



Gavin Newsom
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research



Kate Gordon
Director

June 17, 2019

To the Office of Legislative Counsel:

The Governor's Office of Planning and Research herewith submits the final report of the Commission on Catastrophic Wildfire Cost and Recovery containing the commission's "assessment of the issues surrounding catastrophic wildfire costs and damages, and [...] recommendations for changes to law that would ensure equitable distribution of costs among affected parties" in accordance with the requirements of PRC § 4205 (c) (1). OPR staff thank the commissioners and the public for their time and dedication to the consideration of these issues.

The report contains an executive summary, followed by three separate workgroup reports, each the product of a subset of commissioners who were tasked to provide analysis and develop draft recommendations in three issue areas. Only the executive summary is expressive of commission intent, although the workgroup reports provide a necessary foundation in supporting the final recommendations. The commission voted unanimously to transmit these recommendations to the legislature and the governor's office for consideration.

For further inquiry, please contact the Governor's Office of Planning and Research.

Sincerely,

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FINAL REPORT OF THE COMMISSION ON CATASTROPHIC WILDFIRE COST AND RECOVERY

Commissioner Carla Peterman, Chair
Commissioner Dave Jones
Commissioner Michael Kahn
Commissioner Pedro Nava
Commissioner Michael Wara

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Commissioners



Commissioner Carla Peterman, Chair

Chair Peterman served as Commissioner at the California Public Utilities Commission (2013-2019), and as Commissioner at the California Energy Commission (2011-2012). Peterman has also served on various boards including the National Association of Regulatory Utility Commissioners (NARUC), and NARUC's Energy Resources and Environment Committee (Vice-Chair).



Commissioner Dave Jones

Commissioner Jones is the Director of the Climate Risk Initiative at UC Berkeley's Center for Law, Energy and the Environment, a Senior Fellow at The Climate Works Foundation, and Senior Director of Environmental Risk at The Nature Conservancy. Previously, Jones served as California's Insurance Commissioner (2011 to 2018), California State Assembly (2004-2010), Sacramento City Council (1999-2004), and as Counsel to US Attorney General Janet Reno (1995-1998).



Commissioner Michael Kahn

Commissioner Kahn was Chair of the California ISO and Electricity Oversight Board during the California electricity crisis and Chair of the California Commission on Judicial Performance. In his forty-five-year legal career he served as lead counsel in numerous landmark cases including US v. Stringfellow, Cisco v. Apple, and Peoplesoft v. Oracle and was named in 2015 to the California Trial Lawyers Hall of Fame.



Commissioner Pedro Nava

Commissioner Nava serves as Chair of California's Little Hoover Commission. Before his election to the state Assembly, he served on the California Coastal Commission. In the Assembly he represented the Ventura and Santa Barbara areas (2004-2010), where he chaired Transportation, Banking and Finance committees, and Joint Committee on Emergency Services and Homeland Security. He also worked as a deputy DA in Fresno and Santa Barbara counties.



Commissioner Michael Wara

Commissioner Wara is a senior research scholar at the Stanford Woods Institute for the Environment, and Director of the Climate and Energy Policy Program. Wara's scholarship focuses on carbon pricing, energy innovation, and regulated industries. Prior to joining Woods, Wara was an associate professor at Stanford Law School.

Letter from OPR Director Kate Gordon



“Fire Season” is now as much a part of the California lexicon as summer, winter, spring, and fall. In early June of this year, Californians experienced a wave of Red Flag wildfire warnings, and utilities began to preemptively shut off power to reduce wildfire risk. California is moving into an era of more catastrophic wildfires, as climate change, population growth, land use patterns, and inadequate forest management practices converge to put more people and acres at risk. Electric utilities play a role in roughly ten percent of California’s wildfires, but utility-started fires are often the most destructive because they happen in tandem with high winds and usually occur in populated areas.

The Commission on Catastrophic Wildfire Cost and Recovery was established in statute in late 2018 in the wake of two of the most destructive fire seasons on record. The commission was tasked with assessing issues related to wildfires associated with utility infrastructure, and to provide recommendations on changes to law that would ensure equitable distribution of costs among affected parties. This report lays out the commission’s recommendations, delivered after five months of intense public debate held around the state. This public process was one of the only times wildfire victims, impacted communities, public and investor-owned utilities, insurers, ratepayers and others have been able to participate directly in decision-making about how the state plans to take short- and long-term measures to address the intersection of utility policy, insurance frameworks, and increased wildfire risk across California.

While the commission was tasked with looking at how to equitably socialize the costs of those wildfires that do occur, the single most important thing we can do as Californians to manage these costs is to take ambitious steps to reduce the frequency of fires in the first place. We must work to make homes in the wildland urban interface much more resilient, rethink how—or if—we continue to expand development in the most risky fire-prone areas, and redouble efforts to fortify and maintain our utility infrastructure. Those of us in state government must commit to prioritizing more public resources to these important efforts.

I would like to thank the commissioners and the public for their time, effort, and careful consideration in putting these recommendations together. There are no easy answers to these challenging issues, especially as climate change makes wildfires more frequent and severe. But as you will read in this report, we cannot afford to do nothing. These recommendations point the way towards a more sustainable and equitable future.

Kate Gordon

Director

Governor’s Office of Planning and Research

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Executive Summary

Last September, in the midst of the worst wildfire season in California’s history, the legislature passed and then-Governor Brown signed Senate Bill 901. Among other things, the bill created a Commission on Catastrophic Wildfire Cost and Recovery to provide recommendations to the governor and legislature on how to manage the long-term costs and liabilities associated with utility-caused wildfires.

This Executive Summary provides an overview of the work and recommendations of the commission. The commission recommendations are drawn from three workpapers, each developed by two-member workgroups and supported by public testimony. Only the executive summary is expressive of commission intent, although the workgroup reports, attached in appendices, provide a necessary foundation in supporting the final recommendations.

I. Preface

The catastrophic wildfires of 2017 and 2018 took 139 lives, destroyed communities, temporarily displaced hundreds of thousands of Californians, burned more than 2.8 million acres, created short- and long-term health problems, and caused irreparable harm to the state’s natural resources.

Wildfires have always been a part of California’s natural landscape. However, climate change has resulted in a combination of hotter and drier conditions for longer periods of the year, along with interspersed years that are unusually wet. These extremes in precipitation have built up vegetation that then dries out in the hotter years, providing more fuel for California’s fires and ultimately resulting in more frequent and severe wildfires. Fifteen of the twenty largest California wildfires,¹ as well as fifteen of the twenty most destructive,² have occurred since 2000.

This explosive growth in fire activity and accompanying destruction has been coupled with the growth in California’s population and the steady incursion of human settlement into high fire risk areas, in part due to the lack of affordable housing available elsewhere in the state.

Together, increasing global temperatures and an increasing population have played direct roles in increasing the fire threat in California.

¹ [CAL FIRE Top 20 Largest California Wildfires.](#) (last visited May 29, 2019)

² [CAL FIRE Top 20 Most Destructive Wildfires.](#) (last visited May 29, 2019)

Over the course of the past five months and five public hearings, the Commission has heard from many victims, and learned of the untold damages these recent catastrophic fires have caused. As Shari McCracken of the Butte County Board of Supervisors told the commissioners of the recovery after the Camp Fire, “Though it is hard to quantify, there is a greater feeling of uncertainty and less hope for rebuilding in the Camp Fire than we have seen in other fires...It is the order of magnitude of destruction that people just can’t quite grasp. Second, the order of magnitude of the destruction is testing every level of government [...] The County will not be what it was.”³

California’s utilities have played a pivotal role in causing the state’s most destructive recent wildfires, and must take a leadership position in mitigating the risks created by this new reality. As the Governor’s Energy Strike Force noted in its April 2019 report, “California’s electric utilities must be part of the solution to this problem. In the past four years, equipment owned by California’s three largest investor-owned utilities sparked more than 2,000 fires.⁴ Utility-caused fires tend to spread quickly and be among the most destructive. Hundreds of thousands of miles of electrical transmission and distribution lines snake across the California landscape, often igniting fires during extreme wind events and in remote areas, making early detection and fire suppression extremely challenging. Longer fire seasons make utility-caused fires even more likely.”

At the same time, the current method of allocating costs for these fires—socialization through utilities and ratepayers—has destabilized the state’s energy sector, with the largest utilities facing increasing costs of capital and an imminent threat of bankruptcy. This background is fully addressed in the Governors Strike Force Report, so the commission will not repeat here except to say that these impacts burden ratepayers, wildfire victims, and the state’s overall progress towards our climate and clean energy goals.

SB 901, passed in 2018, aimed at addressing this challenge through four key measures: requiring the adoption of wildfire mitigation plans for all electric utilities, providing greater legislative guidance in the cost-recovery process at the California Public Utilities Commission, incorporating a “stress test” to help guide the CPUC in avoiding critical negative impacts on the health of the investor-owned utilities, and providing for securitization of 2017 wildfire expenses.

³ Shari McCracken. Public testimony to the commission, March 13, 2019.

⁴ Carolyn Kousky, et al., Wildfire Costs in California: The Role of Electric Utilities Wharton Risk Management and Decision Processes Center (Sept. 2018), riskcenter.wharton.upenn.edu/wp-content/uploads/2018/08/Wildfire-Cost-in-CA-Role-ofUtilities-1.pdf (last visited Apr. 10, 2019)

As highlighted by the Strike Force Report, the passage of SB 901 was followed by utility credit rating downgrades, indicating that **SB 901 does not do enough to manage the systemic risk from wildfire to the state’s major utilities.**

It is with this background in mind that the commission fulfills its mandate to look specifically at the intersection of wildfire and utilities, and to make “recommendations for changes to law that would ensure equitable distribution of costs among affected parties.”

The commission’s recommendations are summarized below. Full detail on each recommendation is included in the appendices.

II. Commission Process and Report Structure

The Commission on Catastrophic Wildfire approached its work in the spirit of collaboration and maximum public engagement. To this end, the commission met five times, at four locations across the state including cities that had either been recently impacted by wildfires, or that face a significant threat of future wildfires. The five meetings were held in the following cities:

Sacramento – February 25, 2019

Redding – March 13, 2019

Santa Rosa – April 3, 2019

Ventura – April 29, 2019

Sacramento – June 7, 2019

In the process, the commission received invaluable testimony from wildfire victims, local governments, utilities and other energy industry experts, ratepayer advocates, financial experts, and other members of the public. The commission received thousands of pages of thoughtful written testimony, accepted on a rolling basis, with a Request for Comment in April including specific questions to help guide the development of this final report. The commission is grateful for all who committed their time, energy, and expertise to this process.

Through this process, the commission has amassed a public record, which it has used to inform the recommendations contained here. Where possible commissioners have cited this public record to substantiate their recommendations. In addition, all written comments will be included in the final report for the record.

At its April 29th meeting in Ventura, the commission established three workgroups (each made up of two commissioners) to undertake drafting sections of the report, supported by commission staff. These workgroups included one focused on utility liability, one on funding mechanisms to handle damages from future wildfires, and one on issues related to the homeowners insurance market in high-risk fire areas.

This executive summary highlights the findings and recommendations of each of these workgroups.

At its final meeting on June 7th, the commission discussed the findings and recommendations contained in the executive summary. After some agreed-upon changes reflected herein, the commission unanimously approved the transmittal of this document, along with the workgroup reports, to the legislature and governor for further review and consideration. As mentioned above, only the executive summary is expressive of commission intent, although the workgroup reports provide a necessary foundation in supporting the final recommendations.

III. Findings

Utility Liability

Finding 1. California faces an unprecedented multi-dimensional emergency caused by catastrophic wildfires.

Finding 2. California has a decentralized system of regulating and governing the wildfire prevention and mitigation of its 56 public and private electrical utilities that creates inconsistent rules for addressing wildfire risk, and redundancy of effort, and squandering of scarce resources.

Finding 3. The current interpretation of inverse condemnation, holding utilities strictly liable for any wildfire caused by utility equipment regardless of standard of care or negligence, imperils the viability of the state's utilities, customers' access to affordable energy and clean water, and the state's climate and clean energy goals; it also, does not equitably socialize the costs of utility-caused wildfires.

Finding 4. The increasing costs of capital and the risk of bankruptcy associated with the strict liability interpretation of inverse condemnation doctrine for water companies, publicly-owned utilities, and investor-owned utilities is harmful to wildfire victims, ratepayers, and the utilities themselves.

Finding 5. The risk of utility bankruptcy harms both major classes of the victims of wildfires. Casualty victims (i.e., non-property loss victims) are unfairly forced to have their claims moved from civil court proceedings to bankruptcy jurisdiction. Property loss victims unfairly have their claims similarly moved to bankruptcy court where they lose many of the protections of civil court, may have their claims substantially reduced or extinguished by the bankruptcy court, and may be subordinated to post-bankruptcy victims' claims.

Finding 6. The current process and standard for determining cost recovery contributes to the uncertainty that utilities face, often increasing costs to ratepayers while resulting in insufficient investment in wildfire mitigation.

Funding Mechanisms

Finding 7. The financial mechanisms for paying wildfire liabilities associated with utility-caused fires are strained and not sustainable for victims, ratepayers and utility shareholders.

Finding 8. Wildfire risk is created by multiple parties who should all be incentivized to reduce risk and share in paying for wildfire damages.

Finding 9. The time required for, and the uncertainty of, investor-owned utility wildfire cost recovery from ratepayers reduces investor confidence in utilities, and limits utility access to capital after a major fire.

Finding 10. Californians' electric costs are increasing due to wildfire mitigation investments and other capital and regulatory requirements.

Finding 11. The liabilities associated with wildfire are challenging to model and not well understood.

Homeowner's Insurance

Finding 12. Admitted lines home insurance is becoming more difficult and more expensive to obtain in high wildfire risk areas in California.

Finding 13. As more homeowners in the WUI are unable to find home insurance from admitted carriers, more are having to purchase fire insurance from the surplus lines market or from the FAIR Plan.

Finding 14. Home insurance in the WUI is still largely available, although we are marching steadily toward a future where home insurance will be increasingly unavailable and/or unaffordable for many in the wildland urban interface in California. More destructive fires in the future of the sort we saw in 2017 and 2018 will only accelerate this trend.

Finding 15. California does not currently require a new government created insurance program beyond than the FAIR Plan to support home insurance availability in the WUI.

IV. Recommendations

As is clear from the findings above, the current wildfire situation in California requires a balancing act. Californians in the wildland-urban interface contribute to the economic and cultural vitality of the state and deserve adequate protection from wildfires. It is critical that not only utilities, but also homeowners, renters, federal, state and local government, and

others, act to reduce the risks of wildfires in the WUI. We must not incentivize risky behavior, including the risks many Californians take by continuing to move into the most fire-prone areas of the WUI; by remaining un- or underinsured; or by neglecting to maintain proper home hardening and fire safety standards. But we also cannot put the entire cost of wildfires onto ratepayers' backs. Cost recovery from utility-related fires must be spread across those with the responsibility to help reduce these wildfires in a way that is fair, does not incentivize risk, and does not overly burden utilities to the extent that they could be driven out of business.

This is not an easy task. Where the commission landed, after hours of testimony and expert consultation, is as follows:

The Commission recommends the prudent manager standard for electric utilities be modified to bring specificity, to the extent possible, to what constitutes prudent behavior in the context of wildfires.

The commission recommends that the current strict liability interpretation of inverse condemnation for utilities be replaced with a fault-based standard.

The commission recommends the creation of a Wildfire Victims Fund, adequately sized to the level of risk, to more quickly and equitably socialize wildfire costs. Such a fund would be structured to avoid subsidizing risk: it would only pay out settlements to claimants at the levels they would have received in the absence of the fund's creation, and will require substantial repayment by utilities not found to be prudent.

The commission recognizes some real challenges, risks, and downsides to this outcome – not least of which is that creation of a large fund might go against the overarching need to ensure that the state is not ultimately subsidizing risky behavior from homeowners, renters, federal and local officials, and utilities. The commission has attempted to address some of these concerns through the fund details but many questions and concerns remain.

Absent either reform of strict liability *or* the establishment of a wildfire fund, immediately revising the prudent manager standard and establishing a liquidity fund would resolve some of the issues currently facing the state's electric utilities.

The commission recommends a series of reforms related to the homeowner's insurance markets, to maintain availability and affordability of insurance in the wildland urban interface, while also ensuring that policy prices remain fundamentally tied to risk.

The commission urges that any changes to inverse condemnation, the prudent manager standard, cost recovery, or creation of a Wildfire Victims Fund be considered in a coordinated fashion. Interactions between the three frameworks are so direct and so strong that modification of one or more without close coordination is likely to lead to failure of policy effectiveness or other severe unintended consequences.

Utility Liability

The commission recommends the following as the clearest way to more equitably socialize costs, relieve the extreme burden of ratepayers, and meet the principles enumerated by the Governor's Energy Strike Force.⁵

Recommendation 1. Replace the current strict liability interpretation of inverse condemnation for electric and water utilities with a fault-based negligence standard.

The current liability regime stems from the constitutional doctrine of inverse condemnation. In applying this doctrine, courts have assigned liability to utilities even in the absence of a finding of negligence.

Converting this strict liability regime to a fault-based standard reduces the burden to ratepayers by removing significant wildfire liability, decreasing the cost of capital, and reducing the risk of bankruptcy, while maintaining a robust incentive for utilities to mitigate wildfire risk.^{6,7} The Commission notes that a change in this liability regime may transfer costs, not eliminate them, and that transfer may result in stakeholders responding accordingly.

Recommendation 2. Revise and clarify the prudent manager standard for utilities.

Refining the prudent manager standard used by the California Public Utilities Commission is a necessary additional step to provide clarity to utilities and their lenders regarding wildfire cost recovery. When utility equipment contributes to a wildfire, the CPUC must determine that the utility prudently managed its system before IOUs can recover liability costs from their electric customers. The commission received testimony that that the current standard for determining prudence is unclear and protracted. This process has led to significant uncertainty in the capital

⁵ Governor Newsom's Strike Force. "Wildfires and Climate Change: California's Energy Future", pp 26-27

⁶ There remains significant uncertainty around the legal viability of changing the strict liability interpretation of inverse condemnation to a fault-based standard. Notably, in 2018, the Office of Legislative Counsel authored an opinion indicating that the legislature may not, by statute, alter judicial interpretation of the California Constitution.

⁷ The utility liability workgroup of this commission posited a legal approach on this issue at its final meeting, and this approach is outlined here for consideration. The question of whether the inverse condemnation strict liability standard applies to utilities has never been decided by the California Supreme Court or the Legislature. Nevertheless, two Courts of Appeal have so ruled. Both opinions are suspect. The first, Barham, was decided before California's new electricity deregulation scheme was implemented and the second, Pacific Bell, was based on the factually disproven assumption that the utility could pass its liability onto its ratepayers. The Legislature and Governor have the authority and basis to declare a wildfire emergency which threatens the safety and well-being of the State and to establish a legal and regulatory scheme setting forth their interpretation of the Constitution to respond to the emergency; see, e.g., Bunch and cases authorizing the Legislature to interpret the State constitution. The utility liability findings and recommendations in this Report would support such Legislation.

markets regarding the costs that utilities face, which in turn leads to increased costs for utility customers.

Regardless of whether the strict liability application of inverse condemnation remains the rule, the commission recommends modifications to the approach of determining prudence, in order to bring certainty to the process while still holding utilities responsible for imprudence of the utilities' management.

The objectives of this reform would be to 1) ensure that ratepayers pay for just and reasonable investments (such as investments in prevention and safety), but do not pay for avoidable, imprudent behavior and 2) ensure cost recovery reflects the host of factors—including risky homeowner or renter behavior—that contribute to the extent of wildfire damage, and does not hold utilities solely liable in cases where other factors contribute to the magnitude of the damages.

Below are three, not mutually exclusive, options for reforming the prudent manager standard.

Cost Recovery Option 1: Burden shifting. In order to increase the certainty that prudently incurred costs will be allowed in rates, CPUC process could be modified to allow for a presumption of prudence for a utility wildfire expense given a prima facie showing but still allow for a challenger to attempt to prove, by a preponderance of the evidence, that an expense was imprudently incurred.

And/Or

Cost Recovery Option 2: Further refinement of those SB901 factors the CPUC should consider when assessing disallowances, to give a higher weighting to those factors that acknowledge the unique, exogenous circumstances possibly present in a catastrophic wildfire.

If and only if a Wildfire Victims Fund is created and utility shareholders make a substantial up-front contribution to the Fund:

Cost Recovery Option 3: Maximize utility shareholder liability up to the point it harms ratepayers or impacts service. One option might be to have a predetermined maximum liability that shareholders may be subject to under the current (or an alternative) framework for prudence. This option should only be considered if shareholders make substantial upfront contributions to a fund.

Recommendation 3. Consolidate and strengthen the standards and processes for utility wildfire mitigation and response. One option for consideration is to establish an Electric Utility Wildfire Board, which consolidates governance of all utility catastrophic wildfire prevention and mitigation into a single entity separate from the California Public Utilities Commission.

The IOUs, POUs, and cooperatives are governed by separate wildfire prevention and mitigation rules. Moreover, there is no consolidated data gathering, best practices development, or other centralized efforts to maximize the state's fire prevention and mitigation efforts. This results in inconsistent policies, duplication of efforts, and lack of efficient coordination. The commission recommends considering the creation of a single, purpose-built state entity to have governing authority over all utility wildfire prevention and mitigation activities. The Electric Utility Wildfire Board, or other entity would set and enforce safety standards and implement, administer, and adjudicate fault-based standards for both IOUs and POUs. Any new state agency given these authorities must also be aligned with and consistent with the CPUC's processes and authorities. The commission envisions a robust entity with (a) data collection and other information technology efforts; (b) liability and conduct standards development activities; and (c) liability standards enforcement activities.

Taken together, these actions would significantly reduce the risk to ratepayers from overwhelming wildfire liability. **But taking these actions would not entirely eliminate that risk.** Utilities would continue to face liquidity challenges if they are perceived to face the risk of significant wildfire liabilities.

For this reason, the commission recommends that an additional funding mechanism be considered to create a buffer against the shock of liability from catastrophic fires. Such a mechanism is further described below. In the event that the inverse condemnation/strict liability standard were revised, such a fund would need to cover less liability, and would therefore require a smaller capitalization than if the current inverse doctrine were to stay in place.

Funding Mechanism: Wildfire Victims Fund

Catastrophe funds, such as a Wildfire Victims Fund, can be useful tools when rapid changes in perception of risk from a particular peril (wildfire, hurricane, earthquake) lead to disruptions in insurance markets or to a risk that traditional insurers are either unable or unwilling to manage through the normal underwriting process. The degree to which the State's utilities continue to face such a perception will determine whether a fund is needed, and if so, how large it should be.

The commission recommends that the legislature establish an adequately sized to risk and broadly sourced Wildfire Victims Fund to more quickly and equitably socialize wildfire costs. Ultimately, how such a reserve fund is structured, and how effective it is, depends on what other reforms the legislature adopts. To be most effective, a fund should be coupled to greater

investment in wildfire mitigation, and to reforms to the liability regime, cost recovery process, and property insurance markets.

At the same time, while this discussion focuses on a fund that would be designed to pay claims from wildfire victims, the commission believes that a smaller fund, designed to provide liquidity to utilities after large wildfires, could provide some but not all of the benefits of the larger claims-paying fund.

Recommendation 4. The legislature should consider establishing a broadly sourced Wildfire Victims Fund, adequately sized to the level of risk, to more quickly and equitably socialize wildfire costs, and maintain the health of the state's utilities.

This fund should be designed based upon the following objectives:

1. Pool risks broadly, and be sourced beyond electric ratepayers.⁸
2. Include contributions from utility shareholders and ratepayers that reflect differential risk
3. Limit risk pooling when the utility engages in imprudent behavior.
4. Treat wildfire victims fairly
5. Improve utility solvency and liquidity so that utilities may continue to offer reliable, affordable service to Californians and make progress towards California's clean energy goals.
6. Maintain incentives for all parties to pursue wildfire mitigation efforts.

Recommendation 5. The Wildfire Victims Fund, which should be created as soon as possible—ideally to cover potential 2019 fires, but if not the 2020 fire season and beyond—should be tax-exempt, and limited to "catastrophic" electric utility caused wildfires.⁹

The fund would ideally have the following attributes:

Participation and Capitalization: Participation in the Fund should be voluntary, with participants benefitting from changes to the cost-recovery standard. Participating utilities

⁸ The Commission believes the broadest socialization of utility-ignited wildfire costs is to socialize those costs across taxpayers; absent support for this concept, the Wildfire Fund Subgroup report provides further recommendations on cost socialization.

⁹ For detailed recommendations and considerations on these decision points, please see the Fund Workgroup Report. The commission also recommends that **the legislature should continue to monitor exposure faced by water utilities and consider in the future whether any additional financing mechanisms are needed to transfer risk and recover costs in that sector.**

must maintain a specified level of commercial wildfire liability or general liability, with a specified minimum deductible.

The Fund should be highly capitalized to survive anticipated third-party damages¹⁰ and with relatively equal contributions from ratepayers, shareholders, property owners (through a surcharge on property insurance) and the State of California (through forfeited tax revenue from the tax-exempt status of the Fund, and through statewide investments in mitigation).

Claims Payment: The Fund should pay claims in excess of the mandated, combined commercial insurance and deductible, up to a cap. Specifically, the Fund should pay a maximum amount per fire incident, and a maximum amount per utility in a given year. Any excess liability incurred by a utility would remain with that utility and be subject to CPUC prudence review and follow through cost allocation.

It is critical that the fund not have the perverse outcome of actually incentivizing risky behavior on the part of utilities or claimants. To that end, claimants to the Wildfire Victims Fund should not be entitled to larger settlements than they would have received in the absence of its creation. The fund should pay insured, underinsured, and uninsured losses from utility caused wildfires at values approximating their settlement value through predetermined discounts. Similarly, if a utility is found to be imprudent, or partially imprudent with respect to a wildfire, the fund should pay claims only up to a specified amount, directly tied to the level of up-front shareholder contributions to a fund.

In addition to claims payment, money contributed to or earned by a Wildfire Victims Fund should be used for a variety of purposes to further its goals, including purchase of reinsurance or other risk transfer, developing a better understanding of and recommendations for risk based approaches to wildfire mitigation, and public education on the risk of wildfire and the actions that can be taken to avoid or reduce vulnerability

Fund Duration: Finally, the need for the fund should be evaluated every five to ten years, with a planned mechanism to wind down Fund operations and return unused capital to all contributors in an equitable fashion.

Fines: The commission recommends reviewing the CPUC fine authority to issues fines for any violations. Revisions could include increasing the \$8 million cap on fines for citations related to wildfire mitigation, statutorily increasing the maximum fines allowed under PUC section 2107, and altering the disposition of fine revenue to the Wildfire Victims Fund or towards mitigation measures.

¹⁰ See (Wildfire Fund Workgroup Section) for a details discussion of fund capitalization and modeling needs.

Challenges in Creating a Wildfire Victims Fund

Establishing a Wildfire Victims Fund of adequate size and with adequate contributions, that does not perversely incentivize risky behavior on the part of homeowners, renters, federal, state and local officials, and utilities, is a daunting task. Creating a fund could have the unintended outcome of encouraging claimants to inflate their claims, for instance. Or, the presence of the fund as a backstop could encourage homeowners, renters, and local governments to pay less attention to important fire-prevention efforts. Balancing the objective of creating an adequately sized fund to meaningfully protect ratepayers, the importance of better socializing costs, and the imperative to reduce the overall risk of catastrophic wildfire presents important challenges.

Key among these is that the likely largest potential contributor to the fund, PG&E, is currently undergoing Chapter 11 reorganization, and its financial liabilities for fires in 2017 and 2018 have not been resolved. This reorganization, which will not be finished this legislative session, may have implications for the utility's available liquidity to contribute immediately to a fund. This is particularly concerning given the likely higher contribution expected from PG&E due to its territory size and recent wildfire history.

In addition, shareholders of all the state's IOUs may object to sizeable initial contributions to the fund, even though they will benefit from the risk pooling a fund creates as well as from associated cost recovery reform.

Maintaining payouts at current settlement values both for subrogation claims from insurers, and for payments to underinsured homeowners, also present both legal and implementation challenges. Moreover, once established, a fund would require some mechanism to ensure submitted claims for under- and un-insured homeowners are reasonable, given there is no intermediary such as the courts or an insurance company reviewing claims' veracity. Not maintaining payouts at current settlement values, and the potential for claims inflation, both will dramatically increase the cost of the fund and so compromises its likely usefulness.

Finally, there are important affordability challenges to consider in thinking through the potential of a Wildfire Victims Fund. The state has an overall goal of maintaining affordable electric utility rates, which could be increased as a result of utility contributions to such a fund. On the other hand, such a fund might be the least-worst option for utility customers in that it would render a future of escalating and unpredictable electricity bills somewhat less costly and much more predictable.

Further work is needed to identify the costs, consequences, and feasibility of parts of the proposal as presented here.

Insurance

Insurance is becoming more difficult and more expensive to obtain in high wildfire risk areas in California, and **while insurance is still largely available, it will be increasingly unavailable and/or unaffordable for many in the wildland urban interface in California.** More destructive fires in the future of the sort we saw in 2017 and 2018 will only accelerate this trend. The state should take measures to help bring stability to the market, while ensuring that the market accurately reflects the underlying risk.

The commission recommends the following:

Recommendation 6. California should preserve its risk-based approach to pricing insurance.

The commission strongly recommends that California maintain incentives created through risk-based pricing of insurance for all stakeholders to avoid and mitigate risk. Furthermore, the state should not act to suppress prices in high-wildfire risk areas by increased cross-subsidy from low-risk areas.

Recommendation 7. Improve the California FAIR Plan, California's last-resort basic home insurance, by increasing the coverage limit to \$3,000,000 and automatically increase the limit with an inflator annually. In addition, the commission believes that a targeted premium subsidy for existing homeowners in the WUI who are low income and for whom the FAIR Plan is the only option for insurance is justified.

Recommendation 8. Improve the California Insurance Guarantee Association by increasing the claims cap to \$1,000,000 and then increase annually by an inflation factor.

Recommendation 9. Require Fire Risk Underwriting Models used by insurers to be filed and approved by CDI.

Recommendation 10. Require insurers to file annually with CDI for review and approval the insurers' replacement cost estimating models/tools and the inputs they are using as well as a comparison of recent loss experience to estimates based on these tools.

Recommendation 11. Set home fire risk reduction and community risk reduction standards with input from insurers and require insurers to write insurance where home owner and community both meet standards.

Recommendation 12. Require insurers to implement a tiered mitigation credit based on the level of home hardening. This is presented as an alternative to Recommendation 11, but the Commission believes it would be far less effective than Recommendation 11 because it does not address the unavailability of insurance.

Recommendation 13. Require insurers to calculate and provide a replacement housing estimate in writing to insureds annually and before entering into insurance contract.

Recommendation 14. Require CDI to undertake a data call on the insurers' subrogation claims, as well as on the insurers reinsurance cost and availability.

Recommendation 15. Require homeowners insurers to offer a one-year notice of non-renewal, in addition to the existing 45-day notice, when there is no change in the risk presented at the insured property within the homeowner's control, or if the insured has been with the same insurer for five years or more.

Recommendation 16. Mandate that all homeowners insurers offer a "Difference in Conditions" policy or a Comprehensive Personal Liability/Residential Workers' Compensation coverage.

Recommendation 17. Require that there be a valid quote for insurance coverage before any real estate offer is accepted.

Reduction of Wildfire Risk in California

As noted at the outset, the commission recognizes that addressing the impact of wildfires on California's utilities requires both reducing fire risk on the front end, and fairly paying out for claims based on fire damages when they occur. While most of this report focuses on cost liability and cost recovery, we cannot lose sight of the critical need to mitigate the risk that these fires will become catastrophic. These final recommendations focus on this important point.

Recommendation 18. Establish a Wildfire Vulnerability Risk and Reduction Coordinator within the Governor's Office of Planning and Research. The Risk Reduction Coordinator would be charged with conducting research and providing regular recommendations to the legislature, governor, CPUC, Insurance Commissioner, and local governments on optimal levels of risk mitigation spending within the state by various parties.

Recommendation 19. Provide significant state investments in prevention and mitigation efforts, whether funded by a state tax and a specific fund in the state budget for direct mitigation or small grants for home hardening.

Recommendation 20. Take action to significantly increase consistency of private property maintenance laws by developing best practices or minimum standards for fire risk, and minimum allowed penalties for non-compliance.

Recommendation 21. The commission recommends that the state require that any municipality or government body that approves new development, including new construction on vacant land, is able to provide firefighting service to that property within a certain maximum time.

Recommendation 22. Development fee for new construction in the WUI. New development that will put more lives and property at risk ought to have an associated development impact fee, paid to the State of California by the applicant for the development permit, to help fund risk reduction efforts benefitting the new development.

V. Conclusion

In this report, the commission has attempted to address the current catastrophic wildfire liability situation in a way that recognizes the severity of the problem and its many different contributors; addresses the critical need to provide cost recovery for those with serious damages while not bankrupting utilities in the process; and highlights the importance of actively reducing wildfire risk while simultaneously structuring a system to pay for damages from these fires. Each of these solutions has implementation challenges which should be further considered in legislation development and monitoring of any new laws.

Bearing all these factors in mind, the commission recommends that the legislature immediately revise the CPUC's prudent manager standard and cost recovery process along the lines discussed above.

The commission further recommends a change to the current inverse condemnation/strict liability standard.

The commission recommends that the state create an adequately-sized Wildfire Victims Fund to cover reasonable costs incurred in catastrophic wildfires. However, the commission recognizes the challenges of capitalizing and standing up such a fund, and understands that in the short term a smaller bridge fund may be necessary, on the road to eventual longer term reforms.

Finally, the commission recognized that there are significant unknowns in the implementation of the measures outlined in this report. The legislature and relevant state agencies should monitor the consequences of these measures, and be prepared to make changes as needed.

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APPENDIX I: UTILITY WILDFIRE LIABILITY WORKGROUP REPORT

Commissioner Kahn and Commissioner Nava

The workgroup reports are the products of the workgroups established at the April 29th, 2019 commission meeting, and represent the consensus thinking of the members of a given workgroup. Only the executive summary is expressive of full commission intent.

I. Findings from Public Testimony

Governor Newsom's April 12, 2019 report Wildfires and Climate Change: California's Energy Future ("Strike Force Report") covers much of the background necessary for this report. In many places, the Strike Force Report provides explanations and supporting data which parallel the work and findings of this workgroup. Herein, where relevant, the workgroup will cite the Strike Force Report rather than reproducing that information.

Finding 1. California faces an unprecedented multi-dimensional emergency caused by catastrophic wildfires.

The commission received evidence that the state faces an emergency with many causes as described in the Strike Force Report.¹ The cumulative effects of population growth and expansion into high fire severity zones, the effects of climate change, and many years of insufficient application of resources to combat and harden against the growing threat of wildfires have created conditions in which millions of Californians now and for the foreseeable future are vulnerable to the devastating consequences of catastrophic wildfires.

Though stakeholders and experts provided the commission with evidence of myriad causes of this emergency, this commission's charge was to focus on utility infrastructure. In doing so, the commission received input focused on two subjects related specifically to utility liability:

¹ Governor Newsom's Strike Force. "Wildfires and Climate Change: California's Energy Future", pp 2

LeRoy Westerling, public testimony. February 25, 2019. "A warming, drying landscape with more variable precipitation has resulted in more, larger, and more severe wildfires across the west."

1. The decentralized manner in which the state's 56 investor-owned utilities (IOUs), publicly-owned utilities (POUs) and cooperatives manage the risk of catastrophic wildfire.
2. The effect the state's current utility wildfire liability regime is having on the ability of the state to properly respond to the fire emergency and to equitably allocate its costs.

In the following findings, the workgroup will discuss both of those subjects.

Finding 2. California has a decentralized system of regulating and governing the wildfire prevention and mitigation activities of its 56 publicly-owned and investor-owned electrical utilities and cooperatives that creates inconsistent rules for addressing wildfire risk, redundancy of effort, and squandering of scarce resources.

The commission heard from a wide variety of fire victims, utility company representatives, government officials, fire emergency experts and other stakeholders, all of whom stated that additional resources are needed to prevent wildfires. The governor and legislature have already recognized this need and have begun to address it,² although substantially greater resources are required, particularly in relation to the threat posed by utility infrastructure.

Currently, as outlined in SB 901 last year, IOUs are required to develop and submit Wildfire Mitigation Plans to the California Public Utilities Commission (CPUC) for approval (PUC section 8386). The majority of the POUs are required to independently develop wildfire mitigation plans and have them available for public comment. Thus, each of the state's POUs sets its own standards and programs in its wildfire mitigation plan, and this behavior is not regulated by the CPUC beyond the existing statewide standards³. Separately, each of the state's six investor-owned utilities sets its own standards and programs for addressing the fire emergency which behavior is regulated by the CPUC.

The State of California has no regulatory agency or other body with the responsibility or authority for coordinating and governing the comprehensive wildfire prevention and mitigation of the IOUs, POUs and cooperatives. There are numerous practices which the

² Exec. Order No. N-05-19 (2019). Retrieved from <https://www.gov.ca.gov/wp-content/uploads/2019/01/1.8.19-EO-N-05-19.pdf>.

Proclamation of State of Emergency (22 March 2019). Retrieved from <http://www.fire.ca.gov/general/downloads/45-DayReportPlans/3.22.19-Wildfire-State-of-Emergency.pdf>

Veklerov, K. (2018, August 8). "California giving out \$170 million in cap-and-trade revenue to help prevent wildfires." *San Francisco Chronicle*. Retrieved from <https://www.sfchronicle.com/california-wildfires/article/California-doles-out-170-million-in-13139050.php?psid=6rRXA>

³ See CPUC General Order 95 and General order 165.

state's utilities can adopt to improve wildfire prevention and mitigation, however there is no regulatory mechanism for adopting a uniform, flexible statewide approach to the emergency for all electrical utilities.⁴

There is a need for improved data collection about the utility wildfire risk and utilization of advanced technology to combat the emergency. But, there is no centralized method for the state to marshal its resources in this regard as, for example, Florida has adopted with its hurricane agencies.

The approach of consolidating regulations, governance and problem solving into a single agency or board with statewide responsibility has been successfully undertaken in analogous circumstances by California⁵ and other states.⁶

Finding 3. The current application of inverse condemnation imperils the viability of the state's utilities, customers' access to affordable energy and clean water, and the state's climate and clean energy goals and does not equitably socialize the costs of utility-caused wildfires.

The state's three major IOUs—Pacific Gas & Electric (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E)—face a crisis in that they have limited and expensive access to capital to fund their operations, and they face the significant risk of bankruptcy. This case for this is clearly outlined in the Strike Force Report.⁷ This circumstance increases electricity rates, imperils 75 percent of the state's residents' ability to have their energy needs served.

The state's POUs and cooperatives which serve 25 percent of the state's residents, also face financial crisis from the current liability regime. POUs are unable to shift the burden of their

⁴ The CPUC's Wildfire Mitigation Plan proceedings established through SB901 provide a significant step in this direction, however this process needs improvement and leaves out the state's POUs.

⁵ See California Earthquake Authority, public testimony, April 3, 2019.

⁶ John Rollins, public testimony, April 3, 2019. "Over 25 years ago, in the wake of Hurricane Andrew, Florida faced an acute availability and affordability crisis in homeowners insurance. An abrupt rise in insurers' cost of capital after the unexpected and severe storm losses broke the connection between the property hazard risk faced by consumers and the insurers and reinsurers who commit capital to share that risk. Florida had an existing guaranty fund to deal with the dozen insolvent insurers, but responded to the state's future needs by chartering a trio of institutions: a state-backed scientific body to assess hazard risk (the Florida Commission on Hurricane Loss Projection Methodology or "Commission"), a state-backed reinsurer (the Florida Hurricane Catastrophe Fund or "Cat Fund"), and a state-backed direct insurer (now known as Citizens Property Insurance Corporation, or "Citizens"). Each institution plays a unique role in market stabilization."

⁷ Governor Newsom's Strike Force. "Wildfires and Climate Change: California's Energy Future", pp 3

liability threat, and as such the costs will be born directly by the ratepayers,⁸ or will force the utilities into bankruptcy. While ratings agencies have indicated that this threat is not as great as that faced by the IOUs, they have nonetheless indicated potential ratings downgrades.⁹

The state's greenhouse reduction goals are also dependent on healthy utilities that are able to support renewable energy markets, energy efficiency programs, and technology advancements. As utilities face a higher cost of capital and the risk of bankruptcy, these programs will suffer.

The state's water providers also face risk from the current liability scheme.¹⁰ Water utilities provided testimony that they are increasingly facing litigation for wildfire damages under inverse condemnation in instances where the water utility had no role in starting the fire. They testified that this liability puts at risk their ability to provide service to customers.

The state must comprehensively address two overriding problems:

- 1. The lack of a coordinated approach by the electric utilities to the climate caused catastrophic wildfires (see Finding No. 2 above) and**
- 2. The flawed system of allocating liability to the state's privately-owned utilities, publicly-owned utilities and publicly-owned water utilities.**

Otherwise, the utilities and their ratepayers will suffer significant and increasing consequences.

⁸ Sacramento Municipal Utilities District (SMUD). Letter to the commission 22 April 2019 "Publicly owned utilities like SMUD, which don't have shareholders to bear the costs of the damages inflicted by a catastrophic fire, have only one recourse to fund any wildfire liability - to collect from our customers. These inevitable rate impacts cannot avoid having a disproportionate impact on our most vulnerable populations that are least likely to afford it, including low income customers, the elderly, and renters. A major wildfire, like recent fires elsewhere in California, could cause SMUD's electric rates to jump by upwards of 25 percent."

⁹ Sacramento Municipal Utilities District (SMUD). "Recently ratings agencies have started reassessing POU's financial risk to wildfire catastrophes and responsibility for claims given the strict liability standard in California. Like other utilities, SMUD ratings have been recently placed on "outlook negative" by Moody's, a status that is a precursor for downgrading ratings absent any structural risk changes."

¹⁰ California Water Association et al. Letter to the commission. April 22, 2019. "The dangers posed by the current application of the inverse condemnation doctrine are highlighted by the judgment against the Yorba Linda Water District ("YLWD") after the 2008 Freeway Complex Fire. In this case the Superior Court determine that, 'neither the Plaintiffs nor the YLWD (or any YLWD public improvement) caused the Freeway Complex Fire.' Despite this, Yorba Linda Water District had to pay out nearly \$70 million because a portion of its water system was damaged by the fire, which interrupted the flow of water to the fire hydrants in one neighborhood. The Superior Court did not find that Yorba Linda Water District did anything wrong or was negligent. [...] Yorba Linda Water District had 'full liability' even though it was also a victim of the fire and because the fire damaged the water system. And now this same logic is being used as the foundation of suits against other public drinking water providers, including the City of Ventura in relation to the 2017 Thomas Fire.."

Finding 4. The increasing costs of capital and the risk of bankruptcy associated with the application of strict liability inverse condemnation doctrine to water companies, publicly-owned utilities, and investor-owned utilities is harmful to wildfire victims, ratepayers, and the utilities themselves.

Victims: The risk of utility bankruptcy harms both major classes of the victims of wildfires. Under bankruptcy, property and casualty victims (i.e., non-property loss victims) are unfairly forced to have their claims moved from civil court proceedings to bankruptcy jurisdiction, and property loss victims may be subordinated to post-bankruptcy victims' claims.

Ratepayers: The application of strict liability to utilities under current law severely and unfairly prejudices the ratepayers of privately-owned utilities, publicly-owned utilities and water utilities.

The IOU Ratepayers: IOUs have two sources of revenue to pay for their inverse condemnation liabilities – their shareholders and their ratepayers. The evidence submitted to the commission is that (a) these utilities face significant difficulty and expense in purchasing insurance to cover these liabilities,¹¹ (b) these liabilities render the IOUs unable to obtain critically needed capital, including capital to invest in fire prevention activities and (c) the effect of these liabilities is to significantly increase the cost of capital, or to render the IOUs (currently PG&E and potentially SoCal Edison & SDG&E) bankrupt.

The alternative to the shareholders of these utilities bearing the costs of strict liability – the ratepayers absorbing this cost - is equally untenable. The commission has received testimony that the consumer, commercial and industrial customers of the IOUs currently pay among the nation's highest utility rates.¹² Additionally, regardless of strict liability costs, these rates will necessarily increase significantly because the ratepayers will pay for fire prevention efforts and

¹¹ Josh Jiang, Marsh Risk and Insurance Services. Public testimony. March 13, 2019. "Most traditional liability insurers have already decided to exclude wildfire liability insurance or discontinue writing liability insurance for California utilities going forward. A few remaining large carriers with strong parents and balance sheets are still offering large capacity limits, but at a premium level pricing at a 1 in 2 or 1 in 3 loss ratio. Attachment points on liability vertical towers no longer seem to matter given the severity of those losses as carriers want to charge the same rate for the capacity even at a higher attachment point. If wildfire losses of the last few years continue for the California utilities, a collapse of the insurance market will follow. We expect the liability insurance market to continue being distressed until meaningful regulatory reform, new and improved technology and mitigation tools can be implemented to reduce wildfire frequency and severity."

¹² The California Large Energy Consumers Association. Letter to the commission. April 22, 2019. "California's industrial electricity rates are almost double those of other western states. For example, in January 2019: Nevada's average industrial rate was 4.94 ¢/kWh; Arizona's was 5.96 ¢/kWh; Texas' was 5.25 ¢/kWh; these can be compared to California's average industrial rate of 11.43 ¢/kWh."

capital costs.¹³ The result of the application of strict liability for inverse condemnation is the risk of significantly increasing the already-high cost of electricity service to 75% of the state's electricity customers either directly through cost-shifting or indirectly as a result of bankruptcy.

The POU Ratepayers: The current application of strict liability to POUs and cooperatives serving 25% of the state's residents also significantly burdens ratepayers. This is because the shareholders of these utilities are the ratepayers. Thus, under current law, 100% of the cost of inverse condemnation liability is passed through to these ratepayers. Testimony submitted to the commission demonstrates that POUs are already are facing (1) the inability to obtain insurance at reasonable costs¹⁴ if at all;¹⁵ (2) rising costs of capital; and (3) rising fire prevention costs.¹⁶ Under the current liability scheme, many of the state's publicly-owned utilities and cooperatives are one catastrophic fire away from financial ruin, the cost of which will be entirely the responsibility of the ratepayers. In particular, testimony from Plumas-Sierra Rural Electric Cooperative demonstrated the paralyzing consequences of the application of inverse condemnation to our residents in remote forested counties.¹⁷

Water Utilities: The state's water utilities similarly face the risk that the current utility liability scheme will imperil their services and customers. These companies point to the liability imposed by the application of the inverse condemnation rule to them in the Yorba Linda case to assert – without contradiction – that unless the inverse condemnation law is changed, they

¹³ The Utility Reform Network. Letter to the commission. April 22, 2019. "For example, the amount Pacific Gas & Electric Company (PG&E) proposes to spend in 2020 to prevent wildfires and purchase wildfire liability insurance would increase average annual electric bills by \$84 for residential customers. Customers will face additional bill increases from PG&E's wildfire prevention activities and insurance costs before 2020 that are not yet reflected in rates. And these wildfire-related costs are likely to increase further for many years after 2020."

¹⁴ Sacramento Municipal Utilities District (SMUD). Letter to the commission 22 April 2019. "Last year we were able to roughly double our wildfire insurance, while incurring a four-fold increase in premium costs. Renewal conversations have started and while we don't expect the market to move away from us, we do anticipate even higher costs."

¹⁵ Bob Marshall, Plumas-Sierra Rural Electric Cooperative. Public Testimony, March 13, 2019. "Last year, we went up for renewal and got \$35,000 costs for \$15 million of umbrella coverage. This year, no one would touch it except for Lloyd's of London, who was \$7 million for a massive deductible. That would have been a 10% to 15% rate increase for something that didn't provide very much cover."

¹⁶ SB 901 requires both investor-owned utilities and publicly-owned utilities to develop and implement wildfire mitigation plans. The cost of implementation will be passed directly on to ratepayers.

¹⁷ Bob Marshall, Plumas-Sierra Rural Electric Cooperative. Public Testimony, March 13, 2019. "The bottom line is that we are trying to self-insure because we can't get commercial insurance because of the strict liability issue. I know that someone needs to pay for that and the driving issue at the heart of this is climate change; but this is not socializing the damage, it is dumping the costs on us. Adding millions of dollars of cost to a small utility is going to put a lot of us out of business. We believe the answer is reformation of the law; however, even a cap would be tremendous."

could face the possibility of being unable to provide clean drinking water to the state. The union employees of these companies (and the other utilities) have provided similar testimony.¹⁸

Finding 5. The current process for determining prudence and cost-recovery contributes to the uncertainty that utilities face, ultimately increasing costs to ratepayers while resulting in insufficient investment in wildfire mitigation.

Establishing that strict liability does not apply to the state’s electric and water utilities,¹⁹ without further legal reform, will not rectify the problems identified above. The consensus of the electrical utilities and their lenders and investors is that the state must adopt uniform, objective fault-based standards and a mechanism for implementation of those standards in order for the state to meet the wildfire challenges identified in this report and the Strike Force Report.

II. Utility Liability Recommendations

Recommendation 1. Replace the current strict liability application of inverse condemnation for electric and water utilities with a fault-based negligence standard.

Rationale: As discussed above, the current liability regime creates the potential that the state’s electric and water utilities will be unable to meet their responsibilities; unfairly overburdens ratepayers; and inequitably allocates the costs of the fires.

In their work soliciting and receiving extensive public, stakeholder and expert input, the members of this workgroup did not hear from a single source that the current liability scheme works satisfactorily as implemented. Suggested alternatives focused on two solutions to the current crisis if the current liability scheme were left in place and included bonding, cost recovery fund, risk spreading and others. However, each alternative pointed either to the

¹⁸ California Water Service & Utility Workers Union of America. Letter to commission. April 22, 2019. “With the climate change-fueled proliferation of wildfires, community water systems facing unrestrained wildfire liabilities will, no doubt, find it increasingly difficult to make needed improvements to the State’s drinking water infrastructure. The Governor’s Strike Force explains...that the absence of a fault-based wildfire liability standard will negatively affect the ability of energy utilities to provide customers with safe and affordable electricity. The same is true for community water systems, only more so because their customer totals, invested plant and equipment, and sources of investment capital are orders of magnitude smaller than those of electric utilities.”

¹⁹ The commission notes that neither the Supreme Court nor the legislature has ever opined on this subject and, of course, has not opined on this subject in response to the unique wildfire emergency the State now faces.

ratepayers or the taxpayers assuming the crushing, uninsurable, unlimited liability created by the application of strict liability inverse rules.

Changing the strict liability rules for applying inverse condemnation to a fault-based standard allocates the cost of catastrophic wildfires more equitably than those which impose these costs on ratepayers or taxpayers.

Recommendation 2. Revise and clarify the prudent manager standard

Along with changing the strict liability application of inverse condemnation to a fault-based standard, the workgroup recommends the legislature undertake modifications to the prudent manager standard, to provide greater certainty regarding when utilities are able to recover costs related to wildfire damages. *[Staff Note: these concepts are discussed further by the Wildfire Fund Workgroup in their findings and recommendations]*

Recommendation 3. Establish an Electric Utility Wildfire Board which consolidates governance of all electric utility catastrophic wildfire prevention and mitigation into a single entity separate from the California Public Utilities Commission.

A single, purpose-built state entity should be created to have governing authority over all utility wildfire prevention and mitigation activities. The entity would set and enforce safety standards and implement, administer and adjudicate fault-based standards for both IOUs and POUs. The workgroup envisions a robust entity with (a) data collection and other information technology efforts; (b) liability and conduct standards development activities; and (c) liability standards enforcement activities.

The Electric Utility Wildfire Board would have the following functions, among others:

1. It would set rules, regulations and procedures for governing all California electric utility wildfire reduction activities including any wildfire mitigation plans, rules for hardening the grid, and electricity shut offs. It would consolidate the current California expertise in those areas to perform these functions and it would be sensitive to local needs and conditions in doing so.
2. It would advise the CPUC and other ratemaking authorities of the burdens placed on the utilities and mandate or request (as the law allows) those authorities to provide the ratepayer funding for such activities
3. It would develop research and data collection and public education capabilities, and consolidate those already existing, to provide a robust proactive forum for California to meet the utility wildfire challenge in the future
4. It would have authority to fine or otherwise punish the utilities and their officers and directors for non-compliance and to refer more serious violations to criminal authorities. These powers shall be independent of its liability adjudicating functions described below. Thus, a

utility and its officers and directors could be subject to punishment in circumstances in which the utility is not liable for the consequences of a particular fire. This is intended to address the moral hazard issue.

5. It would have adjudicative functions regarding the fault based liability standard using administrative law judges pursuant to California's administrative law system. If a victim of a wildfire claims that a utility is liable for the consequences to it of a wildfire under the fault based liability system the victim shall file a claim with the board and that claim shall be resolved under fault based standards with Judicial review. If the claim is upheld the utility shall pay the claim, not the ratepayers in the case of the IOUs. If the claim is denied because the utility was not at fault under the circumstances, the victim shall have recourse to a possible wildfire fund if qualified thereunder and otherwise the consequences of the fire will be treated identically with other no-fault based circumstances. All property owners and other potential victims will be encouraged to continue to utilize California's property insurance resources which should be augmented to make more robust.

Rationale: Currently the six IOUs and 50 POUs and cooperatives are governed by separate and different wildfire prevention and mitigation rules. Moreover, there is no consolidated data gathering, best practices development and other centralized efforts to maximize the state's fire prevention and mitigation efforts. This results in inconsistent policies, duplication of efforts and lack of efficient coordination.

The Strike Force Report recommends the CPUC undertake significant efforts to remedy these deficiencies for the IOUs.²⁰ The workgroup supports the Strike Force's suggestions but instead recommends that all of such efforts be placed in a new entity which applies these efforts to all of the state's electric utilities. This workgroup is skeptical of the efficacy of the Public Utilities Commission handling this responsibility for the investor-owned utilities, as the CPUC is already overburdened with regulatory responsibility over water utilities, transportation, telecommunications and other activities. In addition, the CPUC has evolved a quasi-judicial process which does not offer the flexibility and speed required in responding to the evolving threat of wildfires, or the needs of the victims in an aftermath of a fire, and the CPUC's actions leading up to and during the current crises has saddled it with a credibility crisis with respect to these issues.

In order to fairly implement a fault based-liability standard, all electric utilities must be governed by a single set of liability standards and a single oversight authority. By consolidating

²⁰ See Governor Newsom's Strike Force. "Wildfires and Climate Change: California's Energy Future" "Part 4: A More Effective CPUC with the Tools to Manage a Changing Utility Market". pg. 40-43

statewide expertise in the prevention and mitigation activities of state vis-à-vis utilities and wildfires, the state will achieve a maximum level of efficiency and expertise.

Considerations regarding liability recommendations

The workgroup recommends the above as the clearest and most durable way to more equitably socialize costs, relieve the extreme burden of ratepayers, and meet the principles enumerated by the Strike Force Report.

These actions would not entirely eliminate the risk of overwhelming liability from utilities and ratepayers. However, they would go a significant way toward reducing that risk. An additional funding mechanism should be considered to create a buffer against the shock of additional liability. Under the recommendations above, if a fund is needed, the cost of capitalizing it would be significantly reduced.

As noted earlier, wildfire prevention and risk mitigation are a critical aspect of any effort to manage the costs of utility-related catastrophic wildfires. *The recommendations above should be undertaken in conjunction with significant effort to reduce overall risk.* To this end, the Strike Force Report notes that 25% of the state's population or 11 million people live in a high fire risk area. There are many reasons for this reality, but one critical element is that local city and county governments permitted such development. As California struggles with new approaches to forest management, continued approval for homes in high fire risk areas will exacerbate the problem. Local governments must recognize this risk as they make land use decisions.

Appendix II: Wildfire Fund and/or Other Funding Mechanism(s) Workgroup Report

Chair Peterman and Commissioner Wara

The workgroup reports are the products of the workgroups established at the April 29th, 2019 commission meeting, and represent the consensus thinking of the members of a given workgroup. Only the executive summary is expressive of full commission intent.

I. Summary

The following findings, drawn from comments to the Commission, inform our conclusion that existing financial mechanisms and frameworks are insufficient to manage utility wildfire risk and liabilities. The legislature should further clarify the CPUC cost recovery process and establish a broadly sourced Wildfire Victims Fund to more quickly and equitably socialize wildfire costs. Ultimately, how such a fund is structured, and how effective it is, depends on what other reforms the legislature adopts. This workgroup has primarily focused our analysis, and discussion, to understand how a fund could best perform absent those reforms. However, the workgroup believes that a fund, to be most effective, should be coupled to greater investment in wildfire mitigation, and liability regime, cost recovery, and property insurance market reforms.

Establishing a Wildfire Victims Fund of sufficient size and with adequate contributions is a daunting task, and while this workgroup focused on a fund that would be designed to pay claims from wildfire victims, we believe that a smaller fund, designed to provide liquidity to utilities after large wildfires, could provide some but not all of the benefits of the larger claims-paying fund.

II. Findings

Finding 1. The financial mechanisms for paying wildfire liabilities associated with utility caused fires are strained and not sustainable for victims, ratepayers and utility shareholders.

As the Strike Force Report notes and other commenters endorsed, “[T]he current system for allocating costs associated with catastrophic wildfires – often caused by utility infrastructure, but exacerbated by drought, climate change, land-use policies, and a lack of forest management – is untenable both for utility customers and for our economy. Multi-billion dollar wildfire liabilities over the last several years have crippled the financial health of our privately and publicly owned electric utilities. . . . Utilities rely on credit to finance ongoing infrastructure investments, including wildfire mitigation. As utilities’ credit ratings deteriorate, their borrowing costs increase and those costs for capital necessary to make essential safety improvements are passed directly to customers. These downgrades, and the prospect of additional utility bankruptcy filings, directly impact Californians’ access to safe, reliable and affordable electricity.”¹

Rating agency reports suggest that further credit rating downgrades are likely if the wildfire risk to utility shareholders remains unchanged.² In addition to ratepayer and shareholder impacts, financially distressed and/or insolvent utilities create much greater risks that victims will not be paid in full for their wildfire losses, and greater risk for all parties that do business with the utilities, including the renewable energy industry.

Investors and rating agencies assert that investors will be unwilling to invest in California utilities if the primary risk to solvency persists - the potential that fire liabilities will emerge that are larger than the utility’s assets. Unresolved, this market concern can create liquidity issues for utilities immediately following a fire. Specifically, after a fire, utilities are seeking to raise money to pay for claims at the same time their equity may be declining in value. Such liquidity issues can complicate the payment of wildfire victim claims and lead to utility bankruptcy filings. Absent solutions to what Institutional Equity Investors refers to as “massive, unbounded liability,” market confidence is unlikely to return to sufficient levels to affordably fund utility operations and ongoing capital investments.

Historically, insurance markets have provided the necessary buffer to ensure liquidity and solvency. However, testimony received by the Commission indicated insurance markets for

¹ “Wildfires and Climate Change: California’s Energy Future”, Governor Newsom’s Strike Force, p2-3

² Institutional Equity Investors. Written comments to the commission, April 22, 2019. p.8-9.

utility wildfire liability have contracted significantly, with few if any insurers being willing to offer coverage for these losses.³

Finding 2. Wildfire risk is created by multiple parties who should all be incentivized to reduce risk and share in paying for wildfire damages.

It is hard to parse responsibility across all stakeholders for wildfire. The demarcation between human factors and natural causes is less clear and more case specific than for other catastrophic perils. Each stakeholder contributes to the cumulative risk of catastrophic wildfire and no stakeholder can avoid all risk solely by their own action.

Socializing the costs of utility caused wildfires across a broader set of parties larger than utility shareholders and electricity customers is a more equitable apportionment of risk. It is equitable to allocate a share of costs to parties that have some control over causes that contribute to the overall utility wildfire problem in the state. At the same time, equity means insuring that the impacts on those least able to manage additional costs is not overwhelmingly large.

Significant efforts are underway by all parties to reduce wildfire risk. As the publicly owned utilities note in their comments, all utilities and communities have taken efforts over the last several years to implement wildfire mitigation measures and continue to work together to reduce risk. Nonetheless, parties can continue and expand efforts to manage risk:

- Utilities can better assess their wildfire risks, make investments to reduce wildfire risk, ensure proper maintenance of their systems, and demonstrate accountable spending of already approved investments.
- Utility boards and management, can identify, quantify, and create internal accountability and incentives for risk management. The Board has the responsibility to insure that compensation and other incentives align management's performance with shareholders and customer interest in safety.

³ As EEI notes, "In past decades, the traditional insurance market provided sufficient and affordable protection for wildfire liability for California's investor-owned utilities because wildfire liabilities were smaller. But due to the rise in frequency and severity of wildfires in California along with the current liability regime, this is no longer the case." (Institutional Equity Investors. Written comments to the commission, April 22, 2019, p.9). Further, utility insurance providers testified that "most traditional liability insurers have already decided to exclude wildfire liability insurance or discontinue writing liability insurance for California utilities going forward[...]If wildfire losses of the last few years continue for the California utilities, a collapse of the insurance market will follow." (Josh Jiang, Marsh Risk and Insurance Services. Public testimony. March 13, 2019)

- The PUC can further clarify a framework for cost recovery of reasonable utility investments.
- The CPUC can approve, and ratepayers can pay for, additional investments in wildfire hazard reduction associated with utility infrastructure.
- The state can invest in additional wildfire hazard reduction in communities and limit or prevent the development of new property at risk for wildfire damage.
- The state has a role to assist or require that communities adopt practices that limit wildfire risk to themselves and their neighbors.
- The state also has a role in ensuring that state (and federal) lands are managed in a way that minimizes risk of ignition and spread of wildfire.
- Property owners and communities can mitigate risk by hardening homes and infrastructure and maintaining defensible space.
- Local governments can enact and enforce defensible space ordinances that reduce the intensity of fire when it enters developed areas.

All stakeholders suffer if wildfires persist at the current scale. As the Strike Team report explains, “Under the status quo, all parties lose – wildfire victims, energy consumers, and Californians committed to addressing climate change.”⁴

All benefit if wildfires can be managed more effectively. Several commenters⁵ to the Commission suggest that the requirement to contribute (in various ways), including via a wildfire catastrophe fund, creates incentives for all to more aggressively mitigate wildfire risk and damage and more equitably allocates wildfire costs.

Finding 3. The time required for, and the uncertainty of, investor-owned utility wildfire cost recovery from ratepayers reduces investor confidence in utilities and limits utility access to capital after a major fire.

When utility equipment contributed to a wildfire, the CPUC must determine that the utility prudently managed its system before IOUs can recover liability costs from their electric customers. This determination may be years after the fire has occurred due to the length of the

⁴ Governor Newsom’s Strike Force. “Wildfires and Climate Change: California’s Energy Future”, pp 1

⁵ See Edison Electric Institute. Written letter to the commission April 22, 2019.

civil litigation process to determine liability (including settlement of wildfire claims)⁶ and subsequent CPUC cost recovery proceeding, which begins only after the civil process is complete.

The Commission received testimony that the current standard for cost-recovery is unclear and protracted.⁷ Furthermore, critics of the current prudency determination and cost recovery standard argue that the standard is out of line with reasonableness standards used by the Federal Energy Regulatory Commission (FERC) and civil law, which place the burden on the party objecting to cost recovery (FERC) or asserting negligence (civil law) to show that imprudence or negligence has occurred.⁸

Ratepayer advocates remind the Commission that the purpose of a reasonableness review is to “avoid outcomes that would have utility ratepayers bear costs arising from utility mismanagement.”⁹ As such it is important to have a standard that clearly disallows cost recovery for liabilities stemming from utility imprudence.

SB901 acknowledged that although limiting cost recovery to only prudent expenses is important to protect ratepayers, so is having solvent utilities. The stress test adopted by SB901 sets a maximum limit to non-recoverable (disallowed) costs, but applies this limit only to 2017 fire liabilities.

SB901 also acknowledges the complex circumstances that may lead to a wildfire. For wildfires that occur in or after 2019, SB 901 directs the CPUC’s prudency evaluation to consider twelve factors that more directly relate to wildfire causes and assessment, including the role of climate change in exacerbating wildfires (UPUC section 451.1).

To date, there has been only one significant instance where an investor owned utility requested cost recovery for third-party wildfire damage in excess of general liability insurance.¹⁰ Cost-recovery was not granted in this case, although this review occurred prior to

⁶ After the wildfires in 2007, SDG&E pursued settlement of its civil liability claims, and then in 2015 filed an application for cost recovery at the CPUC (Application 15-09010). The PUC adopted its decision denying cost recovery in 2017. CPUC (D.)17-11-033. November 30, 2017.

⁷ See written testimony from Southern California Edison, Edison Electric Institute, Consumer Attorneys of California.

⁸ See written comments from Pacific Gas & Electric, Southern California Edison, Edison Electric Institute

⁹ The Utility Reform Network. Written letter to the commission, April 22, 2019.

¹⁰ California Public Utilities Commission, ORDER DENYING REHEARING OF DECISION (D.) 17-11-033. July 12, 2018

passage of SB 901 and so did not explicitly reflect the twelve factors enumerated therein. CPUC's disallowance of SDG&E's WEMA cost recovery application and the scale of 2017 and 2018 wildfire liabilities have raised questions as to whether a more predictable standard of review for wildfire claims is warranted, and whether it should be more permissive given the nature of the risk, size of potential liabilities, and assumptions of cost socialization assumed in "no-fault" liability. Cost recovery standards were identified by several commenters to the Wildfire Commission as the key element in need of refinement in order to restore market confidence in California utilities.

Finding 4. Californians' electric costs are increasing due to wildfire mitigation investments and other capital and regulatory requirements.

The Strike team report and ratepayer advocates express concern that passing more wildfire costs to electric customers will further reduce electricity affordability.¹¹

The CPUC May 2019 report pursuant to SB 695, "Actions to Limit Utility Cost and Rate Increases," affirms that electric rates and bills are going up. The report explains that rising rates and bills stem from declining utility sales, while revenue requirements continue to grow to meet statutory mandates and operational needs.

Mitigating wildfire risk is also increasing electric costs. The SB695 report details that the costs of proposed projects in utility Wildfire Mitigation Plans could result in increases of up to seven percent in monthly bills for residential customers, not accounting for any adverse change in the cost of capital for the utilities. Commenters indicated similar.¹²

¹¹ TURN states that "California is in the midst of a utility bill affordability crisis. High energy bills resulted in 886,000 California households being shut off by PG&E, SCE, SDG&E and SoCal Gas in 2017, impacting more than 2.5 million people, most of whom are children." (The Utility Reform Network. Written comments to the commission, April 22, 2019,) CLECA and The California Farm Bureau note that California industrial and agricultural customers pay nearly twice the cost for power as their western neighbors. The Farm Bureau asserts that "a tipping point has been reached such that ratepayers can no longer be the sole funders." (The Farm Bureau. Written comments to the commission, April 22, 2019)

¹² TURN notes that, " Yet these figures represent only the initial impacts of what could well be years of higher utility spending to prevent wildfires, leading to increased rates that persist for decades into the future, not to mention impacts from any utility-caused wildfires in 2019 and beyond." (The Utility Reform Network. Written comments to the commission, April 22, 2019) Wildfire mitigations costs increase rates as well for publicly-owned utilities. SMUD notes that its wildfire mitigation spending has already increased rates 1.5%-2% (SMUD. Written comments to the commission, April 22, 2019).

CLECA highlights that commercial customers also face likely rising costs from the 2017 and 2018 fires. CLECA notes "the combined wildfire liability for PG&E for these two years would represent a 18% increase in rates for

The perceived financial risks of investing in California utilities create their own substantial costs. Because utilities must attract new capital - generally a 50/50 mix of debt and equity - in order to construct new infrastructure, with the interest (debt) and return (equity) paid for out of rates, increases in risk perception have direct implications for rates. Since the 2017 fires and the disallowance of SDG&E cost recovery for the 2007 fires (the decision on which occurred contemporaneously with the 2017 fires), the credit quality of California utilities has deteriorated precipitously. This impact has been felt even by Sempra, the parent company of SDG&E, despite the fact that there have been no utility caused fires in SDG&E's service territory since 2007, and the utility is widely recognized as a global leader on utility wildfire practices. Credit downgrades lead to increases in the cost of borrowing for utilities that ultimately will be reflected in customer rates. More recently, all three utilities proposed large increases in the allowed return on equity, which they believe will be required to attract new equity investment. While that proceeding is ongoing and its outcome is far from clear, what is clear is that a substantially higher return on equity (the "cost" of equity) - reflecting the same risks that have led to higher debt costs - will likely be required to attract new investment in California utilities.¹³

These correlated changes dramatically raise the costs of any future utility infrastructure projects for wildfire safety or other reasons. In comments, Institutional Equity Investors noted that current California IOU projects call for \$70 billion in capital expenditures in the next five years that will need investor financing and utility cost recovery.¹⁴

PG&E bundled primary voltage industrial rates by 2023." "The combined wildfire liability for these two years would represent a 5% increase for SCE bundled primary voltage industrial rates by 2023." (CLECA. Written comments to the commission, April 22 2019. Appendix 1, p.1).

¹³ Institutional Equity Investors estimate that "a 1% increase in the cost of debt occasioned by a ratings downgrade, coupled with an ensuing 3% increase in the cost of equity, would result in a 6.5% increase in the average monthly bill of PG&E customers. Customers of Southern California Edison and San Diego Gas & Electric would suffer similarly." (Institutional Equity Investors. Written comments to the commission. p.10) The publicly-owned utilities note that even investment grade utilities face risks of higher costs, "Even with interest rates at historically low levels, a downgrade from AA to A would result in \$3-4 million of additional interest costs annually for every \$1 billion of borrowing, or \$100 million over the life of the bonds." (California Municipal Utilities Association et al. Written comments to the commission p.3)

¹⁴ Institutional Equity Investors. Written comments to the commission, April 22, 2019, p.4.

Several commenters suggested that given issues with electricity affordability, any changes to cost recovery should consider ratepayer impacts and any Wildfire Victims Fund should be capitalized more broadly than via ratepayers alone.¹⁵

Finding 5. The liabilities associated with wildfire are challenging to model and not well understood.

The science is clear that wildfire severity and the frequency of large fires are increasing due to climate change. However, specific liabilities are difficult to model.

The Commission heard substantial testimony by various parties (insurance industry, insurance brokers, and utility representatives) that rely on models to understand and price future wildfire risks. There are a variety of approaches to understanding wildfire risks including historic loss experience, more recent loss experience, highly complex Catastrophe Models, and expert judgment. None can, at this point, accurately specify the expected future wildfire losses in California from utility-caused wildfire. As AIR notes in its comments, “In the case of rare but severe catastrophic events, including wildfires, highly variable historical experience provides an insufficient basis to assess future loss potential.”

The challenges with estimating losses involve changes in the value at risk due to new housing development and increasing building and reconstruction costs, uncertainty about the degree to which mitigation measures will be implemented by communities and homeowners that lower risk, uncertainties about the effectiveness of utility Wildfire Mitigation Plans when fully implemented, and changes in the climate and weather environment, among others. There is no precise answer to basic questions about the risk of wildfires and the likely magnitude of future liabilities created by them.

There is, currently, no clear understanding of what a “worst case” wildfire in California might look like. This workgroup cannot exclude the possibility that the 2017 and 2018 wildfires were 1 in 250 year events or that they were 1 in 20 year events, and the workgroup does not know whether average losses over the past 20 years or the past 5 are an appropriate level to plan for over the next decade. The answers to these questions will depend on both what actions are taken to reduce risk as well as on the weather and climate that creates the conditions that can lead to catastrophic wildfires.

¹⁵ See written comments to the commission from The Utility Reform Network, Pacific Gas & Electric, and Southern California Edison.

III. Considerations Objectives and Recommendations

Summary Recommendation: Given the findings above, the workgroup recommends that the Legislature, in furtherance of a more equitable distribution of utility-caused wildfire costs, revise the CPUC cost recovery process and establish a Wildfire Victims Fund.

This workgroup believes it is paramount that any such changes and new financing mechanisms be consistent with the objectives detailed below in order to avoid unintended consequences that result in more instability for wildfire victims and electricity ratepayers. The workgroup strongly recommends that legislation for cost recovery reform and a victims' fund only be pursued if there are clear, specific assurances and legal safeguards in place to ensure these objectives are achieved. In many cases, it is reasonable for legislation to delegate implementation details to responsible agencies for further development. However, given the need for certainty among the delicate and complex interactions of the Commission's broader set of recommendations, the workgroup recommends strong legislative clarity regarding the primary components and interaction of any changes to strict liability, cost recovery, and related financing mechanisms.

Cost Recovery Objectives

Objective 1: Ensure ratepayers pay for just and reasonable investments, but do not pay for avoidable, negligent behavior.

Objective 2: Ensure cost recovery standards reflect the host of factors that contribute to the extent of wildfire damage and does not hold utility shareholders solely liable in cases where other factors contribute to the magnitude of the damages.

Objective 3: Be as predictable as possible to all stakeholders, given Objectives 1 and 2.

Fund Objectives

Objective 1- Broadly pooled risks, beyond electric ratepayers.

Risk pooling creates state-wide economies of scale and addresses the overall perceived risk to all California utilities regardless of their ownership structure. The financial environment at all utilities has deteriorated in one form or another (IOU credit downgrades, challenges to POUs of accessing insurance) and all utilities are facing significant challenges in managing a risk as large as liability from catastrophic wildfires. One solution is to create an entity of sufficient scale for which even the largest foreseeable fire related liabilities are not destabilizing, and then to facilitate risk transfer from the threatened utilities to this entity. Complimentary to this

approach is the need to reduce the risks from wildfire, hence decreasing the magnitude of the liabilities.

Risk pooling, in order to be maximally cost-effective, should provide an opportunity for inclusion of POU, and POU participation should be encouraged (especially for those with large service territories in high fire risk areas). This means creating a path for POU to feasibly contribute to the fund commensurate with their risk. POU customers are also the owners of their systems, therefore playing the roles of both IOU shareholders and ratepayers. They could opt to make an initial contribution equivalent to an IOU's shareholder contribution plus an additional ratepayer contribution or could opt to make a higher ongoing contribution.

Given the diversity of stakeholders with some responsibility and ability to reduce wildfires, as noted in Finding 2, as well as the potential ratepayer affordability crisis noted in Finding 4, the fund should require contributions from utility ratepayers, utility shareholders, from property owners, and from the state. These parties all benefit from the risk pooling, greater certainty, and efficient claims process that a fund would provide.

Objective 2: Contributions from utility shareholders and ratepayers reflect differential risk.

Contributions should be actuarial – tied to risk. One approach to establishing contributions would be to look at recent losses, while another approach would be to identify key physical characteristics that are correlated with risk and to adjust utility contributions based on them, such as total overhead circuit miles versus undergrounded systems or the number or proportion of utility customers located in high risk areas. Over time, more sophisticated actuarial tests may inform utility and ratepayer contributions, or private markets using actuarial experience will develop utility specific pricing which can inform appropriate contributions.

Objective 3: Limit risk pooling when the utility engages in negligent behavior.

When the utility acts prudently, then the workgroup believes it is equitable, and practical, to have all parties pay some portion of the damage costs, and not require repayment of a fund. However, when a utility fails to act prudently, utility shareholders should repay some portion of the damages to the fund in addition to paying any penalties that might result from further investigations. A key attribute of insurance and risk pooling is financing loss even when a party has acted imprudently, the rationale for which is further apparent if an imprudent loss causer has effectively prepaid for that liability with higher premiums . However, an imprudent utility should not be fully shielded by the fund from the risk of being unable to recover cost from ratepayers. The degree to which the utility is shielded should depend significantly on the degree to which it contributed resources to the fund.

Objective 4: Treat wildfire victims fairly.

A fund should offer more certainty to wildfire victims regarding timely claims repayment and provide support for the under and uninsured.

Objective 5: Improve utility solvency and liquidity.

The best solutions to address solvency and liquidity require both reducing the overall liability and more widely socializing it, which is best addressed by a combination of mitigation, strict liability reform, cost recovery reform, and a fund. However, there are some particular fund attributes that can better support the objectives of liquidity and solvency. Such attributes include fund sizing and bond authority commensurate with probable wildfire risk, limits to third party claims, and contribution structures that enable access by utilities to lower cost financing.

Objective 6: Maintain incentives for all parties to pursue wildfire mitigation efforts.

Sustainability of a fund is highly dependent on all parties increasing efforts to reduce wildfire risk and reduce total costs. The easiest fire liabilities to manage are the ones that are never created because of wildfire prevention efforts. *The presence of a well-capitalized fund may reduce incentives for utilities, property owners and local governments to invest in mitigation and maintain adequate insurance. As such, any fund should be structured in a manner to reduce this moral hazard.* For example, relying on post event liability assessments, in addition to limiting upfront contributions from utilities, creates an incentive to avoid costly catastrophic fires. Moreover, a track record of vulnerability reduction will make re-insurance and cheaper capital more available, thus reducing the costs of managing the remaining wildfire risk.

IV. Detailed Recommendations on Cost Recovery and a Fund

Cost Recovery Recommendations

Given the limited experience California has with cost recovery for catastrophic fires, it is difficult to identify with certainty what constitutes reasonable pre- or post-event behavior, though. Although ratepayers should not pay for imprudent conduct or negligence, they should pay for wildfire costs when a utility acts in a reasonable manner - our collective understanding of this increases with experience. The workgroup believes there are several modifications of the current approach to determining prudence that better acknowledge the intent of inverse condemnation to socialize costs and the evolving understanding of reasonable utility practices, while still holding utilities responsible for imprudent conduct or negligence.

The workgroup recommends Options 1 and 2 if no action is taken to further socialize costs or if a liquidity fund is created and Option 3 if a Wildfire Victims Fund is simultaneously created *and* utility shareholders make a substantial upfront contribution to the fund.

Cost Recovery Option 1: Burden of proof shifting. The CPUC review process for utility wildfires could be modified to allow for a presumption of prudence for a utility wildfire expense given a prima facie showing, but still allow for a challenger to attempt to prove, by a preponderance of the evidence, that an expense was imprudently incurred. This change should not impact other cost-recovery processes at the CPUC.

Current CPUC cost recovery review process, as described above, requires that the utility prove, by a preponderance of the evidence, that the expense was prudently incurred. In order to increase the certainty that prudently incurred costs will be allowed to be recovered in rates, the CPUC process could be modified to allow for a presumption of prudence for a utility wildfire expense given a prima facie showing, but still allow for a challenger to attempt to prove, by a preponderance of the evidence, that an expense was imprudently incurred. The difference between these legal philosophies is apparent in the case of the SDG&E 2007 wildfire cost recovery request: the request to recover federally regulated expenses was deemed prudent and approved by FERC (where the burden of proof was on the party challenging the utility's prudence) while the request to recover state regulated expenses was denied by the CPUC (where the burden of proof was on the utility to show their expenses were prudently incurred).

Cost Recovery Option 2: Further refinement of the SB901 factors the CPUC should consider when assessing disallowances.

SB901 (Dodd, 2018), section 451.1 lists 12 factors the CPUC may consider when evaluating applications for catastrophic wildfire cost recovery. The workgroup believes could be further enhanced by mandating the CPUC to give a higher weighting to the SB901 factors that acknowledge the unique, exogenous circumstances possibly present in a catastrophic wildfire. This might be accomplished via a statutory modification to PUC 451.1 that requires the CPUC to make a determination of the degree to which related factors (PUC 451.1(a)(7)-(11)) reduce the percentage of liability from a wildfire that utility shareholders should be accountable for, even if utility operations were the cause of a wildfire and other factors (PUC 451.1(a)(1)-(6)) would counsel against the recovery of costs in rates. Thus if a utility negligently caused a fire, shareholders would bear full responsibility if exogenous factors did not contribute to the liability, but might only face partial responsibility if exogenous factors were important in generating the liability.

Cost Recovery Option 3: Limits on utility shareholder liability—only if shareholders make substantial upfront contributions to a fund.

If shareholders make a substantial upfront contribution to a Wildfire Victims Fund, one option for cost recovery is to have a predetermined maximum liability that shareholders may be subject to under the existing, or a revised, prudency framework. One option might be to apply a version of the SB901 stress test¹⁶ to all wildfire cost recovery claims. Another is to limit liability to a percentage of the market capitalization of an electric utility on the day prior to the ignition of a wildfire. For example, if a utility had a market capitalization of \$50 billion the day before a wildfire, it might be limited to paying a maximum of \$10 billion in losses for any single incident if found to be imprudent. Any costs above that limit would be recoverable from ratepayers or through a fund. By making upfront contributions to a fund, a utility would in effect be pre-funding any future rate recovery denials and so is reasonably entitled to expect some limitation on risks. Any such cap would need to be set at such a level as to continue to avoid a moral hazard. In general, the workgroup favors incorporating functionally identical features into the recapitalization procedure of an adequately sized Wildfire Victims Fund rather than making changes of this type to the CPUC cost recovery standards.

Additional Options:

The workgroup notes that another option, proposed in one form in Senate Bill 1088 (Dodd, 2018) and subsequently by utilities in other fora is to create explicit criteria for operation, maintenance, and investment by a utility. Under this proposal, a utility would be deemed prudent if it met the required criteria in pre-wildfire reviews. This approach makes sense in theory in that it would allow for all parties to create an objective and measurable set of criteria that could be met by the utility as a whole and would thus avoid the perception of an after-the-fact “perfection in practice” standard for prudency review. The challenge with this approach is developing a set of criteria that are an adequate pre-event proxy for prudent management of safety in the wildfire context. While the utilities have performed significant analysis of these issues in the Safety Model Assessment Proceeding, Risk Assessment Model Proceeding, and Wildfire Mitigation Plan processes, there is still no consensus on a set of standards or practices that would allow for a pre-event prudence determination.

There does appear to be consensus by many parties other than the investor owned utilities that current Wildfire Mitigation Plans do not provide a set of criteria that would allow for implementation of this approach. At this time the workgroup does not recommend such an approach for cost recovery. Such an approach may be reasonable in the future once there is

¹⁶ SB 901 established authority within the CPUC to develop a mechanism (the “stress test”) to determine when the denial of cost recovery would put the utility in financial jeopardy, and to allow cost recovery in such cases.

more collective experience with the mitigation plans and generally what constitutes reasonable action.

Finally, the workgroup recommends reviewing the CPUC fine authority to issues fines for any violations. Revisions could include increasing the \$8 million cap on fines for citations related to wildfire mitigation, statutorily increasing the maximum fines allowed under PUC section 2107, and altering the disposition of fine revenue to the Wildfire Victims Fund or towards mitigation measures.

While cost recovery is a critical issue in the absence of a Wildfire Victims Fund, the presence of a claims paying fund fundamentally alters the situation so far as ratepayers are concerned. To the degree that a fund acts as an insurer of wildfire liabilities - similar to a larger version of the utility's general liability insurance policy, there will be fewer or perhaps no cost recovery applications to the CPUC because all wildfire expenses will be recovered from the fund, not as expenses in rates.

Ratepayers don't get something for nothing with this arrangement - rather than managing large fire liabilities as expenses in rates that may cause unprecedented bill volatility¹⁷ ratepayers would pay a non-bypassable charge that, in conjunction with contributions from other parties, serves to insulate them from the costs of future fires via a Wildfire Victims Fund.

From the utility shareholder perspective, the magnitude of their pre-event contributions to the fund is logically connected to the certainty of post-event cost recovery process from the fund or at the CPUC. To the degree that utilities contribute to a Wildfire Victims Fund, they are in some sense pre-paying for avoiding future disallowance perceived unlimited risk from the cost-recovery process. They should be willing to contribute more to a fund to the degree that they receive certainty regarding the maximum value of a repayment to the fund or of a disallowed expense that they would most likely fail to recover from ratepayers.

Wildfire Victims Fund Recommendations

Catastrophe funds, such as a Wildfire Victims Fund, can be useful tools when rapid changes in perception of risk from a particular peril (wildfire, hurricane, earthquake) lead to disruptions in

¹⁷ "[PG&E] estimates \$30 billion in damages for 2017 and 2018 fires. But the operating revenue of their electricity business is less than \$13 billion a year...If future fires continue to create liabilities similar to those over the last two years and PG&E can't cover the new losses by selling bonds, rates would have to double in the first year and continue to continue to grow at an unsustainable rate year after year." Memo from Steve Weissman to Ana Matosantos. <https://gspp.berkeley.edu/news/news-center/the-massive-cost-of-the-new-normal-in-wildfires-climate-change-era>

insurance markets or to a risk that traditional insurers are either unable or unwilling to manage through the normal underwriting process. The purpose of catastrophe funds in these cases is to pool risk at sufficient scale to cost-effectively manage it. The catastrophe fund agrees to a transfer of liability for a particular type of claim from another party (a homeowner or an insurance company that writes homeowner policies) to itself. Assuming the catastrophe fund can be structured to more efficiently manage the risk, it may be able to manage the peril at more affordable cost. This can be critical to allowing continued access to home insurance for customers that are exposed to the peril in question.

Fund scope:

a. The Wildfire Victims Fund should pay claims for only electric utility caused wildfires.

Based on testimony received at public hearings, the workgroup recommends a Wildfire Victims Fund created at this point in time should focus on utility caused wildfires rather than all causes of wildfire or on additional perils. While there are signs of strain in the home insurance market in California—and this will likely worsen unless there is a significant reduction in wildfire losses—at this point there is not a property insurance crisis. In order to limit a Fund’s costs, and therefore impacts on all stakeholders, it should be limited to covering only utility wildfire liabilities. Similarly, although the workgroup appreciates the concerns raised by water utilities regarding the potential inverse condemnation liabilities they face from fires, we think the challenge facing water utilities is unique from electric utilities. Any reforms to the strict liability standard should consider reforms for water utilities as well. The CPUC and legislature should continue to monitor exposure faced by water utilities and consider in the future whether any additional financing mechanisms are needed to transfer risk and recover costs in that sector.

The workgroup recommends that participation in the fund be voluntary, but that only participating utilities should be allowed to benefit either from Wildfire Victims Fund claims paying resources, as well as from any changes in prudency review that are enacted concurrently with creation of the fund. In this construct, the workgroup believes that all investor owned utilities will opt to participate in a well-designed Wildfire Victims Fund and many Publicly Owned Utilities may opt in as well, so long as contributions required from their ratepayers are fair. An alternative participation scheme would require participation by all utilities above a certain size (load served or overhead circuit miles) and allow optional participation by smaller utilities.

The workgroup recommends that payments from the fund occur only for catastrophic fires. One approach to define “catastrophic” is an event that exceeds the maximum coverage reasonably available to utilities via their privately obtained general liability and wildfire specific

insurance. For IOUs, this is currently between \$1 and \$1.5 billion. POU's have a broader range of available insurance due to the broader size range of POU's in the state. An alternative approach would be to pay for wildfires that exceed a fixed threshold – i.e., \$1 billion - and to require all utilities to obtain coverage equal to that amount or to participate in private risk pooling arrangements that are equal to that amount.

Given the desire to more broadly socialize costs, the workgroup recommends a claims paying fund rather than a liquidity only fund. While a liquidity fund can provide greater access to capital following a wildfire, testimony indicated that other tools, such as allowing investor-owned utilities to securitize debt to raise capital in the aftermath of a fire, can also achieve the same objective without requiring an upfront ratepayer investment. However, the cost to utilities to raise capital post event may be greater if equity value has diminished post-event or if the scale of the event raises solvency concerns. If wildfire costs are more broadly socialized via changes to the strict liability standard, then a complementing liquidity fund may provide additional benefits to utilities and ratepayers, including access to lower cost capital.

In the event that other barriers prevent creation of a claims paying fund but would allow for creation of a smaller liquidity only fund, primarily funded by ratepayers, the workgroup recommends that only modest changes to cost recovery be considered (Cost Recovery Options 1 and 2).

b. The Wildfire Victims Fund should pay insured, underinsured, and uninsured property losses from utility caused wildfires at values approximating their settlement value.

In recent utility caused wildfires (2007, 2015, 2017, 2018) there have been significant liabilities beyond those covered by insurance. Insurance coverage has proven insufficient to fully compensate victims, some homes destroyed in the fire carried no insurance whatsoever, many renters lacked coverage, and construction costs increased dramatically due to shortages of skilled labor after the fires, and local governments lacked sufficient coverage for infrastructure loss. While estimates vary, there can be no question that underinsurance of liabilities is a significant fraction of total liabilities in recent catastrophic events. As a result, resolving the crisis for utility ratepayers, insuring that fire victims get paid for their losses, and stabilizing financial conditions for electric utilities requires steps to reduce the magnitude of under- and uninsured property [staff note: see further discussion in Insurance Workgroup Report] and also developing a Wildfire Victims Fund that can pay claims beyond those that are covered by current utility liability insurance.

At the same time, if a Wildfire Victims Fund covers insured, underinsured, and uninsured claims, the fund must avoid creating incentives not to purchase insurance. The fund should be

designed to avoid these incentives by paying the settlement value of claims, or a range of predetermined values, rather than their full value. Insured claims for catastrophic loss, depending on the facts, settle at values far below 100 cents on the dollar. Underinsured claims, both because they can be subject to greater uncertainty and because they are not vetted by a claims adjustment process, tend to settle at even greater discounts. The workgroup believe that while compensation for both insured, underinsured, and uninsured losses should be compensable from a fund, Wildfire Victims Fund payments for insured losses should reflect the approximate settlement value of a claim. Most parties recommend that insured claims should be subject to automatic reduction, within the range of which such claims historically settle. Although several parties suggested claims settle at 50% of insured loss, no party suggested a clear legal mechanism for requiring such a reduction. Details on how the reductions would be calculated should be further explored and are a critical part of any authorizing legislation. If insured claims cannot be guaranteed an automatic reduction, this would put significant upwards pressure on the needed fund size.

Underinsured claims against the fund should be covered at a substantially lower level and claimants must agree not to litigate their claim. Wildfire Victims Fund payments for underinsured fractions of property claims should reflect the differential settlement value between insured and underinsured losses. Faster claims resolution and increased certainty could be important incentives for underinsured claimants to participate in a Wildfire Victims Fund.

The workgroup recommends that local governments receive compensation for settlement value of infrastructure destroyed by fire. Local governments should be encouraged to adequately insure critical infrastructure and those that do should receive a higher settlement value for insured losses.

The workgroup recommends that private parties that were totally uninsured but can substantiate their loss - either renters that carried no insurance for their personal property or homeowners that chose not to obtain homeowners coverage or participate in the FAIR Plan - could receive an offer of a flat settlement from the Wildfire Victims Fund at a low value - perhaps \$10,000 per household. This would assist these parties in reestablishing their lives while disincentivizing the choice not to obtain insurance coverage before a disaster strikes. Bodily injury and other tort claims should not be covered by the fund.

c. The Wildfire Victims Fund should be created as soon as possible to cover the 2020 fire season and beyond, and ideally would include coverage for 2019 fires.

The problem of utility wildfire liability is urgent. Current lack of a solution creates imminent risk for all utilities in the state. There is a very real risk that a fire in a non-bankrupt utility's

service territory would precipitate a rapid deterioration of financial status leading to a bankruptcy. A bankruptcy filing will significantly reduce the ultimate payment that wildfire victims of prior fires receive. For the bankrupt PG&E, a fire in its service territory would, due to the operation of federal bankruptcy law, create an “administrative claim” on the firm which takes priority over all pre-bankruptcy claims, including those of 2015, 2017, and 2018 fire victims. A large fire in PG&E’s service territory in 2019 could potentially threaten payment of the bankruptcy settlement value of 2018 and earlier wildfire victims.

The lesson of SB901 and the fall 2018 fires is that the State cannot afford to wait to put in place a long-term solution for utility caused wildfire even as it implements mitigation strategies that in the long run will reduce the risks. Therefore, we recommend that a Wildfire Victims Fund should cover liabilities in the 2019 and later fire seasons. This should be possible since the legislation will be enacted prior to the most dangerous part of the season while payments to victims will not occur until after the claims process, which typically takes at least one to two years. Thus liabilities from a fire that occurs even in the 2019 wildfire season would not necessarily need to be paid by a Wildfire Victims Fund structure that pays claims after insurance companies, plaintiffs for uninsured parties, and others have negotiated to a settlement of claims. Delayed implementation of the fund or delayed claims coverage by the fund will only raise the risk that in the interval between action by the State and the beginning of coverage, a catastrophic wildfire will further degrade the likelihood that current and future victims get fair compensation. Given enactment during the 2019 legislative session, the risks to current fire victims in the absence of a long-term fix, and the time required to adjudicate claims, we see no reason why a Wildfire Victims Fund if established, should not pay claims for the 2019 fire season.

Some challenging implementation issues are raised by the bankruptcy of PG&E. Whether and how a bankrupt entity could raise funds during the reorganization process without impairing the priority of other creditors is uncertain. There is enormous potential benefit to participating in a Wildfire Victims Fund for all unsecured creditors in terms of avoiding potentially massive administrative claims due to additional wildfires. These questions can only be answered by the parties to the PG&E bankruptcy and perhaps even then only via a plan of reorganization. If PG&E cannot participate in a Wildfire Victims Fund until it exits the bankruptcy process, this would significantly increase the value to PG&E bankruptcy stakeholders of an expeditious resolution to the bankruptcy and reorganization process.

Fund Administrative Structure:

A Wildfire Victims Fund administrative structure must be effective, transparent, and maximize the fund’s resources to pay claims. The relatively simple administrative structure established

for the California Earthquake Authority (CEA) is a good model for a Wildfire Victims Fund. The Earthquake Authority is run by a three-member board appointed by state government to which CEA executive leadership reports. The board serving a Wildfire Victims Fund should be appropriately compensated and include subject matter experts, including expertise on utility financing and operations, insurance claims and actuary assessments, and catastrophic fire modeling.

a. Tax Exempt Status. Any administrative structure must be designed to create tax exempt status for the fund. Tax exempt status will facilitate greater effectiveness of investor owned utility contributions to the fund, since they will not be subject to taxation. It will also facilitate more efficient use of earnings created from the funds reserves or principal. If the principal is subject to taxation, far less of it will be available to reinvest, pay claims, purchase reinsurance or invest in mitigation efforts.

In order to be tax exempt while also remaining distinct from the State (in order to avoid placing state finances at risk from wildfire liabilities), a fund must be clearly designed to provide a public benefit to the state. A Wildfire Victims Fund clearly provides a public benefit given the threat posed by wildfires to provision of an essential service to the citizens of the state. Efforts should be made to articulate this benefit and to seek favorable IRS treatment of fund contributions and earnings as soon as a fund structure is created.

b. Use of funds. Money contributed to or earned by a Wildfire Victims Fund should be used for a variety of purposes to further its goals. First and foremost, resources of the fund would be available to pay wildfire related liabilities that exceed the attachment point to the fund for any participating utilities. In addition, fund resources could be used to purchase reinsurance or other risk transfer to the degree that they are available and cost effective.

The workgroup recommends that the state authorize the fund to spend a small fraction of its resources on developing a better understanding of and recommendations for risk based approaches to wildfire mitigation. This research could serve as an important independent arbiter of best practices in reducing wildfire vulnerability. Any analyses conducted by the fund should be shared with all stakeholders to increase knowledge about effective approaches to reduce overall risk of catastrophic fire.

The workgroup also recommends that the state authorize the fund to expend a small fraction of its resources on educating the public more effectively about the risk of wildfire and the actions that it can take to avoid or reduce vulnerability. The CEA has done very effective work educating the public about the value of simple mitigation strategies and has created significant risk reduction by doing so. A Wildfire Victims Fund should be authorized to take similar cost effective steps for the State. Indeed, the case is even stronger for a Wildfire Victims Fund

because many interventions that homeowners, communities, and utilities can take have spillover effects. That is, reducing fuel loads on a property or in a community provides benefits to neighbors. The Wildfire Victims Fund should be enabled to educate all stakeholders about cost-effective actions they can and should be taking to reduce risk.

Fund Financial Structure:

a. The claims paying capacity of the fund should be structured as a “layer-cake” or “tower” of different forms of claims paying capacity. Fundamentally, the goal of the fund’s financial structure would be to maximize the ability of the Wildfire Victims Fund, given available resources, to pay claims over time. To a significant degree, the structure is dependent on both the amount of money available to the fund, expected future cashflows, and the willingness of reinsurers or other risk transferees to accept wildfire risk in exchange for reasonable compensation. Legislation creating a fund would need to establish both a clear set of rules for what increment of wildfire liability would be retained by utilities and clear authority for the fund to take appropriate actions to develop an efficient claims paying structure.

There is wide variation in the use of pre-event funding versus post-event assessment authority on the part of catastrophe funds. Post-event assessment authority can be used when the risk is not fully understood or when effectiveness of risk mitigation measures is poorly characterized. Both are important concerns for the case of wildfire: committing pre-event capital when risks and risk-mitigation are poorly constrained can unnecessarily raise costs.

- The workgroup recommends that legislation creating a fund should require that participating utilities maintain a commercial wildfire liability or general liability policy equal to at least 10% of their gross earnings or 1 billion dollars for investor owned utilities.¹⁸ The state should require the deductible for the policy be equal to at least 5% of their earnings or \$500 million for investor owned utilities. Utilities would be free to structure lower deductibles for other types of liability that might occur in the general course of business.
- The workgroup recommends that the Wildfire Victims Fund pay, for utilities that pay into the fund, any claims in excess of 10% of gross earnings for public utilities or \$1.5 billion for investor owned utilities or the maximum level of reasonably available commercial wildfire insurance, whichever is greater.

¹⁸ Others have proposed higher retention. See Consumer Attorneys of California. Written comments to the Commission, April 22, 2019.

- The workgroup recommends that the Wildfire Victims Fund pay a maximum amount per fire incident and a maximum amount per utility in a given year. Any excess liability incurred by a utility would remain with that utility and be subject to CPUC prudence review and follow through cost allocation.
- The fund should be authorized to utilize risk transfer mechanisms - reinsurance, insurance linked securities, or others - to maximize the claims paying capacity of the fund. Current market conditions are such that reinsurance would likely be unavailable to the fund except to cover losses at a very high level - perhaps above the level of liabilities from recent catastrophic wildfires.

Once settlement values are clarified, claims are paid by the fund if they are above the attachment point for a utility. If a utility is found to be imprudent, or partially imprudent with respect to a wildfire, the fund would pay claims up to a specified amount, directly tied to shareholder contributions to a fund.

Especially in early years when the fund is smaller, many catastrophe funds rely on post-assessment bonding authority. This is a pre-arranged legal authority to levy an assessment on insurance policies that can then be used to finance borrowing used to pay claims.

The fund should be permitted, if in its management’s opinion it lacks sufficient pre-event capacity to fund likely wildfire liabilities, to arrange for contingent post-event bonding authority via post-event assessments on electricity customers and home insurance policyholders.

b. The fund should be designed to last so long as necessary but no longer.

The workgroup recommends that the Wildfire Victims Fund be designed to last only so long as needed and that its need be subject to regular, periodic reassessment and reauthorization by the legislative and executive branches on a 5- or 10-year basis.¹⁹ As mitigation becomes more effective either on the part of utilities or communities, the Wildfire Victims Fund may cease to be necessary because utility caused wildfires will either become less frequent or decrease in intensity and destructiveness. If the fund becomes unnecessary in future, and so the fund is not

¹⁹ Often after a major catastrophe, there is temporary uncertainty about how to price a risk. This uncertainty can lead to withdrawal of normal property and casualty insurance. But once primary insurers and their reinsurers better understand the risk, or it is better mitigated by, for example, structure hardening, they may return to a market. For this reason, some catastrophe funds have been designed to sunset once a “normal” insurance market redevelops. Hurricane Iniki necessitated the creation of the Hawaii Hurricane Relief Fund, which was then mothballed after ten years once private insurers reentered the market. Funds need not exist in perpetuity.

reauthorized for further claims-paying capacity, there should be a pre-planned mechanism to wind down fund operations, pay outstanding bonds, and return unused capital to all contributors in an equitable fashion.

c. The appropriate size of a Wildfire Victims Fund.

A key question raised by the Strike Team Report is the necessary size of a Wildfire Victims Fund. The workgroup recommends a fund be sized to survive anticipated third-party damages, with a high probability (95% or greater) for a period of time sufficient to ensure that utility mitigation specified in Wildfire Mitigation Plans is deployed and is effective. Based on recently filed Wildfire Mitigation Plans, and allowing for possible delays, 10 years should be sufficient.

The workgroup further believes that a Wildfire Victims Fund should be sufficiently sized to have claims paying capacity - either through pre-event funding or post-event assessments - sufficient to cover a higher wildfire risk scenario that reflects the belief that loss experience over the past two years is an element of the “new normal” rather than a once-in-a-century (or two century) statistical aberration.

The legislature and the Governor must engage with catastrophe risk modelling experts to determine an appropriate claims paying capacity for this higher risk scenario using the best available catastrophe models, appropriately modified to reflect the recent change in risk perceptions, the time duration of the fund, and the fact that the fund is intended to pay all third-party property (not tort) related claims from utility-caused (as opposed to all) wildfires.

Based on recent Senate testimony from consultants employed by the Governor’s team to evaluate fund size and electricity rate impacts, an appropriate claims paying capacity may be approximately \$40 billion, but further analysis is justified to increase confidence in this estimate.

Such analysis should begin with commercially available catastrophe models. These models are the best tools available to estimate the potential for large but very infrequent losses due to wildfire. These models are far from perfect however and so work done to estimate appropriate size of a Wildfire Victims Fund must also consider expert judgment regarding the degree to which currently available models realistically predict the likelihood of recent loss experience.

A Catastrophe modelling-based analysis of fund size should also consider a variety of other context-specific factors. These include the fraction of all wildfire losses that are likely to be utility caused. Such an analysis should be designed to estimate 10-year losses rather than 1-year losses, as is typical for commercial catastrophe models. Fund size estimation should also take into account the degree to which mitigation may reduce risk and the degree to which

total value at risk may increase over the relevant time frame. Given that these models are designed to simulate insured loss, estimates will also have to be modified to reflect both underinsured and uninsured losses, if covered, as well as any settlement discount. Finally, an analysis of required fund size should consider the attachment point for the fund.

Given the unknown likelihood of the unprecedented loss experience of the past three years, pre-event funding (including reinsurance capacity) might be scaled to reflect a more optimistic assessment of likely requirements for claims paying capacity while post-event assessment might be used to cover the difference between an optimistic and a more pessimistic view and so higher level of needed claims paying capacity.

d. Equitable Sources of Contribution to a Wildfire Victims Fund.

As many parties as possible that have some ability to control the risk of wildfire should be asked to contribute to a Wildfire Victims Fund. Different pre- and post- event funding structures, including a stream of contribution payments or post event bonding authority, may allow for access to lower cost capital. The legislature and Governor should further explore, and allow for, funding mechanisms that reduce the cost of capital while ensuring the fund is adequately capitalized. This report details below how pre-event contributions could be structured , however the workgroup recommends the legislature consider post-event funding options as well in order to manage overall initial capital commitment.

Investor owned utility ratepayers could contribute to the fund via a 20-year bond charge, similar in size to the DWR bond charge, as well as via payment in rates for utility general liability insurance coverage. For example, authorization for a new ratepayer charge equal to the \$812 million annual DWR bond charge scheduled to end late-2020, can provide cumulative net present value contribution of \$11.5-13.5 billion. This contribution acknowledges the role that electric customers have to socialize liability for utility caused fires. A fund also limits the rate variability and potential shock that arises from relying only on post-event funding to pay liabilities. Moreover, by sizing the charge to be the same as the outgoing DWR bond charge, this approach reduces incremental bill impacts to ratepayers for fund capitalization. However, under the status quo, the DWR bond charge sunset would result in incremental bill reductions. As such, the ultimate size of any new bond charge should support the equitable sharing of costs across electric customers, shareholders, and property owners, and may be less than the DWR bond charge if a smaller fund is created.

Investor owned utility shareholders could contribute to the fund via a one-time cash contribution or a stream of payments equal to the net present value of the ratepayer contribution. The contribution shares of individual investor owned utilities should be sized to reflect actuarial risks of each utility depending on a variety of factors including recent loss

experience, fire risk in their service territory, value at risk in the high wildfire risk areas of their service territory, and others. This contribution acknowledges the value of the fund, (and associated reforms), in establishing a more stable damage payout and cost recovery environment, which has positive benefits for utility shareholders and continue utility solvency. The workgroup recognizes that ensuring voluntary contributions from shareholders is difficult to require via legislation. The legislature and Governor’s office should consult with utilities and financial market experts regarding how to best incentivize shareholder contributions. A requirement to recapitalize the fund in the event of utility negligence should be smaller the greater the upfront utility contribution. Likewise, the scope of changes to cost recovery, and the degree of pre-event certainty of recovering costs, should depend on the degree to which a utility contributes to initial capitalization of a fund.

Publicly owned utilities could contribute an equivalent up-front (equivalent to shareholder) and ongoing (equivalent to ratepayer) contribution, with both sized to reflect the size of their customer base. Thus a POU ratepayer would pay an additional charge equivalent to the extension of the DWR bond charge plus an incremental charge needed to finance the upfront contribution.

These contributions ensure policy fairness both between ratepayers and shareholders and between participating investor owned and publicly owned utilities.

Property Insurance Policy Holders in California would be subject to a surcharge on their insurance policies sufficient to raise funds equivalent to electric customer contributions. This charge would amount to approximately on average \$80 per year.²⁰ The purpose of such a surcharge is different than existing surcharges collected from property owners and more research is needed regarding how to best structure to ensure there are direct benefits to property owners and how any such surcharge interacts with Prop 26 and Prop 13. The legislature may consider limiting such a surcharge only to properties in Tier 2 or Tier 3 fire zones, even though broader socialization better supports the risk pooling objective. It is important to note the independence of the Wildfire Victims Fund from the State of California may be a factor in distinguishing such a surcharge on insurance policies from a tax requiring supermajority approval.²¹

²⁰ The intention is to have similar collections from property owners as from ratepayers and IOU shareholders, and that the fees would be levied for 10 years or the length of the fund. As such, this fee may be smaller or greater per property if the fund size is different than the assumed \$40 billion, and may decline over time if a smaller capitalization is needed.

²¹ *Schmeer v. County of Los Angeles* (2013) 213 Cal.App.4th 131, 1326–1327.

The **State of California** contributes to the fund via foregone tax revenue due to the fund's tax-advantaged status and via investment in wildfire mitigation that, if effective, will reduce the size of the fund and lowers the probability that post-event assessments will be triggered. The Wildfire Victims Fund does not require direct taxpayer contributions, although the workgroup strongly recommends that taxpayers substantially increase wildfire mitigation targeted to reducing wildfire risks for individual homes and in communities at highest risk for wildfires. This is above and beyond the current funding from the Greenhouse Gas Reduction Fund of \$200 million per year; the workgroup recommends an additional \$3 billion in annual near-term (next 5 years) mitigation funding designed to limit draws on the fund via risk-targeted investment, with a particular focus on areas at highest risk for utility caused fires.

e. Wildfire Victims Fund post-event contributions

Ideally, post-event assessment will not be required because mitigation efforts will reduce utility caused wildfire risks sufficiently that the higher levels of claims paying capacity will not be required. If initial capitalization does prove insufficient, a Wildfire Victims Fund should have authority to levy post-event assessments on parties sufficient to pay claims up to the \$40 billion level, or another level established by further analysis of a high-risk wildfire scenario. Contingent, post-event assessment provides incentives for mitigation (and adequate ongoing mitigation funding) by the utilities and the state. Post-event bonding authority also accounts for the possible need to upsize the fund if liabilities prove greater than expected.

Several parties, including The Utility Reform Network (TURN) and the California Large Energy Consumers Association (CLECA), argue that utilities should be required to repay the fund for any payments associated with fires where utility negligence was later found. The utilities suggest that alternatively, the loss causer should pay a higher contribution to rates recovered through ratepayers. It is important to assign some additional financial responsibility to the loss causer to limit the funds coverage of any claims associated with negligence, but also necessary to maintain solvent utilities.

To achieve this balance, the workgroup recommends utility shareholders be required to repay fund payments associated with an imprudent utility fire up to a certain threshold amount. This utility repayment can be subject to a pre-established cap, for example a certain percentage of market capitalization the day before a fire or a stress-test designed to maintain utility credit quality. The level of this cap should be higher if utilities do not contribute substantial up front contributions to the Wildfire Victims Fund and lower if they choose to make such contributions. Utilities should also be subject to fines and penalties from the CPUC for negligence, which can be remitted to the fund.

Observations regarding feasibility of a fund

Establishing a Wildfire Victims Fund of sufficient size and with adequate contributions is a daunting task.

It is made more challenging by the fact that a key potential contributor, PG&E, is currently undergoing Chapter 11 reorganization, but exit from the Chapter 11 process may only be possible with liability reform. The creation of a fund and cost recovery reform that is calibrated to utility shareholder Fund contributions is the best path forward.

It is made more challenging by the fact that all shareholders of IOUs may object to sizeable initial contributions to the fund, even though they will benefit from the risk pooling a fund creates as well as from associated cost recovery reform.

It is made more challenging by the fact that maintaining payouts at current settlement values both for subrogation claims from insurers and for payments to underinsured homeowners present legal and implementation challenges. But not limiting these payouts would dramatically increase the cost of the fund and so compromise its usefulness.

It is made more challenging by the affordability challenges the state faces in electric utility rates. However, the workgroup believes this proposal renders a future of escalating and unpredictable electricity bills somewhat less costly and much more predictable.

It is made more challenging by the affordability challenges currently being experienced by homeowners in the WUI seeking to purchase fire or homeowners insurance. But it will help to stabilize California's homeowner's insurance market whereas modification of inverse condemnation doctrine may be a fundamentally force.

The solution we propose - a Wildfire Victims Fund coupled to significant cost recovery reform - is not an easy path. Further work is needed to identify the costs, consequences, and feasibility, of parts of the proposal as presented here. The workgroup believes that this combination of reforms will best protect victims, ratepayers, homeowners, and ultimately the health and wellbeing of the citizens of the state of California.

The workgroup believes that a smaller, liquidity only fund could provide some but not all of the benefits of a larger claims paying fund. The workgroup recommends that no or only modest cost recovery changes should be made if such liquidity only fund is created primarily using electricity customer resources with little utility shareholder contribution.

Other elements of this report discuss reform to the liability framework for utility caused wildfires in California as well as potential associated modification to CPUC cost recovery

process for these catastrophes. The workgroup emphasize that such change would have implications for what we have recommended here: possible changes in cost recovery as well as creation of Wildfire Victims Fund to pre-fund liabilities associated with utility caused catastrophic wildfires.

Modification of the current strict liability framework to a fault-based liability framework would reduce but not eliminate the need for a utility-focused Wildfire Victims Fund by limiting instances in which a utility is liable for wildfire to those in which it acted negligently.

Presumably, a negligent utility would be unable to prove to the CPUC that costs associated with its negligence were prudent, and thusly utility shareholders rather than ratepayers would be liable for any liabilities still the responsibility of electric utilities. Non-negligent utility-caused wildfire liabilities would be the responsibility of homeowners and their insurance companies. In both such cases a Wildfire Victims fund could assist with timely claims payment.

The workgroup emphasizes the degree to which change in the liability regime would alter utility liability for wildfire is uncertain. It might be that most wildfire liability would shift to home insurers under this approach. On the other hand, it is also possible that victims would be successful in proving in court that utilities conduct in setting fires was negligent. If so, then a change in liability regime could be destabilizing to utilities because it would predictably lower the odds of cost recovery for wildfire expenses while not reducing the underlying expense. Shareholders and ratepayers might end up needing to create a Wildfire Victims Fund or take major reforms to cost recovery because of the benefits of stable utilities with good access to capital markets. Any changes to inverse condemnation, cost recovery, or creation of a Wildfire Victims Fund must be considered and undertaken in a coordinated fashion. Interactions between the three frameworks are so direct and so strong that modification of one or more without close coordination is likely to lead to failure of policy effectiveness and severe unintended consequences.

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Appendix III: Homeowners Insurance and Mitigation Workgroup Report

Commissioner Jones and Commissioner Wara

The workgroup reports are the products of the workgroups established at the April 29th, 2019 commission meeting, and represent the consensus thinking of the members of a given workgroup. Only the executive summary is expressive of full commission intent.

I. Context/Findings

Finding 1. Admitted lines home insurance is becoming more difficult and more expensive to obtain in high wildfire risk areas in California.

The Department of Insurance (“Department;” “CDI”) and the Personal Insurance Federation of California (PIFC) testified that rate increases have been filed¹ with the Department and will continue to be filed for homes insured in the wildland-urban interface (WUI), which will make insurance more expensive. While most homeowners in the WUI are still able to obtain insurance from admitted carriers, over time more will likely be denied based on the level of wildfire risk and will have to obtain insurance from the surplus lines market or from the state-created Fair Access to Insurance Requirements (FAIR) Plan, which is the fire insurer of last resort available to homeowners who cannot otherwise find home insurance. Under state law, insurers have the discretion to decide where and whether to write home insurance policies and the Insurance Commissioner has no authority to mandate home insurers to write or renew insurance in the WUI. However, insurers are obligated to participate in the FAIR Plan and pay assessments when the FAIR Plan suffers losses that exceed its ability to pay claims.

Insurance Access in the WUI

The Department found that there was a 15 percent increase in insurer initiated non-renewals from 2015 to 2016 in the WUI.² The Department also found that there has been a significant increase in complaints from homeowners in the WUI regarding non-renewals and premium

¹ Personal Insurance Federation of California. Public testimony to the commission, March 13, 2019. California Department of Insurance. Public testimony to the commission, February 25, 2019 and April 3, 2019.

² California Department of Insurance. “The Availability and Affordability of Coverage for Wildfire Loss in Residential Property Insurance in the Wildland-Urban Interface and Other High-Risk Areas of California: CDI Summary and Proposed Solutions” Appendix E and p.1.

charge increases, as well as complaints about insurers declining to write new insurance. Current law requires insurers to provide homeowners with a 45-day notice of non-renewal with a reason for that decision.

Insurance Affordability in the WUI

Insurance pricing is also increasing for homes in the WUI. A Rand study found that on average home insurance in two WUI counties was 25 percent higher in price than for homes in non-WUI counties.³ According to the Department of Insurance, on average home insurance rates in areas of high risk of fire are at least 50% higher than rates for homes outside the WUI.

Further, insurance prices in the WUI are likely to continue to increase significantly. Both the representative of the Personal Insurance Federation of California and the Department of Insurance testified that many insurers have filed for additional rate increases and are likely to do so on a regular basis for the foreseeable future.

Due to insurers' loss experience associated with wildfires, the Department is approving rate increases and will likely approve more rate increases for insurers selling coverage in the WUI.

Finding 2. As more homeowners in the WUI are unable to find home insurance from admitted carriers, more are having to purchase fire insurance from the surplus lines market or from the FAIR Plan, indicating a growing problem. The home insurance market in California is not in crisis yet, although we are marching toward a future where home insurance will be increasingly unavailable and/or unaffordable for many in California's WUI. More destructive fires in the future of the sort we saw in 2017 and 2018 will only accelerate this trend.

Increased Use of Alternatives to Admitted Lines Carriers in the WUI

While the vast majority of home insurance written in California is from traditional "admitted" carriers,⁴ insurance from admitted carriers will increasingly become more challenging to find and less affordable for homeowners in the WUI.

Homeowners who are unable to find insurance from an admitted insurance carrier can access the "surplus lines" market through a "surplus lines broker."⁵ According to CDI, surplus lines

³ RAND. "The Impact of Changing Wildfire Risks on California's Residential Insurance Market," California's Fourth Climate Change Assessment, California Natural Resources Agency. August, 2018.

⁴ 97%, according to the Personal Insurance Federation of California.

⁵ The surplus lines market is one where the insurers offering the insurance and the insurance itself are less regulated by the state – the price of surplus lines insurance is not regulated by the state, for example. Surplus lines insurance is available for most homeowners in the WUI, but the price is higher than that of insurance from admitted carriers and the price of surplus lines insurance will increase in the face of the recent wildfire loss experience of insurers.

writers make up less than one percent of the overall home insurance market overall in California. The Department of Insurance does not have figures for the percentage of homes in the WUI that are insured by the surplus lines market.

Although the surplus lines market share of the overall home market in California is currently very small, it is growing, and the surplus lines market share in the WUI areas is likely disproportionate as compared to the overall market in the state. This growth is likely to accelerate as homeowners find it more difficult to find insurance from admitted insurance carriers.

The FAIR Plan is an insurance program available to California homeowners who cannot find admitted lines homeowners insurance. Created by statute, the plan is not-for-profit, is not subsidized by the State of California or the taxpayers, and is intended to provide fire insurance coverage to homes that the private market refuses to cover.⁶

As more homeowners in the WUI are unable to find home insurance from admitted carriers, more are having to purchase fire insurance from the FAIR Plan. The number of FAIR Plan policies written in the WUI is increasing yearly. It is important to note that while over the last five years the FAIR Plan policies written in the WUI have grown 50%, that the FAIR Plan policies make up only a very small share of the overall number of homes in California generally and in the WUI in particular. There are 3.6 to 4.5 million homes in the WUI, of which 1 million are in areas rated high or very high risk. As of January 1, 2018, there are only 33,898 FAIR Plan policies written in the WUI. This means that the large majority of homeowners in the WUI are able to find insurance from admitted carriers or the surplus lines market – at least for now. Even as this report is being written there are reports of more homes in the WUI being denied renewal of or newly written home insurance.

⁶ The FAIR plan is the fire insurer of last resort for California homeowners. FAIR Plan coverage is subject to multiple limitations that make it less desirable than an admitted lines policy and is also generally more expensive than an admitted insurers' homeowners policy, because the FAIR Plan is taking the homes that the private market refuses to insure due to the risk that those homes face from fires. The FAIR Plan was created by the California Legislature and Governor after inner city riots in the 1960s led to widespread redlining of inner city African-American neighborhoods by insurance carriers. The FAIR Plan by law must set its rates based on risk.

The FAIR Plan is also required by law to have reserves sufficient to pay future claims, so it has to collect enough premium in order to have sufficient reserves to pay future claims. The FAIR Plan is not subsidized by the State of California or the taxpayers. It is also not a state agency; it is a not-for-profit whose board consists of the major home insurers in the state. In the event that the FAIR Plan has insufficient reserves to pay claims, the FAIR Plan can assess all admitted home insurers proportionate to their market share to replenish its reserves. .

FAIR Plan policies are limited to fire insurance. Homeowners who purchase a FAIR Plan policy can also purchase a "differences in conditions" coverage or umbrella policy from an admitted insurer, on top of the FAIR Plan policy, to cover the usual sorts of risks that a traditional home insurance policy covers beyond fire insurance.

Insurers in recent years are increasingly using wildfire risk models to assign a risk score to each home, and then based on that risk score the insurer decides whether to renew or write new insurance for that home. While pricing of home insurance is regulated by the CDI, the decision to sell (or not to sell) insurance to a particular homeowner is within the purview of the insurers themselves.

The models incorporate factors that are related to the risk of wildfire and the propensity of a home to burn, including fuel, surface composition, slope, aspect, distance to high risk areas and firefighter access. Based on the risk score, insurers are deciding whether to renew or write new insurance for homes and deciding on pricing.

The Department of Insurance, however, has found that there are a number of factors that are not included in the models. Homeowners' efforts to create defensible space around the home and other home fortification and construction measures are not included in the current models. Likewise, many types of community mitigation measures are not considered in the models. But evidence suggests that adherence to more stringent building codes, the use of firebreaks, and other community based efforts can help reduce exposure to wildfire loss and indeed, these are many of the measures suggested by the insurance industry itself to reduce risk.⁷

Moreover, there are issues with regard to how the models treat access – no consideration is given to road width, shoulders, or the availability of multiple access routes for firefighting equipment. Finally, the Department notes that there is no credible data to support the models' assumptions that the propensity to burn increases with each change in risk score, which also calls into question the level of granularity (individual homes) at which the risk score is being applied by the insurers.⁸

Finding 3. California does not currently require a new government created insurance program other than the FAIR Plan to support home insurance availability in the WUI.

There are additional laws that should be enacted to help homeowners in the WUI avoid underinsurance; to make sure that the models that insurers are using capture all risk reduction factors; to give homeowners more time in certain circumstances before their insurance is not

⁷ See Insurance Institute on Home and Business Safety, <https://ibhs.org/wildfire/wildfire-demo-2019/>. (Last accessed May 13, 2019)

⁸ California Department of Insurance. "The Availability and Affordability of Coverage for Wildfire Loss in Residential Property Insurance in the Wildland-Urban Interface and Other High-Risk Areas of California: CDI Summary and Proposed Solutions." pp 9-10.

renewed; and to align insurance availability with home and community risk reduction. These and other reforms to improve the insurance market are set forth in the Recommendations.

The workgroup concludes that California is not at a point of crisis where an additional government insurance program should be established to write insurance in the WUI when there is already the FAIR Plan for that purpose. There are just under 34,000 FAIR Plan policies written in WUI, versus 1 million homes in areas of high or very high risk. Most homeowners in the WUI and even in high risk areas are still able to find private insurance, and taking the modest step of providing a means tested premium subsidy for low income households currently in the WUI would address the affordability issues more effectively. Additional recommendations to improve the FAIR Plan are found in the Options and Recommendations section below.

II. Issues to Consider with Regard to Potential Policy Responses to Insurance Affordability and Availability

Policymakers need to take into account a number of considerations in developing options and recommendations to address the growing problem of home insurance unavailability and unaffordability in the WUI.

Insurance price and availability is based on underlying risk. California should act to reduce the underlying risk of wildfire to the extent feasible

First it is important to recognize, as the Commission was told repeatedly through expert testimony,⁹ reductions in insurance availability and relatively higher pricing in the WUI is based on the underlying risk of wildfires. Insurers are deciding whether to make insurance available or not based on their evaluation of the underlying risk of wildfire for those homes seeking insurance. So too with pricing. Insurers' premium prices are based on their loss experience which in turn reflects the underlying risk of wildfires - including and especially recent loss experience. Insurers are filing rate increases with the Department of Insurance based on the increase in risk faced by homes in the WUI and are likely to continue to do so until pricing reflects their current view of the level of risk.

If the goal is to make insurance both more available *and* more affordable, then the state, first and foremost, needs to invest in taking steps to reduce the risk of wildfires, to the extent that it can do so. Some aspects of the risk of wildfires are outside the control of any one state, such as temperature rise and drier conditions due to climate change. The State of California is an international leader in taking steps to reduce the emission of greenhouse gases which are a major contributor to climate change, but other states, the United States government, and

⁹ See Personal Insurance Federation of California. Written comments to the commission. April 22, 2019; Also California Department of Insurance. Public testimony, April 3, 2019.

other countries are not taking similar steps fast enough, and so there are some aspects of the increased risk of wildfires that will be outside of California's control.

However, as set forth in the Governor's Strike Force Report, there are steps the state can take to reduce risks through improved forest management, better land use decision-making, improved building code standards, requiring utilities to "harden" their equipment and take other steps to reduce the incidence of utility caused wildfires, and ensuring that local governments take steps to increase community wildfire resilience and to enact and enforce meaningful defensible space and other code requirements for homeowners.

Insurance Price and Availability Sends Important Market Signals about Underlying Wildfire Risk

Second, insurance availability and pricing send important market signals about the underlying risk of living in an area. Policymakers need to consider the potentially significant consequences of taking steps that artificially mask those price signals.

Masking insurance price and availability market signals can create incentives for more people to move to areas where the risk of wildfire is high, further compounding the likelihood of deaths, injuries, and property losses in those areas where wildfire risk is high.

For example, if the state were to require that home insurance for homes in the WUI be priced the same as home insurance for homes outside the WUI, the price of insurance in the WUI would no longer reflect the higher risk and, in ultimate effect, an incentive would be created for people to live in a higher risk area. At the same time, the cost of living for people who make the choice not to live in the WUI would also increase (see below).

In evaluating whether to subsidize homeowners insurance in the WUI, policymakers need to consider whether the state wants to encourage more people to move into the WUI. We believe that doing so will lead to more deaths and injuries of both residents and first responders, destruction of property, loss of homes, more damages to be paid by utilities (if a fire is caused by utility) and consequent costs to shareholders and utility ratepayers, and more costs for local, state and federal governments and taxpayers.

Climate change is a reality and it's having an effect on the frequency and severity of wildfires. Insurance pricing and availability reflect the increase in wildfire risk and send an important signal that the risk is growing substantially. Suppressing that market signal could result in more people and businesses locating in areas of higher risk with consequent increases in deaths, injuries, loss of property, etc. Policymakers should not attempt to suppress the impact of climate change on homeowner and business decision making by artificially suppressing insurance pricing and availability market signals about climate change.

Masking Insurance Price and Availability Signal Shifts Risk/Cost to Those Who Live in Lower Risk Areas

Policymakers also should consider the potential for cost shifting from those who live in the WUI to those who do not live in the WUI.

For example, if that state were to require that insurance in the WUI be priced the same as insurance outside the WUI, the net effect would be to raise prices outside the WUI, in order to collect enough premium to cover the risks in the WUI where the premium would now be lower than needed to cover fire risks. Homeowners in lower risk areas outside the WUI will have to be charged more to make sure insurers collect enough premium to have sufficient reserves to cover higher frequency and severity of wildfire claims in the WUI.

Should people who live in low risk areas subsidize insurance costs of those who live in higher risk areas?

Insurance is a mechanism to pool risk and spread risk over large numbers of people, and thereby obtain the most efficient and lowest actuarially based price for those risks covered by the insurance. Arguably, everyone is benefiting from access to insurance, which in turn relies on spreading risk to a large number of people, so because everyone is benefitting the price should be the same regardless of the risk.

However, some homes present much higher risks than others. There are relatively fewer homes at high risk of wildfire as compared to the overall number of homes in California. Those higher risk homes don't need to be in the general risk pool for the general risk pool to have sufficient numbers of homes over which to spread risk, and to the contrary, those higher risk homes are imposing potentially higher costs on the insurer and raising costs for everyone who purchased the insurance.

States allow insurers to take into consideration risk factors associated with the property being insured in pricing insurance. Homes that are at greater risk of fire due to location in a high risk area, the strength of the fire-fighting capacity of the community, the home's proximity to those services, the materials used and codes to which the home was built, and other considerations are all allowable factors for home insurance pricing and availability in California.

One underlying rationale for this is that what people pay for insurance should be based on the risks that their property and similar properties face, not the risk that other properties with completely different risk profiles face. Constraining pricing artificially for high risk homes would result in unfair cross subsidies or further motivate the insurer to non-renew in high risk areas.

A second rationale for risk-based pricing is to encourage risk reduction measures. If insurance pricing does not take into account risk the home faces, then there is a lesser incentive for the homeowner, or the community in which the home exists, to take steps to reduce the risk.

Requiring those in lower risk areas to subsidize those in higher risk areas by artificially constraining price penalizes those who live in lower risk areas.

Government Provided Insurance

Sometimes government needs to step in to provide insurance where private market participants withdraw entirely, but care in design of a government insurance program is critical because of danger that government response can have negative unintended consequences.

When private insurers withdraw entirely from a market or decline to write certain risks, government may need to step in to provide insurance that the private market is not otherwise providing. We are not at this point yet with regard to the home insurance market for fire risk in the WUI in California.

When the government has stepped in, in other contexts, it has been because private insurers decline to write any insurance for certain risks. Only when the private market has failed entirely have governments stepped in to provide insurance. The concern about doing so before the private market has failed is one of the government supplanting the private market.

Government should only step in where private market won't provide insurance.

Example: California Earthquake Authority

One example of government provided insurance is the California Earthquake Authority. The CEA provides residential earthquake insurance for Californians. Pricing of the CEA residential earthquake insurance is based on risk. The CEA is not supported by the state general fund so there is no taxpayer subsidy.

Prior to the Northridge Earthquake of 1994, home insurers were required by law to include earthquake insurance in their policies. After the enormous losses suffered by home insurers in the Northridge Earthquake, insurers notified policymakers that they could no longer afford to include earthquake insurance in their home insurance policies because the risk and magnitude of the earthquake losses were too great.

Home insurers advised policymakers that they would stop writing home insurance in California if they were required to include earthquake insurance with home insurance. In this case, the private market withdrew entirely from providing residential earthquake insurance after the Northridge Earthquake.

The State of California responded by creating the California Earthquake Authority (CEA), a government agency which issues a residential earthquake insurance policy. Importantly, the

Legislature required that the earthquake insurance issued by the CEA is priced based on the underlying risk, so there is no taxpayer or government subsidy. The CEA is required to have sufficient reserves to cover claims from two contemporaneous major earthquakes.

The CEA is an example of the government stepping in when the private market has withdrawn completely from covering a particular risk. That situation is not currently present with regard to wildfire insurance risk in the WUI – insurers have not withdrawn entirely from the market.

Example: The California FAIR Plan

Another example of government intervention in the insurance market is the California FAIR Plan. FAIR Plan pricing is based on risk. The FAIR Plan is the insurer of last resort for fire coverage but does not supplant the private market. Customers can only purchase FAIR Plan policies upon a showing that they have attempted but were unable to purchase a policy from an admitted carrier. The FAIR Plan is not funded by the general fund so there is no taxpayer subsidy. The FAIR Plan has the ability to assess insurers if its capital is exceeded by losses.

The FAIR Plan is another example where the state government intervened when it became impossible for homeowners to obtain fire insurance in certain areas of California – originally the inner city. Importantly, the FAIR Plan is not taxpayer subsidized and must price based on the underlying risk. This means that the FAIR Plan is not able to compete unfairly with the private market insurers and keeps the FAIR Plan from supplanting the private market.

The FAIR Plan works as intended – it is the insurer of last resort for those who cannot otherwise find fire insurance in the WUI or elsewhere.

Below we will discuss what might be done to assist lower income homeowners who cannot afford the FAIR Plan in a way that does not put the FAIR Plan itself at an unfair competitive advantage against the private market insurers or artificially reduce the FAIR Plan price so that it does not reflect the underlying risk of wildfire.

Example: Florida Hurricane insurance

Subsequent to Hurricane Andrew in 1993, Florida took a number of actions to shore up private residential insurance because carriers declined to write policies covering wind damage. First, Florida established a Scientific Commission to model Hurricane catastrophe risk in a transparent and accountable manner. Second, Florida established a catastrophic risk reinsurance fund known as the Florida Hurricane Catastrophe Fund. Third, Florida established a public insurance provider of last resort called Florida Citizens Insurance Corp (FCIC) as an insurer of last resort. FCIC has the ability to assess insurers if its capital is exceeded by losses. Both the Catastrophe Fund and FCIC are required to use the Commission's catastrophic risk model.

This example was a response to a total market failure. The Commission asked the witness who testified about the Florida example whether California was in the same market failure condition as Florida when it created Florida Citizens Insurance Corporation; the witness answered in the negative.¹⁰

Example: The National Flood Insurance Program

The National Flood Insurance Program (NFIP) was established in 1968 in response to the unwillingness of insurers to cover flood perils. The NFIP does not price entirely based on risk - it is subsidized by federal taxpayer dollars. Thus it is an example of lower risk taxpayers subsidizing higher risk taxpayers. Over its history, the NFIP has proven to be very expensive in part because it has masked price signals that otherwise would incentivize avoidance of flood risks.

The NFIP is not a good example for California to look to address the home insurance pricing and availability challenge in the WUI, as this would distort the market pricing of risk.

California already has the FAIR Plan

As mentioned, California already has an insurer of last resort for fire - both inside and outside of the WUI - the California FAIR Plan. The not-for-profit FAIR Plan draws upon the lessons learned from prior government interventions in private insurance markets – it is priced based on the actual risk so it is not masking the price signal associated with the fire risk, nor is the price subsidized by taxpayers. It is an insurer of last resort and it is not supplanting the private market through unfair pricing or taxpayer subsidies. It is required to have sufficient reserves to cover future claims, but in the event those reserves are exceeded it can assess the private home insurers to replenish its reserves to pay claims.

California FAIR Plan Affordability

The Wildfire Commission heard testimony that FAIR Plan policies can be difficult to afford for low-income homeowners in certain high-risk locations. For those homeowners who are of limited means, the FAIR Plan can be quite expensive, particularly as rates rise to reflect the recent loss experience. The solution is not to artificially suppress the FAIR Plan price. The workgroup recommends alternative solutions below (See Recommendation #3).

Benefits of Aligning insurance availability and pricing with risk reduction efforts

Another issue considered by the Wildfire Commission is the benefit of aligning insurance pricing and availability with risk reduction efforts. Ideally, insurance should be available and

¹⁰ See John Rollins, public testimony to the commission, April 3 2019

priced to reflect meaningful risk reduction steps taken by homeowners and communities in the WUI. Such is not the case currently.

Current home insurer fire risk underwriting models are inadequate

As discussed above, the fire risk models used by insurers to decide whether to renew or write insurance in the WUI do not take into account home and community fire mitigation efforts. Whether it is defensible space, following modern fire building codes (post-2008), hardening the roof of a home, protecting the eaves of the home, using heat resistant glass in windows, etc, insurers' models do not consider these risk reduction efforts. Current fire risk underwriting models for homes also fail to take into account the actions fire officials are asking homeowners take to reduce fire risk to their homes.

Under current law, the risk score models utilized to decide whether or not to write insurance for homeowners do not have to be filed with CDI, let alone approved by CDI. Moreover, the models are not required to be publicly vetted. The workgroup recommend a process to publicly vet these models and to require their approval by the CDI.

Positive benefits of incentivizing homeowners and communities to reduce fire risk

There are large positive benefits to be gained in risk reduction from aligning insurance availability and pricing with homeowner and community risk reduction efforts, as long as those efforts demonstrably reduce risk.

Currently, the underwriting risk models most utilized by insurers fail to incentivize homeowners to make improvements to homes, because the models do not account for those improvements.

An example where risk reduction standard set for homeowners drives availability of insurance

An important successful example where home insurance availability was aligned with homeowner risk reduction is that of the Wildfire Partners project in Boulder Colorado. Homeowners in Boulder County, Colorado live in the WUI. They were facing increasing instances of home insurers declining to renew or write new home insurance because of wildfire risk. To address this problem, Wildfire Partners was established. This non-profit worked with the county and insurers to develop, based on the best available science, a standard for home defensibility and wildfire risk reduction. Insurers agreed that if a third party verified that the homeowner met this risk reduction standard the insurer would write insurance for the home. This is a successful example where homeowner risk reduction actions were aligned with insurance being made available. The workgroup recommends that California establish a similar program statewide in the WUI.

III. Recommendations

Recommendation 1. Doing nothing to improve insurance conditions in the state is not a good option.

The workgroup strongly believes that doing nothing to improve access and affordability of homeowners' insurance is not a good option. We believe that doing nothing will lead to continued deterioration of insurance availability and pricing in the WUI.

Recommendation 2. California should preserve its risk based approach to pricing home insurance.

The workgroup strongly recommends that California maintain incentives created through risk-based pricing of insurance for all stakeholders to avoid and mitigate risk. Furthermore, the state should not act to suppress prices in high-wildfire risk areas by increased cross-subsidy from low-risk areas.

Recommendation 3. Improve the California FAIR Plan.

FAIR Plan coverage limits have not increased in several decades even as the cost of housing in California has increased dramatically. The FAIR Plan coverage limits should be increased to reflect current construction costs for dwellings in the WUI. The workgroup believes that FAIR Plan policies should follow CDI recommendations to allow for an increase in coverage limits to \$3,000,000 and then allow increases by an inflation factor at specified intervals.

The workgroup believes that a targeted premium subsidy for existing homeowners in the WUI who are very low income and for whom the FAIR Plan is the only option for insurance is potentially justified. This subsidy should be available only to homeowners who currently live in high risk areas and are currently insured by the FAIR Plan or become insured by the FAIR Plan in the future. It should be unavailable to homeowners who move into high fire risk areas in future. This premium subsidy could be funded out of general fund revenues. The FAIR Plan itself should not be subsidized nor should pricing in the FAIR Plan be artificially constrained. Price should continue to be based on risk.

Recommendation 4. Improve the California Insurance Guarantee Association.

California law establishes a "California Insurance Guarantee Association" (CIGA) to pay claims for property insurers who are unable to pay claims due to insolvency. The CIGA is made up of the property and casualty insurers writing insurance in the state and is capitalized through assessments on them. The CIGA is an important safety net for insureds when they are faced with the insolvency of their insurer. Current state law establishes a cap on the dollar value of claims that can be paid from the CIGA to a homeowner whose insurer has become insolvent.

That cap is currently \$500,000.¹¹ The workgroup recommends, based on input from the Department of Insurance, that the cap be raised to \$1,000,000 and then increased by an inflation factor on an annual basis. The cap needs to be lifted because there are many homes in the WUI whose replacement value and insurance coverage exceeds the cap and so the existing cap would result in a payment from the CIGA which is far below that which the homeowner would have otherwise received from their insurer. In addition, the CIGA cap has not been increased since its inception in the 1960s.

Recommendation 5. Require Fire Risk Underwriting Models used by insurers to be filed and approved by CDI.

As discussed above, the Department of Insurance has found a number of limitations with the fire risk models used by insurers. Given the reliance and importance of those models in determining whether home insurance will be renewed or written, the workgroup recommends that, like other critical aspects of home insurance, the models ought to be filed with and approved by the California Department of Insurance, and that the Department of Insurance should be provided with the necessary resources and expertise to review and approve the models based on the best available science. The Department's review and approval of the models should be based on the best available science regarding inclusion of factors that contribute or diminish the risk to a home from wildfire.

Recommendation 6. Set standards for home fire risk reduction and community risk reduction, with input from insurers, and require insurers to write insurance where the home owner and the community both meet standards.

Widespread home hardening upgrades are an important strategy to reducing wildfire risks to homeowners. A McClatchy analysis of impact of the post-2008 wildfire building codes in the Camp Fire footprint shows that homes meeting these more stringent defensibility codes had much higher survivability rates than those without. This was true even where ember cast was a major driver of fire and setbacks were sometimes relatively tight. Meeting the higher standard appeared to matter a great deal in Paradise. The Insurance Institute for Business and Home Safety (IBHS)'s empirical tests of home meeting the post-2008 wildfire building code standard also indicates higher survivability. On the other hand, many homes meeting post-2008 code burned in the Tubbs Fire, indicating that more than home hardening is essential to defensibility during a fire with high ember cast.

Consistent with conceptual recommendations by the Department of Insurance, the workgroup recommends that CAL FIRE be directed by statute to establish a wildfire risk reduction

¹¹ (Ins Code §1063.1)

standard for homes and, separately, for communities, which reduces the risk of loss due to wildfires. CAL FIRE, in consultation with the Department of Insurance, may include all factors that are material to reducing the risks at both the individual home and the community level. The workgroup recommends that state law require insurers to write an insurance policy for a home when *both* that home and the community where the home is located meet CAL FIRE's wildfire risk reduction standard. This recommendation builds on the successful Wildfire Partners example in Boulder Colorado, where a risk reduction standard was set and if a homeowner met it, the insurer would write insurance for the home. Such a scenario aligns risk reduction actions by both the homeowner and community with the availability of insurance, and could be enhanced by the grants or loans proposed in Recommendation 16. It uses insurance availability to incentivize risk reduction, and makes sure that the risk reduction demonstrably reduces risk. This recommendation addresses the understandable frustration felt by homeowners in the WUI who follow the directions of local fire officials by hardening their homes, only to be unable to find private insurance, and acknowledges that community level mitigation actions can be taken to reduce risk.

CAL FIRE and the IBHS are already working on developing a three-tiered approach to improving a home's survivability in the face of wildfire.¹² This effort is modelled on the "Fortified Home" program for hurricane and high wind events, and may serve as a useful framework for the requirement to write insurance for a hardened home.

Recommendation 7. Require insurers to implement a tiered mitigation credit based on the level of home hardening.

This alternative recommendation, proposed by the California Department of Insurance, would be less effective than Recommendation 6, but could rely on the same CAL FIRE standards. Mitigation credits may provide a signal to homeowners as to the actions that would reduce their risk, but such an incentive may not be that helpful to the consumer nor provide enough of a push to make upgrades to one's home. Moreover, a mitigation credit does not address the unavailability of insurance in the first instance. Insurers would still be free to decline to renew or write insurance for homes that meet the CAL FIRE Standard. A mitigation credit does a homeowner no good if they cannot find insurance.

Recommendation 8. Require insurers to calculate and provide a replacement housing estimate in writing to insureds annually and before entering into an insurance contract.

¹² California Department of Insurance. "The Availability and Affordability of Coverage for Wildfire Loss in Residential Property Insurance in the Wildland-Urban Interface and Other High-Risk Areas of California: CDI Summary and Proposed Solutions." pp 5-6.

A significant number of fire survivors are underinsured, according to testimony received by the Commission. They have insurance, but their insurance coverage is not sufficient to cover the full cost of replacing their homes.

State law does not place a duty on insurers to make sure that the insured has sufficient coverage to replace their home. However, insurers have the construction cost data not only from their replacement cost tools but also from the many total losses that they settle after approving the construction cost.

In the wake of multiple fires in the last two decades and the Oakland Hills/Tunnel Fire in 1991, the Department of Insurance found that many homeowners were underinsured. The Department also found that where insurers had provided a home replacement cost estimate to insureds, the estimates varied widely and often failed to incorporate all the cost components associated with replacing the home.

In 2011, then Insurance Commissioner Dave Jones issued a regulation requiring insurers to use a complete, consistent and comprehensive method of calculating the replacement cost of a home, so that consumers would have the best possible information about the cost of replacing their home upon which to make their decision about the amount of insurance coverage. The insurance industry sued to challenge the regulation which, after seven years of litigation, was upheld by the California Supreme Court.

However, state law only requires that homeowners be given notice of their right to request a replacement cost estimate every two years.

The workgroup agrees with the original legislation sponsored by CDI in 2018 calling for insurers to provide a replacement cost estimate annually and recommends that a state law should be enacted to require insurers to provide a complete replacement cost estimate annually to their insureds before renewal and before writing a new home insurance policy. Such an estimate should prominently indicate if the replacement cost estimate is above the current level of coverage. The insurers should also be required to annually validate their replacement cost estimates against actual construction costs in the market where the home is located.

Requiring that the replacement cost estimate be provided annually will give consumers better information to decide how much insurance to purchase.

Recommendation 9. Require insurers to file annually with CDI for review and approval the insurers' replacement cost estimating models/tools and the inputs they are using as well as a comparison of recent loss experience to estimates based on these tools.

Consistent with comments from the Department of Insurance, the workgroup also recommends that state law be enacted to require insurers to file for review and approval their home replacement cost estimating models and the inputs they are using for those models as

well as a comparison of recent loss experience compared to the estimated based on those models.

The estimates of replacement cost are critically important to making sure that homeowners have the information they need to decide how much insurance they should have. Given the importance of the models, the Department should be allowed to review and approve them to better protect consumers.

Recommendation 10. Require CDI to undertake a data call on the insurers' subrogation claims.

There is insufficient information available to decision makers about the extent of insurer subrogation claims. The Department of Insurance should be required by law to annually undertake a data call of insurers with regard to their subrogation claims associated with wildfires.

Recommendation 11. Require CDI to undertake a data call on the insurers reinsurance cost and availability.

More information on the cost of reinsurance and its availability would be useful, so that the Department and policymakers are able to have better insight into the home reinsurance market trends in pricing and availability. The Department should be required by newly enacted state law to undertake an annual data call of insurers with regard to the limits, attachment points, breadth of coverage, and price of reinsurance they are purchasing.

Recommendation 12. Require homeowners insurers to offer a one-year notice of non-renewal, in addition to the existing 45-day notice, when there is no change in the risk presented at the insured property within the homeowners' control, or if the insured has been with the same insurer for 5 years or more.

Consistent with comments made by the Department of Insurance, the workgroup recommends that state law be enacted to require home insurers to provide a one year notice of non-renewal to homeowners before non-renewing, where there has been no change in the risk presented at the insured property within the homeowners control or where the insured has been with the insurer for at least 5 years.

Homeowners are frustrated that they are being non-renewed despite having no change at their property that would raise the risk of wildfire and despite having been a long standing customer. A one year notice will give these homeowners a chance to look for and obtain other insurance.

Recommendation 13. Mandate all homeowners insurers offer a “Difference in Conditions” policy or a Comprehensive Personal Liability/Residential Workers’ Compensation coverage.

The FAIR Plan insurance covers only fire risk. It does not cover the other sorts of liability risks that one would find in a standard home insurance policy. A number of insurers have begun offering “Differences in Conditions” coverage or “Comprehensive Personal Liability/Residential Workers Compensation” coverage to those who have purchased FAIR Plan coverage to cover the other risks that would be found in a standard home insurance policy.

Consistent with comments made by the Department of Insurance, the workgroup recommends that state law be enacted to require all home insurers to offer these additional coverages, so that FAIR Plan policy purchasers have the opportunity to augment their FAIR Plan coverage with these additional coverages.

Recommendation 14. Require that there be a valid quote for insurance coverage before any real estate offer is accepted.

The workgroup recommends that state law be amended to require the buyer of real estate in the WUI to obtain a valid quote for insurance before an offer in a real estate transaction can be accepted. A quote from the FAIR Plan would be sufficient to meet this requirement.

This recommendation provides a risk communication tool to potential home buyers. The rationale for this requirement is to make sure that the buyer understands the cost to insure the property before entering a contract to purchase the property rather than discovering too late that the cost of insurance exceeds their ability to pay and then having to breach the contract and forfeit the deposit. Although there is already an insurance requirement related to receiving a mortgage, that part of the real estate transaction occurs too late in the home-buying process to be informative to the home buyer.

Reduction of Wildfire Risk in California

Wildfire risk mitigation efforts are occurring at an unprecedented scale both by private actors and State and local governments. Nevertheless, the workgroup received abundant testimony and written comments indicating that actions may still be inadequate and lack sufficient coordination to be maximally effective and cost-effective. Moreover, there is a clear lack of coordination between different actors in their mitigation efforts.

Recommendation 15. Establish a Wildfire Vulnerability Risk and Reduction Coordinator within the Governor’s Office of Planning and Research. The Risk Reduction Coordinator would be charged with conducting research and providing regular recommendations to the

legislature, governor, CPUC, Insurance Commissioner, and local governments on optimal levels of risk mitigation spending within the state by various parties.

To address the lack of coordination the workgroup recommends creation of a Wildfire Vulnerability Risk and Reduction Coordinator within the Office of Planning and Research. The Risk Reduction Coordinator would be charged with conducting research and providing regular recommendations to the legislature, governor, CPUC, Insurance Commissioner, and local governments on optimal levels of risk mitigation spending within the state by various parties.

There is currently no single actor considering how best to mitigate risks from wildfire in California. Instead, there are multiple parties acting to control risk within their area of authority, each with unique expertise, different levels of funding, and operating with unique biases. The Risk Reduction Coordinator would be charged with developing risk based metrics for various wildfire risk reduction activities that could then be utilized to ensure that the most effective and cost-effective measures are being taken to reduce risk. The Risk Reduction Coordinator could also play a role of watchdog – alerting all parties to areas where underinvestment in cost-effective risk reduction is occurring.

Publicly vetted risk-based metrics developed by the Risk Reduction Coordinator could also be useful in determining whether Wildfire Mitigation Plans filed by utilities with the CPUC are adequate or require additional mitigation measures. These risk-based metrics should be developed in collaboration with the Department of Insurance, the insurance and reinsurance industries, and with the benefit of their collaboration and input.

Recommendation 16. Additional Risk Mitigation Recommendations

The workgroup recommends significant additional investments in prevention and mitigation efforts, whether funded by a state tax and a specific fund in the state budget for direct mitigation or small grants for home hardening. Sustained funding for such mitigation actions could be enhanced by the state engaging in a risk transfer mechanism related to some of the state costs related to wildfires and their aftermath, freeing up funds for pre-disaster mitigation.

The workgroup further recommends that the state, perhaps via the Risk Reduction Coordinator (see Recommendation 15), take action to significantly increase consistency of private property maintenance laws by developing best practices or minimum standards for fire risk and minimum allowed penalties for non-compliance.

Recommendation 17. Clarifying the responsibility of local fire-fighting capacity when local governments are approving new developments.

The workgroup recommends that the state require that any municipality or government body that approves new development, including new construction on vacant land, is able to provide

firefighting service to that property within a certain maximum time. This would increase the proportion of firefighting responsibility to the municipality that is approving developments.

Recommendation 18. Development fee for new construction in the WUI.

New development of housing and commercial structures in the WUI faces high risk of wildfire that in turn creates costs for the State. The State needs to invest substantially in reducing the risk of wildfire. New development that will put more lives and property at risk, ought to pay a development impact fee to the State of California to help fund risk reduction efforts that will benefit the new development.

The rebuilding of existing properties that were completely or partially destroyed by earlier wildfires should be exempt from paying the fee.

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Appendix IV: Meeting Agendas

Sacramento – February 25, 2019

Redding – March 13, 2019

Santa Rosa – April 3, 2019

Ventura – April 29, 2019

Sacramento – June 7, 2019

Commission on Catastrophic Wildfire Cost and Recovery MEETING AGENDA

February 25th, 2019
10:00am – 2:00pm
**Sacramento City Hall Council Chamber
915 I Street, 1st Floor
Sacramento, CA 95814**

This meeting will also be [webcast](#)

Members of the public may comment on agenda items before or during the discussion or consideration of the item, consistent with Government Code section 11125.7, subdivision (a). Members of the public may comment on matters that are not on the agenda during the “General public comment” item at the end of the agenda.

- 1. Welcome by Governor’s Office**
 - a. Commissioner introductions**

- 2. Commissioners’ introductory comments**

- 3. Governor’s Office of Planning and Research (OPR) proposal for Commission process – Evan Johnson, Executive Officer**
 - a. Staff introductions**
 - b. Meeting format**
 - c. Overview of enabling statute**
 - d. Report to Governor’s Office and Legislature**
 - e. Meeting schedule**

- 4. Selection of Commission Chair – Evan Johnson, Executive Officer**

- 5. Summary of legal requirements for Committee members – Jeannie Lee, OPR Senior Counsel**
 - a. Bagley-Keene Act**
 - b. Public Records Act**

- 6. Discussion and consideration of Scope of Work– Chair**

- 7. Background and context-setting presentations**
 - a. Climate change and wildfire risk**
 - b. Wildfire prevention**
 - c. Energy services and wildfire risk**
 - d. Wildfire insurance coverage, cost, and availability**

8. Discussion and approval of proposed issues areas for expert testimony for future meetings – Chair
9. General public comment
10. Closing comments and adjournment – Chair

For meeting materials go to <http://opr.ca.gov/wildfire/>. For updates on Commission activities, sign up for our listserv at: <http://opr.ca.gov/e-lists.html>.

Meeting date and location are subject to change. Order of business is approximate and subject to change.

The Commission meeting will be accessible via webcast, however the physical meetings will continue if the broadcast is interrupted or terminated for any reason. Public comments will not be accepted via webcast, due to technical limitations. A recording of this meeting will be archived on the Commission website.

The public is encouraged to comment on any item on the agenda. You may submit written comments prior to the meeting by email to wildfirecommission@opr.ca.gov.

The meeting location is accessible to people with disabilities. In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact Evan Johnson at evan.johnson@opr.ca.gov or at (916) 323-6842. Notification 5 days prior to the meeting will enable Staff to make reasonable arrangements to ensure accessibility to this meeting. Hearing-impaired individuals can obtain information by using the California State Relay Service at (888) 877-5378 (TDD).

Commission on Catastrophic Wildfire Cost and Recovery MEETING AGENDA

March 13, 2019
3:00pm – 7:00pm

**Shasta County Board of Supervisors Chambers
1450 Court Street
Redding, CA 96001**

This meeting will also be [webcast](#)

Members of the public may comment on agenda items before or during the discussion or consideration of the item, consistent with Government Code section 11125.7, subdivision (a). Members of the public may comment on matters that are not on the agenda during either of the “general public comment” items.

- 1. Call to order**
- 2. Roll call**
- 3. Agenda changes**
- 4. Initial general public comment (30 minutes)**
- 5. Consent calendar**
 - a. Approval of minutes of the February 25 meeting**
 - b. Approval of Scope of Work, as modified based on discussion from the February 25 meeting**
- 6. Chair’s report**
- 7. Executive officer’s report**
 - a. Executive officer’s report**
 - b. Written public comments received**
- 8. Presentation of expert testimony**
 - a. Existing wildfire liability legal regime**
 - b. Utility insurance**
 - c. Community needs around wildfire damages**
- 9. General public comment (continued)**
- 10. Closing comments and adjournment**

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Commission on Catastrophic Wildfire Cost and Recovery

MEETING AGENDA

April 3, 2019
10:30am – 2:00pm

Sonoma County Board of Supervisors Meeting Chambers

575 Administration Drive
Room 102 A
Santa Rosa, CA 95403

This meeting will also be [webcast](#)

Members of the public may comment on agenda items before or during the discussion or consideration of the item, consistent with Government Code section 11125.7, subdivision (a). Members of the public may comment on matters that are not on the agenda during either of the “general public comment” items.

1. **Call to order**
2. **Roll call**
3. **Agenda changes**
4. **Initial general public comment (30 minutes)**
5. **Consent calendar**
 - a. **Approval of minutes of the March 13th, 2019 meeting**
6. **Chair’s report**
7. **Executive officer’s report**
 - a. **Executive officer’s report**
 - b. **Written public comments received**
8. **Presentation of expert testimony**
 - a. **Homeowners insurance market**
 - i. *Joel Laucher, Chief Deputy Commissioner, California Department of Insurance*
 - ii. *Rex Frazier, President, Personal Insurance Federation of California*
 - iii. *Amy Bach, Executive Director, United Policyholders*

- iv Tom Welsh, *General Counsel, California Earthquake Authority*
- v John Rollins, *Actuary, Milliman, and former Chief Risk Officer for Citizens Property Insurance Corp*
- b. Utility risk financing options**
 - i Carolyn Kousky, *Executive Director, Wharton Risk Management and Decision Processes Center, University of Pennsylvania*
 - ii David Heller, *Vice President Enterprise Risk Management and General Auditor, Southern California Edison*
 - iii Mark Toney, *Executive Director, The Utility Reform Network*
 - iv John Fiske, *Attorney At Law, Baron & Budd*
 - v Steve Fleishman, *Managing Director, Wolfe Research*
- c. Community needs around wildfire damages**
 - i James Gore, *Sonoma County Supervisor, District 4*
 - ii Margaret S. Van Vliet, *Executive Director, Sonoma County Community Development Commission*
 - iii Pete Parkinson, *Fire Survivor, Retired Professional Planner & Past President of the California Chapter of the American Planning Association*

9. General public comment (continued)

10. Closing comments and adjournment

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Commission on Catastrophic Wildfire Cost and Recovery

MEETING AGENDA

April 29, 2019

9:00am

**Ventura City Hall
Ventura City Council Chambers
501 Poli St., 2nd Floor
Ventura, CA 93001**

This meeting will also be [webcast](#)

Members of the public may comment on agenda items before or during the discussion or consideration of the item, consistent with Government Code section 11125.7, subdivision (a). Members of the public may comment on matters that are not on the agenda during either of the “general public comment” items.

- 1. Call to order**
- 2. Roll call**
- 3. Agenda changes**
- 4. Initial general public comment (30 minutes)**
- 5. Consent calendar**
 - a. Approval of minutes of the April 3, 2019 meeting**
 - b. Establishment and assignment of workgroups**
 - i Utility wildfire liability, and cost recovery standards—Commissioners Kahn and Nava**
 - ii Wildfire fund and/or other funding mechanism(s)—Chair Peterman and Commissioner Wara**
 - iii Homeowners’ insurance availability and affordability, and household and community wildfire mitigation and protection—Commissioners Jones and Wara**
- 6. Chair’s report**
- 7. Executive officer’s report**
 - a. Executive officer’s report**
 - b. Written public comments received**

8. Presentation of expert testimony

- a. Discussion on Governor's Office Strike Force report "Wildfires and Climate Change: California's Energy Future"
- b. Expert testimony on issues before the Commission, including:
 - i Utility wildfire liability, and cost recovery standards
 - ii Wildfire fund and/or other funding mechanism(s)
 - iii Homeowners' insurance availability and affordability, and household and community wildfire mitigation and protection

Panelists:

Ignacio Hernandez – *The Utility Reform Network (TURN)*

Chris Lyons – *San Diego Gas & Electric*

Robert LeMoine – *Southern California Edison*

Cara Martinson – *California State Association of Counties*

Rex Frazier – *Personal Insurance Federation of California*

Jim Johnson – *Jones Day*

Laura Fernandez – *Counsel to California Municipal Utilities Association and associate at Braun, Blasing, Smith & Wynne*

Nora Sheriff – *California Large Energy Consumers Association*

9. General public comment (continued)

10. Closing comments and adjournment

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Commission on Catastrophic Wildfire Cost and Recovery

MEETING AGENDA

June 7, 2019

10:00am

Sacramento City Hall Council Chambers
915 I Street, 1st Floor
Sacramento, CA 95814

This meeting will also be [webcast](#)

Members of the public may comment on agenda items before or during the discussion or consideration of the item, consistent with Government Code section 11125.7, subdivision (a). Members of the public may comment on matters that are not on the agenda during either of the “general public comment” items.

- 1. Call to order**
- 2. Roll call**
- 3. Agenda changes**
- 4. Consent calendar**
 - a. Approval of minutes of the April 29, 2019 meeting minutes
- 5. Executive officer’s report**
 - a. Executive officer’s report
 - b. Written public comments received
- 6. Chair’s report**
- 7. Discussion items**
 - a. The commission will discuss draft reports from the three subcommittees (workgroups) and the draft executive summary compiled by commission staff, and receive public comment. After discussion, the commission will consider approving the executive summary, with the subcommittee reports as appendices, as its final report to the legislature and the governor as required by PRC §4205 (c)(1).
- 8. General public comment (continued)**
- 9. Closing comments and adjournment**

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