product of a PRID, is a determination about what information a modeler may keep confidential, and what information an insurance company must disclose in a complete rate application.

The rest of the PRID proceeding – all the evidence collected that the Model Advisor determines is not necessary to disclose – will be kept secret, preventing non-participants from ever knowing what occurred behind closed doors.

Allowing participants in the PRID to ask questions about a model seems to be contemplated in **Proposed Section 2651.10(i)**, which refers to discovery requests, testimony and evidence. **Proposed Section 2651.10(j)** goes as far as suggesting that parties participating in a PRID may offer expert testimony "regarding the reliability of a model." The proposed regulation gives the Model Advisor a long list of other responsibilities, but neither Section **2651.10(j)**, **(i)**, or any

other provision charges the Model Advisor with considering that testimony, let alone making a determination about a model's reliability and safety. Nor does the regulation state that the Model Advisor has the responsibility to review a model, whether for accuracy, bias, or the validity of the science. The Model Advisor is granted no authority to reject or approve a model. With no regulatory mandate for the PRID to reach a conclusion beyond what information to share, participants who represent consumers would be denied the opportunity to argue a model should be rejected.

Indeed, standards by which a model would be challenged and judged by the Model Advisor are absent. Basic scrutiny of a model's functionality – such as bias testing, or comparison of the model's projections to past events – is not mentioned.

Catastrophe model inconsistency and the importance of testing.

The regulation does not define any rubric for evaluating or testing models. There are no guidelines for determining whether a model is reliable, accurate, unbiased, or based on the best available science and data. This omission means that even if the Department amended the proposed regulation to require model review and approval, the standards for that review could vary widely from model to model.

As former RMS vice president Dag Lohmann, now-CEO of KatRisk, LLC, put it:

"Multiple modelers could develop a wildfire model from all the components in current literature, tune the models to reasonably validate with historical data, and ultimately have average annual losses ***2 or 3 times different than each other*** when projecting future losses."

"…a good model can provide users with significant value in spite of outstanding uncertainties as to model precision. ***Model validation, as well as rigorous review of model operations and assumptions, are critical steps in assessing whether this value can be extracted from a cat model, given its intended use.***" [3] *[emphasis added]*

The American Academy of Actuaries similarly emphasizes the difficulties of model testing:

> "While the technical documentation of the models is available to users for their general knowledge, some core assumptions are considered proprietary and are not readily accessible to users. A catastrophe model is developed by a group of scientists (meteorologist, seismologist, hydrologist, statisticians, engineers, actuaries, computer scientist, etc.) with specialized knowledge in different fields. It is not an easy task for model users to develop even a basic understanding of the model, as required by U.S. actuaries' standards of practice."[4]

[3] "Wildfire Catastrophe Models Could Spark the Changes California Needs." *Milliman*, Oct. 2019, https://www.milliman.com/en/insight/wildfire-catastrophe-models-could-spark-the-changes-california-needs

[4] Cleary, Kay, et al. "Uses of Catastrophe Model Output." American Academy of Actuaries p34, July 2018 https://www.actuary.org/sites/default/files/files/publications/Catastrophe_Modeling_Monograph_07.25.2018.pdf

Even Florida, better-known for passing industry-friendly legislation than consumer protection, requires review and approval of public and private catastrophe models.

A 2022 article examining the design and implementation of the Florida Public Hurricane Loss Model, "FPHLM," details how system evaluation is critical to ensuring the effectiveness and reliability of the model. The authors identify "multiple quantitative and qualitative evaluation methods" that are "presented to ensure the correctness, usability and robustness of FPHLM."

Comparing modeled insured losses from specific storm events with actual insured losses from claims data is the primary method of FPHLM evaluation identified. Such a test enables confirmation that actual results and model results have no statistically significant differences. It is also one way to test bias. In the tests presented in the paper, 51% of actual losses were higher than modeled losses, and 49% were lower, suggesting the model is unbiased.[5]

In addition, the authors perform a sensitivity analysis that shows how FPHLM modeled losses due to the hurricane peril vary with changes to parameters such as deductible amount, year built, number of stories, and construction type. Analyses like this of the sensitivity of loss estimates to various characteristics are critical in ensuring the equitable application of a catastrophe model's output values. Californians must also be able to perform sensitivity analyses to evaluate any model being considered for use in rating the wildfire peril. In order to do that, unfettered access to the model itself would be necessary to ascertain exactly how modeled loss amounts are impacted by user-controlled changes to input parameters.

Although the state of Florida allows the use of private catastrophe models in addition to the public model, it also requires private models to be approved by an independent commission that tests the models' reliability before they are approved for use.

In 1995 the Florida Legislature created the Florida Commission on Hurricane Loss Projection Methodology. The Commission conducts on-site testing of private catastrophe models (the public FPHLM model is also tested) and is charged "with adopting findings relating to the accuracy or reliability of particular methods, principles, standards, models, or output ranges used to project hurricane losses, flood losses, and probable maximum loss calculations."

The Commission's November 2023 report on activities contains **174 pages of specific standards the Commission uses to determine whether a model is acceptable for use** by insurance companies in Florida.[6] These are the types of standards that must be developed in California so consumers can be confident the models are fair.

[5] Tao Y, Wang T, Sun A, Hamid SS, Chen S-C, Shyu M-L. Florida public hurricane loss model: Software system for insurance loss projection. *Softw: Pract Exper.* 2022;52(7):1736-1755. doi:10.1002/spe.3086

[6] Florida Commission on Hurricane Loss Projection Methodology. Hurricane Standards Report of Activities as of November 1, 2023. https://fchlpm.sbafla.com/media/532jql0c/2023-hurricane-roa.pdf

However once model information is sanitized through an NDA-protected PRID process, regulators and the public will be incapable of verifying their science or their math, and regulators and consumer representatives will be left with inconsistent outputs and uncertainties that cannot be explained. By limiting access to the model and information about the model the draft regulation forecloses such testing.

Other than bowing to the demands for secrecy from the insurance companies and the Wall Street firms that sell them models, how will this process enable consumer representatives and the Department staff to effectively assess the accuracy and safety of a model? It won't.

No standards and variable disclosures will result in ad hoc review.

The lack of uniform standards in the proposed regulation for model approval, or review of a model's impact on a rate, sets up bespoke oversight in which every company's rate application will be treated differently.

One of the reasons why California consumers, homeowners, renters and small businesses have benefitted from fair and reasonable rates under Proposition 103 is that a highly detailed set of regulations govern the ratemaking process and apply to every insurance company. The staff of the Department are obligated by law to apply those rules uniformly.

10 CCR § 2643.1 requires the Insurance Commissioner to use "a single, consistent methodology" to evaluate insurers' rates.

The California Supreme Court has confirmed that Proposition 103 requires uniform regulation of insurance companies. (*20th Century Insurance Co. v. Garamendi* (1994) 8 Cal.4th 216, 312.) (See also Order Adopting Proposed Decision, *In re American Healthcare Indemnity Company*, File No. PA02025379, July 24, 2003, p. 8.) Uniform rules of the road are not only a protection for consumers against unfair and arbitrary rates, they are a guarantee of efficient, fair and equal treatment for all insurance companies, large or small.

The draft text does not meet these baseline legal requirements.

Proposed Section 2644.4.5(f), for example, requires an insurer to prove that the model is based on "what in the Commissioner's assessment is the best available scientific information for assessing frequency, severity, damage and loss" and "best available scientific information on risk mitigation at the property." However, the regulation is silent on exactly how the Commissioner makes that "assessment."

As noted above, the Model Advisor has even less instruction, being charged simply with "determining required model information." There is no minimum set of information that every modeler would have to disclose.

Without a comprehensive and precise set of definitions and standards, insurance companies and Wall Street modeling firms will seek to justify any model, regardless of its accuracy, which will lead to arbitrary, discriminatory and excessive rates.

Giving the Commissioner and the Model Advisor unbounded discretion with no published guidelines for their decisions opens the door to the "standardless, ad hoc decision-making" decried by the California Supreme Court in *20th Century*, *supra* (8 Cal.4th at p. 312).

The PRID is completely voluntary.

The proposed regulation also has no requirement that a modeling company submit their model to the PRID. Proposed Section 2644.4.5(e) states "any person may initiate or intervene in a PRID," but nowhere does the reg require a model company to submit to the proceeding.

III. INDEPENDENT EXPERTISE: The proposed regulation does not leverage California's vast resources in academia and industry.

Contrary to representations by the Commissioner and Department staff, including the March 14, 2024, press release promising a "new process for review of models by a panel of experts" to "evaluate the appropriateness and soundness of each model," the regulation does not require the appointment of an independent panel of scientific and other experts.

Expert panels with advisory, audit, and oversight authority operate across California government. The enacting legislation and regulations for such bodies will typically lay out the responsibilities of the body and parameters for choosing appointees, including: frequency of meetings, size of the panel, duties, qualifications of members, and specific stakeholders that must be represented – often requiring a diversity of viewpoints and expertise. The Department of Insurance's own website lists ten such panels and boards[7] – each of which has specific parameters for appointees.

Proposed Section 2651.10(g) does not mandate such a panel. This section states only that the Model Advisor "is authorized to hire outside consultant(s) with relevant knowledge and subject matter expertise to assist in determining required model information." Consultants hired by the agency report to the Department and the Commissioner; they are not independent. Moreover, the draft regulation places no conditions on hiring of the consultants, such as a requirement that they be free of conflicts of interest or agree to make any work they submit to the Department and the Commissioner public. This employer/consultant relationship does not resemble the kind of diverse, interdisciplinary panel of independent experts with a wide array of engineering, computing, climate and other scientific expertise that would be necessary to assist the Department in correctly and independently understanding and evaluating a model's operation.

[7] California Department of Insurance, Commissioner Appointments. https://www.insurance.ca.gov/0500-about-us/03-appointments/index.cfm

If past experience is instructive, the Department can be expected to keep the advice of these consultants confidential too. When the Department has hired outside consulting firms to evaluate underwriting models used to determine eligibility for a homeowners policy based on wildfire risk in the past, it has refused to share any of the information or analysis provided by those firms.

In one instance, a Consumer Watchdog petition for hearing in a proceeding on a Farmers' rate application was denied by the Commissioner, based in part on an outside actuarial consulting firm's evaluation of Farmers' use of the Zesty Z-FIRE underwriting model. The denial stated only that based on that outside actuarial firm's review of the model, the Department was "satisfied that the model is sufficient for the purpose in which it is intended to be used, as a secondary new business eligibility tool" and that "the Department has no concerns about its accuracy or reliability."[8] In violation of Proposition 103's transparency requirement, the Department refused access to the consulting firm's analysis of the model:

> The withheld document is a communication between CDI management and our actuarial contractor, Taylor & Mulder. The document contains analyses, opinions, and recommendations made by Taylor & Mulder to CDI management and is specific to the review of the Zesty Z-Fire model and related to Farmers Insurance Exchange, Fire Insurance Exchange, and Mid-Century Insurance Company's (collectively referred to as "Farmers") rate application. If the CDI were to make this document available to you, it would expose our deliberation and decisionmaking processes and undermine our ability to have candid communications with Taylor & Mulder. Disclosure of the document would also discourage candid discussions between the CDI management and Taylor & Mulder, whether it is regarding the review of this model, other models or other projects relating to rate applications. It would also make public predecisional information that took place during the review process and before a final decision was made by the CDI relating to Farmers' rate application. For these reasons, the public interest is better served by not disclosing the document.[9]

If the Model Advisor can conduct the PRID process by meeting behind closed doors with – or even relying entirely upon – "outside consultants" and contend that their work is protected from disclosure, public access would be negated. Such consultants certainly do not constitute a panel, let alone an independent panel of experts.

[8] Decision Denying Petitioner's Petition for Hearing, In the Matter of the Rate Applications of Fire Ins. Exchange, et al., File No. PA-2020-00006, May 11, 2021, p. 3.
[9] California Department of Insurance letter denying Consumer Watchdog Public Records Act request PRA-2021-00414, Sept. 10, 2021. https://consumerwatchdog.org/wp-content/uploads/2024/04/2021-09-10CDIZFire.pdf

IV. HIGHER RATES: Limited model disclosure will make determining a model's impact on rates impossible.

According to the draft regulation, the PRID will decide what information can be accessed by the public in the third phase of oversight: Prop 103 review of an insurance company's rate application.

Proposed Section 2644.4.5(f) states that in the context of a specific insurance company's rate application, "the applicant shall have the burden of demonstrating…" to the Commissioner that the models they use rely on the best science and meet actuarial standards. This is the only place in the regulation that explicitly states models will be subject to evaluation. Even so, the ability to review a model's impact on rates at this stage will be significantly curtailed because the PRID process limits the information about the model that will be available to do that evaluation.

Access to the model itself, the model's weighting of different factors that impact fire risk, any data set used to build a model, and model output reports - including but not limited to size of loss distributions along with the probability associated with each event - are among the information certain to be foreclosed from public disclosure by the PRID. In recent years, insurance companies and modelers have refused to provide the department or public participants access to such information regarding underwriting models in the rate review process even though they are required by law to do so. The same will be true for catastrophe models.

This is the only place the proposed regulation contains any guidelines for what the commissioner would consider in reviewing a model's impact on rates. Unfortunately, as noted above, the guidelines are far too broad to provide any practical standards for regulators to follow.

V. CONFLICTS WITH OTHER RECENT REGULATIONS: The draft regulation prioritizes the protection of trade secrets over long-standing principles of government accountability, in violation of existing law and regulations.

Wall Street modeling companies have made clear in their public statements, in comments to the Department of Insurance, and in testimony before the Legislature, that they are unwilling to disclose their algorithms or data sets, or to provide access to the actual catastrophe models.

Zesty.ai submitted testimony regarding the wildfire mitigation discount regulation stating:

> …the current draft regulations would jeopardize the industry's ability to protect intellectual property and thus limit new innovation from being introduced in the California insurance market. As such, we would recommend that "data, algorithms,

> [and] computer program" as currently detailed in subsection (f) should be excluded from the public inspection process.[10]

At the July catastrophe modeling workshop, Moody's RMS submitted a list of what it would not disclose:

> Any elements that are considered Intellectual Property
> Proprietary data sets (in-house / third party)
> Software programs
> Source Code
> Notional sensitivity analyses showing all possible combinations of output of model
> Client Specific Results[11]

The proposed catastrophe model regulation capitulates to those demands. However, these confidentiality provisions in **proposed Section 2651.10(d) –** "confidential PRID information shall not be public information and shall be considered to be information received in official confidence by the Department of Insurance" – and the NDA provisions in **(e)**, directly contradict not only the clear disclosure requirements of Proposition 103's Section 1861.07, but also the wildfire mitigation discount regulation (10 CCR 2644.9) approved by the Commissioner in October 2022, and the newly proposed "complete rate application" regulation Commissioner Lara proposed earlier this year, (REG-2019-00025).

The Department made a robust case for the submission and full disclosure of models, their algorithms, and all data associated with a model in the rulemaking documents supporting the necessity of both regulations.

Proposed Sections 2651.1(p) and (q), and Proposed Sections 2651.10(a) and (o), appear to be an attempt to bootstrap the changes proposed by this draft regulation into the text of the "complete rate application" regulation. Together they define the limited scope of the "model information" that must be provided as part of a complete rate application. Such information is not a substitute, however, for providing the "model" itself and any model "algorithm" as part of a complete rate application as required by CDI proposed 2648.4. In proposing the "complete rate application" regulation just three months ago, the Department explained the necessity of providing models and algorithms as part of a complete rate application as follows:

> In order to fully evaluate an insurer's request to change its rates and determine whether the requested rate change is appropriate and not excessive, inadequate, or unfairly discriminatory, the Commissioner must be able to review all information that may have a potential impact on the requested rate during the projected rating period. Relevant here, the general criteria, guidelines, systems, manuals, models and/or algorithms that

[10] ZESTY.AI STATEMENT, California Department of Insurance Prenotice Public Discussion on Mitigation in Rating Plans and Wildfire Risk Models, REG-2020-00015, November 10, 2021, p. 2.
[11] Moody's RMS Presentation, California Department of Insurance Workshop Examining Catastrophe Modeling and Insurance, REG-2023-00010, July 13, 2023, p. 5.

> an insurer uses to determine whether to accept or reject new and renewal business and to determine an applicant's or insured's coverage or coverage options may loosely be referred to as "underwriting guidelines."

(CDI Initial Statement of Reasons, REG 2019-00025, Feb. 9, 2024, p. 15.)

The Department similarly argued the necessity of disclosing models and algorithms in the Initial Statement of Reasons for the Mitigation in Rating Plans and Wildfire Risk Models rulemaking, REG-2020-00015. Subdivision 2644.9(f) of that adopted regulation states that "any records, data, algorithms, computer programs, or any other information used in connection with the rating plan or Wildfire Risk Model used by the insurer" shall be available for public inspection. The Initial Statement of Reasons explains:

> Requiring the data to be filed and be publicly available allows consumers, including consumer groups to: 1) review the data; 2) participate in the ratemaking process and 3) enforce rating laws including those prohibiting rates that are excessive, inadequate or unfairly discriminatory.
>
> …
> Subdivision [2644.9](f) makes it clear that all information related to rating plans or Wildfire Risk Models submitted to the Commissioner as part of the rate review process shall be available for public inspection. Subdivision (f) makes it clear that such information specifically includes records, data, algorithms, computer programs or other information used in connection with the rating plan or Wildfire Risk Model. Subdivision (f) makes it clear that this information shall be publicly available whether it was submitted with the initial application made to the Commissioner or whether it was subsequently submitted. Subdivision (f) also makes it clear that ***such information shall be publicly available regardless of the source of the information and regardless of whether the insurer or developer of the rating plan or Wildfire Risk Models claims the information is a trade secret, confidential or proprietary.***
>
> ***…***
> ***Subdivision (f) is also reasonably necessary to make ratemaking transparent and allow for consumer participation pursuant to Insurance Code section 1861.10. Consumer participation would be discouraged and less effective if consumers groups and the public were not able to view the data that the insurers relied upon when submitting their rating plans that include wildfire mitigation factors and Wildfire Risk Models.*** Subdivision (f) is necessary to allow consumers, including consumer groups, to confirm that insurers' rates are not excessive, inadequate or unfairly discriminatory and thus that the rates comply with Insurance Code section 1861.05.
>
> ***If subdivision (f) is not included, consumer groups and the public will not have a way to determine if the Wildfire Risk Model is based on credible data and/or if the rates being***

> ***proposed, based in whole or part on those Wildfire Risk Models are excessive, inadequate or unfairly discriminatory. [emphasis added]***

(CDI Initial Statement of Reasons, REG-2020-00015, Feb. 25, 2022, pp. 42-43.)

Section 2648.4 of the proposed "complete rate application" regulation requires that models and algorithms used to accept, reject, or rate a risk must be provided as part of a complete rate application and made publicly available. Wildfire risk models used to determine individual premiums are similarly required to be submitted to the Commissioner and publicly disclosed pursuant to Section 2644.9(c) & (f).

The proposed regulation appears to empower the Model Advisor to override these requirements through the PRID process, which would conflict with both regulations and Insurance Code section 1861.07.

VI: LIMITING GOVERNMENT ACCOUNTABILITY: The proposed draft seeks to exempt the PRID process from the protections of the California Administrative Procedures Act.

Proposed Section 2651.1 (m) and (n) refers to the "Pre-application required information determination" and "procedure" (the PRID) as "nonadjudicative." This highly technical term is not used in any other Insurance Code statute or regulation. To the extent the Department is seeking to exclude the PRID process from the long-standing protections against government overreach set forth in the California Administrative Procedures Act (APA), which applies to all "adjudicative proceedings," it should reverse course.

The Administrative Procedures Act provides baseline procedural protections through its "Bill of Rights," found in Articles Six through Eight of the APA (Gov. Code §§ 11425.10–11435.65). Among the most important of those rights are that (1) hearings must be open for public observation; (2) the adjudicative function must be separated from investigative and advocacy functions; (3) presiding officers are subject to disqualification for bias; (4) decisions must be based on the record; and (5) ex parte communications are restricted. (Gov. Code § 11425.10.)

Moreover, the proposed PRID process would permit the Model Advisor to conduct the entire procedure behind closed doors. **Proposed Section 2651.10(e)** gives the Model Advisor "discretion to grant or deny a request to initiate or intervene in a PRID procedure." This conflicts directly with Proposition 103, which provides California consumers with an *unqualified* right to initiate or intervene in any proceeding. Section 1861.10(a) states:

> (a) Any person may initiate or intervene in any proceeding permitted or established pursuant to this chapter, challenge any action of the commissioner under this article, and enforce any provision of this article.

Even if the Model Advisor chooses to permit such participation, the regulation purports to make the entire PRID process confidential, including any hearings. (**Proposed Section**

2651.1(s).) No provisions prevent the Model Advisor from engaging in ex parte communications or require the separation of adjudicative and advocacy functions. Additionally, the Model Advisor need not state the factual basis of their decision based exclusively on evidence in the record when determining what model information must be provided. The APA should explicitly apply to any model review. The APA will ensure minimum protections are in place to help rectify these issues by requiring public observation, limiting ex parte communications, requiring separation of functions, and requiring the ultimate decision be based on facts in the record.

The Model Advisor is given unchecked power.

The proposed regulation envisions that the Model Advisor will make many legal determinations that are governed by the California APA. The regulations describe the Model Advisor's power as "without limitation," including to: "administer oaths; issue subpoenas; rule on motions to compel discovery; receive evidence and testimony," **Proposed Section 2651.10(h)**.

The Model Advisor will determine what information will be made public and will determine the "whether there is a significant public interest in the non-disclosure of confidential PRID information." **Proposed Section 2651.10(f)**

Yet there are no guidelines to govern these determinations by the Model Advisor.

Allowing such open-ended discretion without regulatory guidelines again opens the door to the "standardless, ad hoc decision-making" advocated by the insurance industry and rejected by the California Supreme Court in *20th Century Insurance Co. v. Garamendi* (1994) 8 Cal.4th 216, 312.

Compounding the lack of clarity as to the Model Advisor's role and powers, the draft regulation sets forth no qualifications for the Model Advisor.

VII. ALLOWS MODELS FOR AUTO AND OTHER FORMS OF INSURANCE. The regulation goes beyond wildfires to grant the commissioner broad, unrestrained authority to approve models for other purposes.

Proposed Section 2644.4.5(c)(3) allows the commissioner to expand the use of catastrophe models to "additional lines or exposures" and determine not only the catastrophe load, but project average annual losses in any line "at the Commissioner's discretion."

This rulemaking was convened in response to the shortages in the home insurance marketplace and the insurance companies' insistence that they can't do business in California unless they are allowed to use catastrophe models to predict wildfire risk. It is easy to imagine the potential for abuse if the commissioner starts receiving requests from insurance companies to expand their use of catastrophe models to predict losses in any line. This expansion would be a dramatic and unnecessary change when models can be inaccurate, inconsistent and contain biases.

As noted above, 10 CCR § 2643.1 requires the Insurance Commissioner to use "a single, consistent methodology" to evaluate insurers' rates and the California Supreme Court said open-ended discretion without guidelines opens the door to "standardless, ad hoc decision-making."

To allow insurers to use models in any line to project average aggregate non-cat losses in place of insurer specific data and specified trend periods, and making that determination discretionary one with no need for a regulation, will lead to the very inconsistency in application of the regulatory formula across insurers that 10 CCR § 2643.1 prohibits.

VII. PAST TESTIMONY

We incorporate here our previous comments of July and September 2023 that contain further resources and examples of why thorough, transparent review of models and their impact on rates is so necessary.[12]

See these comments for additional information on:

- Models' inconsistency. For example:

  At the Virtual Meeting Regarding Home Hardening and Wildfire Catastrophe Modeling held by the California Department of Insurance on December 10, 2020, Allan Schwartz, Fellow of the Casualty Actuarial Society and a Member of the American Academy of Actuaries, presented testimony to illustrate how this variability manifests in the private earthquake models already in use in California. He identified examples of dramatic differences in the results of the models consulted by insurance companies.

- The academic scrutiny of flaws in financial industry climate prediction software. For example:

  Boston School of Law Professor Madison Condon's presents a public interest critique including: the modeling firms' conflicts of interest; the disproportionate impact of data bias on communities of color; and how the secrecy of private models hides errors.

- Detailed questions about a model's function and impact that reviewers require access to a model to answer. For example:

[12] Consumer Watchdog testimony, California Department of Insurance Workshop Examining Catastrophe Modeling and Insurance, REG-2023-00010, July 13, 2023. https://consumerwatchdog.org/wp-content/uploads/2023/07/Consumer-Watchdog-Testimony-Catastrophe-Modeling-Workshop-7-13-23.pdf

How is risk scoring determined for quantitative variables that have multiple components (e.g. Fire station proximity: Physical distance, staffing, average drive duration, complications in an active wildfire scenario, etc.)?

- The lack of a California investigatory record of models' accuracy and reliability in other states, or projected models' impact on rates in California.

- The Wall Street and insurance industry ties creating financial conflicts of interest at some of the largest modeling firms.[13]

CONCLUSION

Responsible use of catastrophe models in compliance with California's rate oversight and transparency requirements would require that models be publicly reviewed for accuracy, reliability and bias, and be approved for use. Full access to a model and the ability to test its results are a prerequisite for the public and regulators to be able to determine if its predictions and impact on consumers' rates are fair. We urge the Department to redraft the proposal with these standards in mind.

A public California Wildfire Catastrophe Model would best meet these fairness and accountability goals, and empower consumers, communities, and the state to incentivize risk reduction and more transparently predict climate risk.

[13] Consumer Watchdog testimony, California Department of Insurance Workshop Examining Catastrophe Modeling and Insurance, REG-2023-00010, Sept. 28, 2023. https://consumerwatchdog.org/wp-content/uploads/2023/09/Consumer-Watchdog-Testimony-9-28-2023-2nd-CDI-Catastrophe-Modeling-Workshop.pdf