

Commission on Catastrophic Wildfire Cost and Recovery

February 25, 2019

Meeting Minutes

10:00am-2:00pm

Sacramento City Hall Council Chamber

915 I Street, 1st Floor

Sacramento, CA 95814

Item 1: Welcome by the Governor's Office

Evan Johnson: This is the inaugural meeting of the Commission on Catastrophic Wildfire Cost and Recovery. Kate Gordon, the Director of the Governor's Office of Planning and Research (OPR), will provide opening remarks and introduce the Commissioners.

Kate Gordon: Thank you Evan and thank you all for being here, particularly the Commissioners who are taking time out of very busy and valuable schedules to do this and to serve the public. We would like to express our gratitude from the State. I am Kate Gordon, the Director of OPR and I am also the Governor's Senior Advisor on Climate Change. I am here to make a couple of introductory remarks from the Governor's Office about this important Commission.

First, I wanted to just set the scene and talk about what this Commission is and is not tasked with doing. We all know that fire has long been an important part of California's history, our landscape, our ecosystem. Yesterday's wildfires are not today's wildfires or tomorrow's wildfires. Land use, forestry management, and most dramatically climate change and climate impacts have changed the fire landscape and California has increased the risks to all Californians. We saw this of course with the devastating Tubbs Fire in Sonoma and Napa, the Woolsey Fire in Ventura, the Carr Fire in Shasta, the Camp Fire that destroyed the entire town of Paradise, and many other smaller fires. We have seen increased risk of fire to all Californians all across the state. In 2017 and 2018 alone, 151 lives were lost along with untold damages, both emotional and economic.

At the same time, just as fires are not what they were yesterday, the utility structures and insurance structures are not what they were yesterday. All of these structures and institutions are changing with new technology and a new understanding of the impact of climate change on the state and on those intuitions. California must recognize and adapt to these changing conditions.

This Commission provides one key piece to the State's response to these issues. It fits into a much larger picture of state and local action. I will just say a couple of pieces about that and you will be hearing more from some of our presenters today.

Last week, CAL FIRE (California Department of Forestry and Fire Protection) gave a report to the Governor laying out short-term priority actions in vulnerable communities that must be taken before the beginning of the 2019 fire cycle. That is a very short term look at key actions in vulnerable communities. The PUC (California Public Utilities Commission) is continually reviewing wildfire mitigation plans submitted by investor-owned utilities along with changes of our utility system, the grid, and our energy system causing risk of wildfire. The Governor's Office has a 60-day strike team, of which I am a

part, laying out over the next 60 days, a road map of what the key questions are for us to look at, what the key issues are for the State, and how we will look at those.

This Commission provides a key piece of the puzzle particularly in the context of the ever-increasing costs and risk to the state of catastrophic wildfire. Long-term solutions to managing those costs and long-term risks will require expertise, deliberation, and public process. That is why we have gathered this group here to shepherd that conversation, produce a set of recommendations, focusing on long-term costs and risks to the state from catastrophic wildfire across the state in the context of the other processes that are happening throughout the State of California and in the local communities. So, let me stop there with context and briefly introduce our Commissioners:

- Dave Jones who is now Director of the Climate Risk Initiative at UC Berkeley Center for Law, Energy & the Environment. You probably remember Mr. Jones from his two terms as the California Insurance Commissioner, where he had to pay attention to a lot of these issues from the insurance side, which is one of the key issues we will be looking at on this Commission.
- Michael Kahn who has been a lawyer in San Francisco for 40 years and was very relevant during the electricity crisis of 2000-2001 and was the Chair of Cal ISO (California Independent System Operator) and Chair of the California Electricity Oversight Board.
- Pedro Nava who is an attorney with a long record of civil and criminal law expertise, former Assembly member representing Santa Barbara from 2000-2010 and Chair of the Finance and Banking Committee, and now serving as the Chair of the Little Hoover Commission, spending a lot of time looking at how these government processes work and work together and how they can be more efficient.
- Carla Peterman is an experienced leader in utility and energy policy space, which of course is a key piece of this conversation. She was a California Public Utilities Commissioner between 2013 and 2019 and California Energy Commission (CEC) Commissioner.
- Michael Wara is the Director of Climate and Energy Policy at the Woods Institute at Stanford University, as well as a Senior Research` Scholar at the Woods Institute, and J.D. from Stanford and Ph.D. from Santa Cruz. He is a fifth generation San Franciscan, and he has written about climate change in the state.

Item 2: Commissioners' Introductory Comments

Commissioner Dave Jones: As a former San Francisco City Councilor, it is nice to be back in city chambers that are nicer and more modern. It is a pleasure and a privilege to work for Governor Newsom, getting our hands around one of the most challenging problems facing California. I was formerly California Insurance Commissioner, regulating the largest insurance industry and businesses in the wake of recovery after catastrophes. In 2013, we saw the Valley and Butte Fire with mudslides taking many more lives. In 2014, the Santa Barbara Fire. In 2018, the Camp Fire, the deadliest and most destructive in California's history.

Sadly, the climate experts tell us that climate change is real, manmade, and contributing to California's catastrophic wildfires. We are looking at a future where, as our prior Governor (Brown) described it, the "new normal" is more of these fires with greater severity in the future.

Insurers have a lot to offer in terms of helping, but they are also rational economic actors. We have seen increasing prices and decreasing renewables and availability of insurance in the wildland-urban interface, where we have about 3.6 million homes. About 1.6 million have been rated high or very high

risk by the insurance industry. The Legislature and the Governor created an insurer of last resort 50 years ago called the Fire Plan, charged with writing fire insurance anywhere regardless of risk. They have about 35,000 policies in the wildland-urban interface. They are truly the canary in the coal mine. Those numbers are expected to go up a couple of thousand dollars every year.

There are also lessons to be learned in other parts of the country. Flood risk and growing risk along our coast and waterways created the National Flood Response Program, which is not actuarially priced and requires huge subsidies. We have looked at examples across the country of what works and what does not work. I am excited to work with each of the Commissioners, Kate, and Evan at OPR. I am eager to get your input as well and I am excited that so many of you have chosen to join us.

Commissioner Michael Kahn: The tragedies of 2017 and 2018 have revealed the difficulty of utilities. We have been here before and have experienced life-changing blackouts. In the past, we have figured out our problems and become a more prosperous state and I think we can do so again. We are here to provide a public forum. We are grateful to the Governor, the Legislature, the Public Utilities Commission, and the court. I welcome all input and ideas. I am optimistic for the recommendations to the Governor and the Legislature for California to provide Californians maximum safety and security for the state.

Commissioner Pedro Nava: I like to call myself a recovering legislator. I have been made better by the experience. In public service, people bring you their hopes and dreams, as an elected it is up to me to see what I can do for them. I was appointed by Speaker Rendon and I am honored to be part of a distinguished Commission.

My focus is going to be on data, science, and past experience. We need examples of what people have worked on. We need data and science that can be defended and ensure that the decisions that we make are practical and reasonable.

Commissioner Carla Peterman: I am honored to be working on this Commission. I live in the Bay Area with my husband and toddler son. When the fires happened, I personally reflected on the problem and I thought about what my professional experience has helped me understand. Kate laid out well the issues.

We are here because we think we can do better. This board will bring those recommendations forward. In particular, I would like to bring forward the perspective of the utility. My priority is a healthy community – a safe, reliable, affordable community.

I look forward to your expert testimony and welcome your comments. We won't come up with good recommendations without them.

Commissioner Michael Wara: I am confident that California can craft new and better solutions. I share a deep concern that many have expressed, the need to ensure affordable and accessible insurance and utilities. California is already an expensive place to live. Not everyone can afford electricity and homeowners insurance.

Now the climate adaptation problem is essential. I look forward to input from audience, stakeholders, and interested parties. We need your information, data, science, and ideas to develop a better system.

We need to keep Californians safer than they have been and incorporate climate adaptation models for other communities as they come to grips.

Item 3: Governor's Office of Planning and Research (OPR) Proposal for Commission Process

Evan Johnson: I would first like to make some staff introductions.

- Edith Hannigan, California Board of Forestry
- Jeannie Lee, Senior Counsel at OPR.
- Taryn Akiyama and Annie Carroll at OPR who will be note takers for these meetings.

Now, I will overview the meeting format and logistics:

- The Commission consists of five members. Three have been appointed by the Governor, one by the Senate Committee on Rules, and one by the Speaker of the Assembly. The Chair is selected by the Commissioners. No less than three Commissioners may be present for a quorum. OPR is the executive office for this Commission. All of these members may be replaced.
- The Commission has a deadline of July 1st, 2019.
- We intend to hold the next meeting in Redding next month. Beyond that, we will have three meetings around the state that are still being finalized.

Item 4: Selection of Commission Chair

Evan Johnson: Next, we will discuss the selection of the Commission Chair. The Commission is required to elect a Chair, which will be selected by the Commissioners.

Commissioner Dave Jones: Since this issue is central to the issue of the utility infrastructure, I vote for Carla Peterman. She has a depth of knowledge and experience of utilities and is well established in the field.

Commissioner Michael Kahn: I second this nomination.

Commissioner Carla Peterman: Thank you to Commissioners Jones and Kahn for the nomination. I would be honored to serve as your Chair. I think it is important to work with stakeholders, which I have learned from my previous positions. I believe it is not only crucial to provide the Commission an opportunity to engage the public, but for the public to have an opportunity to engage the Commission.

ACTION: Voting to approve Carla Peterman as Commission Chair.

Motion: Commissioner Dave Jones

Second: Commissioner Michael Kahn

Commissioner Dave Jones: Aye

Commissioner Michael Kahn: Aye

Commissioner Pedro Nava: Aye

Commissioner Carla Peterman: Aye

Commissioner Michael Wara: Aye

Abstain: None

Evan Johnson: At this time, I would like to take a brief break to acclimate the Chair to the structure of the meeting.

Item 5: Summary of Legal Requirements for Committee Members

Commissioner Carla Peterman: Next, we are going to hear from Jeannie Lee, OPR Senior Counsel, about the Bagley-Keene Act and Public Records Act requirements.

Jeannie Lee: I want to go over two very important statutes that both relate to your work on this Commission. You have been provided copies of the Bagley-Keene Open Meeting Act and the California Public Records Act. I am going to give some high-level talking points, but please review those documents and ask questions if necessary.

First, I will go over Bagley-Keene. Bagley-Keene guarantees public participation at all meetings of a state body, including the meetings of this Commission. A meeting occurs when there is a majority of the Commission either in a physical location or via telephone or a combination of both to hear, discuss, or deliberate on any item that is within the Commission's subject matter. Here we have a Commission of five members, so a majority of the Commission is three members.

The Act expressly prohibits serial meetings to discuss an item within the Commission's subject matter. A serial meeting is a series of communications, which involves less than a quorum or a majority of the Commission but taken as a whole involves the majority of the Commission.

Also, as a reminder, intermediaries of the Commission may not participate in serial meetings. So an example of a serial meeting, a very common one, would be where Person A talks to Person B about an item on the agenda, and then Person B communicates what was just discussed to Person C. Those are prohibited serial meetings. Another reminder is you should not be texting or emailing during the Commission meeting to each other about items on the agenda and items that will be discussed.

All meetings are open to the public. The agenda will be posted 10 days before the meeting. There will be a brief description of approximately no more than 20 words of each item that will be transacted or discussed. If something is not on the agenda, it will not be discussed or transacted at that meeting, but it may be taken up at a future meeting. The public may speak at meetings on all agenda items including the general public comment period.

There may be a time in the future when a Commissioner needs to participate by telephone. If that is the case, the Commissioner's location must be publicly noticed on the 10-day agenda and your offsite location must be publicly accessible and the public at that particular location must have the opportunity to address the whole Commission.

Evan mentioned there may be work groups. As a reminder, two-member work groups are not covered by the Bagley-Keene Open Meeting Act. If you have more questions, I strongly encourage all of you to review Bagley-Keene itself and we have also provided you with a copy of the Attorney General's Handy Guide to Bagley-Keene Open Meeting Act. All of these have been posted on OPR's website.

Briefly I will talk about the California Public Records Act (PRA). The public has a right to inspect any public records within the possession of OPR, including the records of this Commission unless these

records are exempt from public disclosure, such as an attorney-client communication. Bagley-Keene makes it clear as well that the Commission's records are subject to the PRA.

I do want to make note, however, that Bagley-Keene specifies that the Commission cannot invoke the public interest balancing test in justifying withholding of a public record. So under that balancing test, an agency may withhold a record if based on the facts of a situation, the public interest served by withholding the record clearly outweighs the public interest in disclosing the record. But again, the public interest balance request does not apply to records of this Commission.

Finally, public records include any records kept by OPR that relate to the conduct of the people's business, regardless of the records' form including personal emails and text messages. Please consult the actual copy of the PRA. It has all been posted on the website. If you have any other questions, please feel free to ask and get in touch with me or Evan.

Chair Carla Peterman: Commissioners, any questions? Do we have any public comments on this item?

No Public Comments

Item 6: Discussion and Consideration of Scope of Work

Chair Carla Peterman: Let's talk about the Scope of Work. This will be available on the Wildfire Commission website, which you can find on OPR's website. As a reminder, there is a listserv you can join so you can stay up to date on any material coming out of the Commission and the Commission's schedule and meetings.

Keeping in line with our short timeline, we have a short Scope of Work. This Scope of Work is very consistent with the Legislative direction of SB 901. If you have any questions or proposed changes to the Scope of Work, now is the time to raise them.

Commissioner Michael Wara: I think that it is important that whatever we recommend be sustainable in the long run for the State, so it is important to think about how this risk will evolve over time. Climate change is not going to stop. If we believe that wildfire intensity is in part driven by physical changes in the environment, then we need to think about how that system will evolve in time and create a structure for socializing these costs that is sustainable over time.

Chair Carla Peterman: I will note the last line of the Scope of Work talks about the long-term nature of this issue ("the long-term issue of California's increased fire risk due to climate change risk"). Does that satisfy your concern that it will be adequately addressed by that language?

Commissioner Michael Wara: I was concerned by the first line, "Assessment of the current status of utility liability for damages caused by wildfires in California in light of climate change." I think it is important that we think about the future scope of liability as it is likely to evolve. I realize this is a challenging thing to do and we can't do it perfectly, especially given the time we have, but I hope that we can come up with ideas and options that are sustainable in the long-run for the system.

Chair Carla Peterman: I would support an amendment to that language read the “assessment of the current *and future* status of utility liability...” Any concerns with that addition?

Commissioner Michael Kahn: In the charge by the Legislature, SB 901 Section 7 (c)(1) specifically says that we are supposed to issue a report containing the assessment of a couple of things and making recommendations to changes in law. We should be careful to issue a report that responds directly to the Legislature and the Governor’s charge and that is what we need to do. I don’t have a problem with the wording of it, but at the end of the day, we need to be faithful to the Legislature and the Governor.

Chair Carla Peterman: That is a good point. When there is ambiguity I like to delete language so we could just take out the word “current”?

Commissioner Michael Kahn: In this particular case, it is perfectly clear the unclarity.

Commissioner Dave Jones: I am fine with the change. I want to make another point though: I am mindful of the changes from the Governor in the statute. If you look at PRC 4205 (b), it asks us to make recommendations on the following matters. I think it is captured in the Scope. It is clear we are supposed to provide options on a fund to assist with the payment of cost and options around some mechanism to socialize the costs.

We also need to include some kind of recommendations on the merits of those things. The reason I raise this is because climate change is real, it is happening, and is only going to get worse. We have to think about the implications associated with masking various signals markets in terms of that real risk. So there is a balance to be struck between trying to equitably address costs associated with catastrophic wildfires and socialize them, but also give some attention and thought to whether in so doing we are masking the signals necessary to be sent by markets so that people understand these risks are real and they have real consequences. In addition to options, we need to give some thought to whether those options are actually reasonable and make sense in the context that we are in.

Chair Carla Peterman: Looking at the outline of statutory authority, I don’t see the word “current.” I recommend we strike “current” from the Scope so that it can be consistent with the legislation and the general interest that we have something sustainable going forward. Let now turn to the public for your comments on the Scope of Work.

PUBLIC COMMENT 1: Caroline Choi, Senior Vice President of Corporate Affairs, Southern California Edison (SCE).

This work that the Commission will undertake is extremely important and we really value the commitment you have shown to addressing the climate adaptation challenge, particularly the wildfire risk. Congratulations to Commissioner Peterman on your chairmanship. Some of you have already noted the new abnormal of year-round and increasingly catastrophic wildfires.

SCE has already begun enhancing our electrical system to mitigate wildfire risk and to adapt to this changing climate. We also continue to implement the State’s environmental policies in order to meet our company’s mission of safely delivering clean, affordable, and reliable energy to our customers, a goal that we share with the State of California. Even before the passage of SB 901, we were taking

aggressive action to harden the infrastructure, improve situational awareness, and enhance vegetation management, some of which I know you will be taking up and others I see you will be leaving to others and other statewide initiatives.

Critical to those ongoing mitigation efforts and the financial health of the utilities is the ability to access low-cost debt and equity capital for infrastructure investment and utility operations. That access is significantly threatened and will have a direct impact on utility customers. It is threatened by the State's increasingly negative risk profile and due to several factors including the recent catastrophic wildfires, the application of inverse condemnation with a strict liability standard for electric utilities, and the PUC's prolonged and often unclear recovery process after a wildfire. These decisions strike at the heart of the State's long-standing framework for investor-owned utilities and they pose a real challenge for our shared future. We believe this was made clear in the recent downgrades Edison received by the rating agencies. So as we confront climate change, wildfire, and the financial health of utilities through the work of this Commission and other initiatives, we would seek to inform the decisions that will follow in the Legislature and at the state agencies and this Commission will make important recommendations and there is an urgent need for them.

A couple of policy areas that we would like you to consider: assessing the current liability paradigm in light of a changing climate, promoting the broad socialization of cost and risk financing to minimize customer impacts, and the ability for utilities to securitize losses. A catastrophic wildfire fund we believe should be established to achieve broad risk and cost sharing by covering damage resulting from wildfires if they are caused by electric utility equipment. We believe it would be helpful to restore market confidence in the regulatory compact by promoting a predictable, timely, durable framework for cost recovery at the PUC. We believe tying prudence for cost recovery purposes to substantial compliance through Commission approved wildfire mitigation plans is one way of doing that. We would ask you to encourage timely PUC decision making. With the increased risk of wildfire and climate change effects, we believe the PUC should move faster to consider utility investment proposals and applications that would reduce the risk of wildfire or lessen the impact of wildfire cost to customers. We look forward to sharing our perspective with you in greater details in the workshops to come.

PUBLIC COMMENT 2: Patrick Welch, Director for Energy, California Municipal Utilities Association (CMUA).

Thank you for your service. Your leadership is critical to seek out comprehensive solutions to the growing wildfire threat. A number of you have acknowledged that this Commission is one part of the solutions and we agree that there is a broad array of solutions needed. We have supported legislation activities at the statewide level to achieve that.

I am speaking to introduce the California Municipal Utilities Association and to identify that there are varying models of energy delivery in California. Of our members, there are about 40 publicly owned utilities (POUs) in the State that provide electricity to about one in four Californians. We have a different model; we are community-owned, not for profit entities. We ask that you take that into account in the Scope of Work and your recommendations when writing the report. CMUA would like to be a resource for you to talk about the POU structures, operations, and governance models that operate under. We look forward to working with you in coming months.

Chair Carla Peterman: It is good to see the involvement of our POU's.

PUBLIC COMMENT 3: Elizabeth Kelly, Briscoe Ivestor & Bazel.

I want to make one point of clarification on the Scope of Work under #3. It says its “recommendations on a fund a mechanism.” It can be a fund or a mechanism.

Chair Carla Peterman: It is just supposed to say “a fund a mechanism.” I will ask Executive Officer Johnson to make any updates and repost to the website.

Commissioner Michael Kahn: I would like to respond to CMUA and Edison and say to them and others that, from my perspective, you have heard to Commissioners say that we are going to rely on data and science. We are going to try to get a lot of facts. We have faith in empirical analysis. I am hopeful that as we go through these hearings and we get the kind of information inputted to us, that members of the public, especially the utilities that have significant resources that we don’t have and that have views on the data, especially if their views are contrary to the data that was presented to us, that they bring them forth.

I would be very disappointed if we ended up with recommendations and at the conclusion of our recommendations, we received criticism because we didn’t consider other data or other points of view. In my experience in the last crisis, we had a lot of engagement from utilities and other stakeholders and members of the public, and it was very valuable to us in enabling us to assess the various data that we get and scientific conclusions. We are going to get facts that turn out to be contested, and in order for us to intermediate what is true and not true, you are in a unique position to evaluate this information. Again, I will be disappointed if you hold your tongue until we are done and tell us that we made wrong decisions based on data you thought was wrong, but you didn’t tell us.

Item 7: Background and context-setting presentations

Chair Carla Peterman: Now we will turn to the substantive policy portion of our meeting. Just to give a preview, we will have similar sections at different meetings across the state where collectively we will be able to delve into the issues and the facts that will be important.

We have four presentations today from various representatives at state agencies that are working on different aspects of this issue. After their 15 minute presentations, we will have an approximately 15 discussion between speakers and the Commissioners and we will also have time for public comment.

1. Climate change and wildfire risk
2. Wildfire prevention
3. Energy services and wildfire risk
4. Wildfire insurance coverage, cost, and availability

PRESENTATION 1: Climate Change and Wildfire Risk – LeRoy Westering, Director of the Center for Climate Communication, UC Merced, presenting “Changing California Wildfire.”

Commissioner Dave Jones: I am wondering if you have any time series or maps that show development patterns in the areas that are of greatest risk to fire over the last three to four decades. Part of the challenge that we are grappling with is not only what you described, which is that the nature of fire risk is changing and getting worse driven in no small part by climate change, but I suspect as well that the impacts of that changing risk are being felt more acutely because we have more people living in places

and have more businesses in places that historically were not located in. So I was wondering if you have any time series that you could share with us or if you are aware of any that would help us graphically display what has been going on in terms of development patterns.

LeRoy Westering: That is one of the more difficult things we have grappled with in these assessments. In the most recent assessment, USGS (United States Geological Survey) produced maps of the state based on snap shots at different points of development patterns and models to fill in the progression between them. Then we use those projections along with population projections from the state through 2016. So that was incorporated into the current assessment.

What we haven't done a good job of is getting the fire integrated at the right spatial scale with those development projections to really understand how the risk in the wildland-urban interface is changing. That is part of what CEC EPIC's proposals are focused on right now.

Commissioner Dave Jones: So maybe through the Chair and the staff I could ask if the Fourth California Climate Change Assessment could be made available to the Commissioners and the public so that we could see that information.

Chair Carla Peterman: Is there any positive feedback between wildfires leading to more wildfires?

LeRoy Westering: It really depends in part on what happens immediately after a fire. If we have a really high severity fire and it clears out a lot of forest area, for example, in the Sierra Nevada, if you have high severity burn patterns, you have less seed stock available to recover with. It is especially a key problem if it is very dry after the fire season, so you don't have enough moisture for sprouting new trees. Shrub growth grows faster and thicker and it is fire loving, so you get a new fire dynamic that keeps the old vegetation type from coming back in and it burns at a higher frequency.

Chair Carla Peterman: As we go forward, I am trying to think about whether there are recommendations that are time dependent on previous wildfires.

PRESENTATION 2: Wildfire Prevention – Helge Eng, Deputy Director of Resource Management, CAL FIRE, presenting “Wildfire Prevention and Risk Mitigation.”

Commissioner Dave Jones: I did the math and you have been appropriated \$1 billion over 5 years, the Governor said, “do 500,000 acres”. The US Agriculture Department or Forestry Department said, “do 500,000 acres.” You said it takes about \$500 million to do 500,000 acres. So it will be a billion to do the million acres that the Governor and the federal government have both asked you to do. How many total acres need to be treated?

Helge Eng: Our estimates vary depending on your definition, but I think a safe estimate is somewhere between 50 to 20 million acres. The 500,000 acres is critically dependent on the private sector and their thinning and forest management. Timber harvesting is the end stage of a process of growing a crop of trees, which includes planting and thinning. So the majority of the 500,000 acres in fact from timber harvesting. The forest carbon plan set a goal for the State of 60,000 acres of state-sponsored fuel reduction, including prescribed fire, but even that is \$1,000 an acre or \$60 million a year, so it is going to be expensive.

Commissioner Dave Jones: You also had a dramatic slide of sawmill capacity decrease. Was that the number of sawmills or the production at sawmills?

Helge Eng: That is the actual number of sawmills.

Commissioner Dave Jones: So we can clear all of this, but we also have this problem where we don't have enough sawmills to process what we are clearing?

Helge Eng: Correct. One our of recommendations to Governor Newsome was sawmill capacity to attract new investment in both bioenergy facilities, which can take a lot of the forest waste coming out of these projects, as well as the sawmills, which can take a lot of the thinning. Export has helped somewhat, but it is very cyclical and depends a lot on the economy and places like China. So it is not a guaranteed wood product flow.

Commissioner Dave Jones: So you some need regulatory direction to put more emphasis on biomass as a source of energy and/or some subsidy mechanism to subsidize the markets for these products in order to create enough demand for more sawmills to come into the market?

Helge Eng: The demand is actually there; California is by far greatest consumer of wood products in the nation. Given the realities of the market place, a lot of that is imports from Canada and elsewhere. We have the opportunity to increase capacity quite substantially. The limit to investment is raw material supply. For a group of investors to come into California, they would like a 10 to 20 year agreement for wood supply to incur that investment. We are working with the forest service and federal agencies to put some of that together.

Commissioner Pedro Nava: In looking at our statutory authority, under Public Resources Code 4205 and Section (c)(1) "making recommendations for changes to law would ensure equitable distribution of costs among affected parties." One of the slides you showed that made the greatest impression on me was on disadvantaged communities. As we go forward and think about mechanisms to fund and our recommendations, we must collect information with respect to disadvantaged communities – where they are located, how fire impacts affect them in differently than other parts of the state. Without incorporating that nuance, if we are not careful, we develop a recommendation that brings disproportionate economic impact on an already disadvantaged community. If you choose to say you live a certain place and the consequences are of you own making, those decisions like people in Paradise, that might have been the only affordable place for people to live. In disadvantaged communities, you have a number of factors that draw and keep people there that should be blended into whatever we do with our recommendations.

Helge Eng: Thank you for bringing that up. That was a very clear direction from us to Governor Newsom. He wanted us to focus on vulnerable communities for fuel reduction projects coming up this fire season. That is exactly what we are doing, focusing on these areas where these communities exist.

Commissioner Michael Wara: A lot of methods that you talked about for wildfire prevention seem well suited for operating in wildland areas and seem less suited for operating in places with lots of houses and many property owners and small parcels. I am curious the degree to which CAL FIRE could provide some information about the scope of the challenge in places where from an insurance from there is a lot of value at risk in terms of homes and communities? Certainly for a fire like the Camp Fire, as it gets

going and there is a wildland community interaction, does it matter? Should we be thinking of defensible space issues differently and investing in that differently? Is there some way that CAL FIRE interacts with local governments and local fire departments to supercharge that effort?

Helge Eng: Even with limited funds, clearly the demand outweighs the supply. We have to make hard choices. We focus most of our efforts on the wildland-urban interface, creating fuel breaks, home hardening, ingress and egress. That is where most of the expensive homes are and where most of our protection efforts go. At the same time, it is not black and white. Some of these methods that we talked about are more suitable in wildland areas, but fires do not occur either in subdivisions or the backwoods, they often originate in distant areas and then gain steam and move into subdivisions. We are very active in our direct protection of the wildland-urban interface. We work with local governments and other agencies including the federal government. We are taking an all tools available approach.

Commissioner Pedro Nava: I am assuming that staff will get information about projects that are approved in the wildland-urban interface so we can make sense about how you are charged with clearing 500,000 acres and the Feds are charged with 500,000 acres.

But what happens if we then have jurisdictions that approve more development in the wildland-urban interface? That really makes no sense to me. Part of what we are going to have to talk about is about land use planning. I heard Commissioner Jones make some remarks on NPR about the wildland-urban interface and about jurisdictions who make decisions about housing development and the consequences, or lack of consequences, to that governing body for making that decision. We have got to be able to ensure that if we want you to clear out some forest area, we are something about the other end of it. I do think there is a part of what we ask first responders to do that ought to be ameliorated by asking them not to address the consequences of bad planning. They are the ones who have to put their lives on the line to do that.

Helge Eng: I couldn't agree more. CAL FIRE is very aggressively implementing projects in wildland-urban interface. We would be happy to provide you with the data we have on that. We have good data on developments that are approved. The challenge is going forward – balancing where do you put new subdivisions, and how do balance egress/ingress and safety features with the natural risk? Where to put 46 million people where it is safe to live?

Chair Carla Peterman: Do you have a sense of what percentage of homes in the wildland-urban interface do not have sufficient defensible space?

Helge Eng: I don't have that on the top of my head, but we would be happy to provide that data. We do go out and provide defensible space inspections.

Chair Carla Peterman: You also mentioned you just submitted the 45-day report to the Governor, which encompasses all these issues. Is there any opportunity for public process?

Helge Eng: It is at the Governor's Office now, but I am confident it will become a public document within days. There should be a process for public comment, certainly for this Commission.

Chair Carla Peterman: This Commission is tasked with thinking about allocating cost, but it is much easier to taking about allocating cost when the overall costs are lower, which is why we are interested in the prevention work that you are doing, even though our mandate is more of a complement that.

Commissioner Michael Wara: Is it your sense that practices across the state are relatively uniform with respect to local fire departments and enforceable defensible space? Is there variation that reflects the historic presence of fire in communities? Santa Barbara may be more used to having big wildfires than other places in northern California. Do you have any comment on that?

Helge Eng: The basic principles of fire prevention in the wildland-urban interface is fairly well known and uniformly applied. Given that and the variety of ecosystems in California, you mentioned southern California and northern California. Yes, there is a certain amount of variation and that is probably necessary. Fire tornadoes and chaparral are often shorter and require a different approach, the population density, the infrastructure, roads, ingress/egress. They are handled differently in different jurisdictions with a common, basic fire prevention methodology.

PRESENTATION 3: Energy Services and Wildfire Risk – Simon Baker, Deputy Director, Energy Division, PUC and James Ralph, Chief of Policy and Legal Affairs, PUC presenting “Overview of California Energy Services and Wildfire Risk.”

Commissioner Michael Kahn: Where were you in 2000 when we were trying to figure all this out?

Simon Baker: I don't even think that I was in graduate school yet.

Commissioner Pedro Nava: For either one of you, you heard from the representative at CAL FIRE (Helge Eng) that one of the greatest challenges they face is public education with respect to wildfire forest management and practices. Is there an element of the wildfire mitigation plan that incorporates public education to your ratepayers about forest management issues?

James Ralph: I would be happy to follow up on the details of whether or not it requires outreach on forest management issues, but outreach to communities about reenergization events is certainly part of wildfire mitigation plans.

Commissioner Dave Jones: The last speaker (Helge Eng) alluded to what is commonly referred to as a stress test. Is there a bullet on that on the slide? Is it one of the other PUC actions that you described on the second to last slide? Is it a financial stress test or safety stress test or what is being stressed?

James Ralph: Everyone is being stressed. It says, “Approved OIR RE: Cost Recovery Methodology in January 2019.” SB 901 includes a provision regarding cost allocation of wildfires costs from 2017. There is some language in SB 901 that the PUC is supposed to interpret and implement. We are currently doing that process in the rulemaking. We have stated in the public documents that we are going to adopt a methodology, which implements that provision and will provide some level of clarity and certainty to the market and others who are watching this closely. We are moving forward with that proceeding right now. We recently held the first hearing and expect to advance that proceeding as quickly as possible.

Commissioner Dave Jones: So that methodology then applies to 2017 and 2019 going forward, but not 2018?

James Ralph: The language of SB 901 PU Code Section 54.2 is attached to a section addressing the 2017 fires. With further guidance from the Legislature, this mechanism could be applied to other years, but the Statute applies only to 2017.

Commissioner Dave Jones: Are you analyzing the impacts of that methodology with regard to the investor-owned utilities' ability to access capital on the capital markets? Is there any explicit consideration or is that just implicit during the entire exercise?

James Ralph: I don't believe that the statute explicitly says that, but I think it is implied. I don't have the statutory language in front of me right now, but basically I think that that could be implied into the statutory provision.

Commissioner Dave Jones: Not to get too much in the weeds, but I am wondering whether there is some ability as you are thinking about that methodology at the PUC to do some sensitivity analysis with regard to what implications different variates of that methodology might have for access to the capital markets? In the most simplistic way, if you were to come up with a methodology, and I don't know if you are permitted to do so, that allowed for a 100% pass through with no discretionary input from the PUC, that might have certain implications for access to the capital markets versus some other methodology that is significantly constrained and has a lot of conditions and a lot more discretion. There is a lot between those two, but where you land might have some implications for access to capital, so I am curious if there is any explicit way of considering that in your deliberations.

James Ralph: We are currently deliberating those exact questions. I agree that what we do will have an impact on that, but those deliberations are ongoing, and we hope to move the proceeding forward quickly.

Commissioner Dave Jones: That obviously has implications for what kinds of costs need to be considered to be allocated in this Wildfire Commission's recommendation. The timing for your consideration of the cost recovery methodology is when? When do you hope to have it done by?

James Ralph: It is hard for me to give a firm deadline, but we will issue a scoping memo, which is when we will announce the schedule. That will be the next public document and we will release that soon.

Commissioner Dave Jones: But it is probably after our Wildfire Commission's July 1, 2019 deadline?

James Ralph: I am reluctant to give a hard commitment on that.

Chair Carla Peterman: I will just add my expectation would be that your analysis of a stress test would need to be consistent with typical practice. What you alluded to perhaps, Commissioner Jones, would be changes of law or a different approach to the PUC's current approach. I don't think we can assume that that will be in the analysis, but maybe it will.

James Ralph: That is correct, Chair Peterman. We will be assuming that the existing law is in place as we implement the stress test.

Commissioner Michael Wara: Our charge is to think about the socialization of these costs. I just want to make sure everyone is clear or at least I am clear about how these costs would be socialized under current practice. So, most of the folks whose houses burned down have a claim under inverse condemnation against the utility if the utility caused the fire and that potentially is at shareholders' liability or ratepayers' expense. How would the expense – if it is an expense, either because it should be because the utility did everything right or because of the stress test – be socialized? And to what degree does the PUC have discretion to alter the pattern of socialization?

I recall that (PUC) Commissioner Picker has at times said things about charging a cost-causation line of thinking. What is the normal practice? How big of a range is there of the normal practice within the current law for socialization of a wildfire expense?

James Ralph: The basic framework for wildfire costs is that a wildfire event happens. CAL FIRE investigates it and makes a determination about the source of ignition. The PUC investigates for any violation of our regulations. We first could pursue enforcement actions for any violation of our regulations. That is the first step.

Once the costs associated with the fire are final and the court of appeals process has run its course, the utility can seek cost recovery at the PUC by filing an application. We evaluate the reasonableness of the utility's conduct under PU Code 451 – this was before SB 901 – and we determine whether or not the actions of the utility were reasonable, taking into account all factors known about the event that is on the record.

If we find the conduct of the utility was reasonable, the costs of the fire are passed onto the ratepayer through distribution costs. If it is on the transmission line, it would first go to the FERC (Federal Energy Regulatory Commission) and a similar but different process would happen there.

If we find that the conduct is unreasonable, then those costs do not find a way to the bills of ratepayers. That was before SB 901. SB 901 created a slightly modified system, which for 2017 there is a stress test and new prudency review created for future years where Section 451 now has more detailed provisions and a set of factors that we are to evaluate. In addition to that, there is a securitization process, which comes at the very end of the process, when we have determined that ratepayers are going to handle those costs and we could use a securitization process.

Chair Carla Peterman: We will have a more focused deep dive into these topics at a future meeting.

Simon Baker: The just wanted to add to the second part of your question, which had more to do with cost allocation and rate design. Once a determination has been made that ratepayers would recover some amount of cost, there is a second phase of the general rate case proceeding cycle and that is the rate design phase. That is where costs get allocated to the various customer classes: industrial, commercial, agricultural, residential. The definition of customer class isn't very granular. While there are certain rate classes, for example, low income or medical baseline

subsidies or rate structures for different climate zones that take advantage of different baseline allocation, the PUC would have to develop a whole new set of criteria for allocating rates, which is not what we have done to date.

Commissioner Michael Wara: So, there has not been any active thinking about a tier three wildfire zone rate? Ratepayer is a very generalized term. There are going to be ratepayers that own a home in high wildfire risk country, there are going to be ratepayers who are renters in urban districts that have zero wildfire risk. What I am hearing you say is they are going to pay for these costs on a kilowatt basis spread across all ratepayers. Is that, roughly speaking, correct?

Simon Baker: Yes, roughly speaking. There are different allocation schemes for different customer classes. But no, I am not aware of any thinking at this time to do what you are suggesting.

Chair Carla Peterman: Just a point of clarification: the utilities are the ones who typically propose new rate designs. I think that will be a question we have in the future about if the utilities have made proposals at any point in time along these lines or if they are proposing them as part of their mitigation plans in any way.

Commissioner Michael Kahn: You are telling us that under the current system, there is an analysis of reasonableness and if the Commission deems the cost reasonable, it is passed onto the ratepayers. My question is: it sounds like there is a cap on the amount that will be borne by the utilities; is there a cap that is borne by the ratepayers? Or does the buck stop with the ratepayers here without a limit?

James Ralph: We haven't been given legislative direction on a cap such as that.

Commissioner Michael Kahn: There are some movements in the Legislature on that regard. You must be aware of that.

James Ralph: There might be many different conversations happening, but in SB 901 there wasn't language.

Commissioner Michael Kahn: So, the answer is there is a limit to what gets passed onto the utilities, but there is no limit on what gets passed onto the ratepayers. Is that right?

Chair Carla Peterman: I should go back to something that you said earlier, which is currently that is only in place for 2017 fires. Outside of that, other fires that the Commission has considered in legislation direction have no cap on either. But I think that is a point for a future discussion.

Commissioner Michael Kahn: I don't understand that to be the case for 2019 and the future. I think 2019 defaults into what 2017 does. It is a hole in the donut for 2018. We can get guidance on that, but I am just trying to clarify where we are in the current state of law, and as I understand it there is a cap on utilities and there is no cap on the ratepayers.

James Ralph: We will certainly take into account affordability to ratepayers in the stress test proceeding, but there is no hard cap in the statutory language.

Commissioner Michael Kahn: But what happens if you decide that the utilities can't afford it and the ratepayers can't afford it?

James Ralph: We definitely have a difficult challenge on our hands, but we are working diligently to undertake it.

PRESENTATION 4: Wildfire Insurance Coverage, Cost, and Availability – Joel Laucher, Chief Deputy Commissioner, California Department of Insurance (CDI), presenting "After the Fires: A Cross Section of the Issues Face by Insurers and Insurance Consumers."

Commissioner Pedro Nava: If you could help me understand on your slide presentation insurer loss experience with the percentages. What is the role of reinsurance?

Joel Laucher: Reinsurance means that, to the degree these insurers had reinsurance, it is similar to insurance in that they found another entity that would take on part of their exposure and perhaps mitigate their losses. Insurers buy insurance in many forms. So, they might buy reinsurance for the peril of fire in California or the peril of fire for the six most western states, or it might be a bundle of multiple perils. Insurers make use of insurance themselves; they reinsure so that any given catastrophic year like this might reduce their overall loss exposure and they can set the retention level that they hold wherever they decide is the most reasonable to keep that retention.

Commissioner Pedro Nava: Does CDI have numbers that reflect the cost to the carrier for that reinsurance? For example, State Farm shows a 275% loss ratio. I don't know if it would be helpful or not to know whether there was a reinsurance. While on the statistics it shows the 275% loss ratio, do we know whether or not that was an actual loss?

Joel Laucher: No, we don't know. We might be able to take a look at it when we are looking at the financial oversight of the company, but generally we do not account for their reinsurance costs in our rate setting formula. We do include all these losses as if the insurer bore these losses, so I am certain that all of these insurers either had significant reinsurance or pooling agreements that generally, could be nationally or internationally, spread this exposure.

Commissioner Pedro Nava: As it relates to the requirement of insurance, homeowners, if they're financing their home and haven't paid it off, are going to be required from their lender to have insurance. If you are in a disadvantaged community and you find that your premium has increased as dramatically as you have indicated, what are the consequences to that homeowner? If their insurance premium rate is elevated to such a point where they can no longer support paying it, the consequences I am assuming are that they can't make their mortgage payment, which then results potentially in a for sale or foreclosure of that property.

Joel Laucher: Yes, that is generally correct. If you don't secure the fire coverage policy for your home, ultimately the mortgage company will procure insurance themselves and put it into your mortgage payment. And that can be expensive insurance, driving up the cost of a mortgage. If you don't then pay your mortgage amount, it can be foreclosed.

Commissioner Michael Kahn: I have three questions. The first pertains to the insurance for utilities. You didn't talk about that and maybe that is out of your purview and maybe the Chair will say we will hear

that later, but I am very curious as to the availability of the utilities to get insurance. I understand the California legal scheme is fairly unique and presents burdens on the utilities. I am trying to understand. Can they get insurance? If so, how expensive is it? Does the cost of that insurance get passed onto the ratepayers or do the utilities have to eat that?

Joel Laucher: What I am talking about here with homeowners insurance is basically what we call the admitted market of insurers that are voluntarily writing coverage subject to approval of the rates in California and backed by the California Insurance Guarantee Association. I briefly mentioned some homes are written by surplus lines, carriers that operate that are not subject to rate regulation. The utilities, to my understanding, purchase their coverage in that greater, non-admitted surplus lines market place, generally compilations of multiple insurers taking some piece of the risk and possibly even in layers of risk. So three insurers might take \$10 million in excess of \$10 million and another set of insurers will charge a little less for the next layer, but that is where that algorithm takes place, not at the level that I personally deal with. This is a more fundamental level.

Commissioner Michael Kahn: Chair Peterman, I think that for us to understand the risk or cost, we have to understand whether the utilities can get insurance and also the effect of the law on the availability of insurance because that is going to the essence of the question of spreading risk.

I also have a question about the homeowners insurance and I would like to ask about subrogation. Under current law, the insurers can subrogate the losses and pursue the compensation for people who are otherwise liable. Do you believe that California homeowners are paying less for homeowners insurance now because the subrogation right exists or is the subrogation right just providing an effective windfall for the insurance carriers?

Joel Laucher: It takes a number of years for that subrogation to go through the process. We have definitely seen in the past, I am talking more about 2003 or 2007, I don't remember which, but utilities were found at fault in some southern California fires. Ultimately, the insurers did get some major recoveries.

My understanding is a lot of the losses, the cost of these losses, go into a catastrophe load. So rather than the company that has a 200% loss ratio doubling its rates next year to reflect what just happened all at one time, it is spread out over time. So insurers had loaded those 2003 or 2007 losses into their catastrophe load and when they got the recovery, they then removed those losses from the catastrophe load, which can have a relevant decrease on the cost of insurance for the individual consumer.

Commissioner Michael Kahn: You said can, do we know?

Joel Laucher: It would if there is a significant loss and a significant recovery. It can lower the amount of the insurance for the homeowner.

Commissioner Michael Kahn: Not to get too technical, but that is experience rated rather than predicting. They are looking at their experience of what they recover in the subrogation and they are rating it for the future, rather than predicting for the future.

Joel Laucher: It does get technical. A catastrophe load is made of 20 or more years of catastrophe experience. It is an average of those 20 plus years. That creates a factor – let's say 25% factor – so you multiply last year's rates by 1.25 and you base the rate for next year on that modified rate. And that is what you are charging until you change your rates again.

Let's say an insurer has a recovery from subrogation and removes a major catastrophe out of its experience, out of that 25-year loading, and that catastrophe factor drops from 1.25 to 1.20. In other words, moving forward those rates could be, let's say for simplicity's sake, 5% lower because that catastrophe loading piece has been reduced by the recovery of those losses. So that is moving forward. There is a period of time where they are charging based on that catastrophe load without that reduction so that consumers are paying for that catastrophe because the insurer hasn't yet recovered the subrogation.

Commissioner Michael Kahn: What I am concerned about is one of our charges to talk about possible changes to the law. I am worried about an unanticipated consequence of changing the law to be that insurer carriers now are charging for homeowners insurance with the anticipation of subrogation and, if for some reason the law changes to eliminate that opportunity, that the rates will go up. I don't want an unanticipated consequence of our recommendation be insurance rates go up because we didn't think about it.

Joel Laucher: I would say that insurance rates aren't based on the anticipated recovery. The insurer would never know whether this is going to be a utility fire or based on a vehicle sparking a fire, so they can't expect to recover. It might be a consideration in their minds, but it isn't a loading specifically that goes into a rate.

Commissioner Michael Kahn: You have presented a scheme that I am trying to understand whereby homeowners insurance is either by the carrier or FAIR Plan. Is there a gap or does that cover 100% of the homeowners in California?

Joel Laucher: There is a big difference between a homeowners policy and a FAIR Plan policy. A FAIR Plan policy is a dwelling fire policy, which is essentially is a coverage for the main peril of fire burning down your home. For example, a homeowners policy what makes it a package policy is that it has a liability coverage that is very important for any individual to have. FAIR Plan is just covering the structure, no liability. It has other perils it doesn't include as well, such as water-related damages. So it is the most fundamental coverage to qualify suiting your mortgage company requirements and provide you with the most likely catastrophe type loss of coverage.

Commissioner Michael Kahn: People have talked to us about catastrophic funds that the state might set up. How does the FAIR Plan alternative differ from a catastrophic fund?

Joel Laucher: The FAIR Plan is based on insurer participation. To write property coverage in California in an admitted market, you are obligated to participate in the Fair Plan. An insurer participates in both the profits and losses of the FAIR Plan. The rates are actuarially sound, so they are going to be based on what they expect to pay out. If they did pay out more than they had on hand or had accumulated in surplus, they would do an assessment to the insurers, not to policy holders or not to the public at large. The insurers that are participating would have to pay an assessment to reimburse the FAIR Plan if it got askew on having paid too many losses. It is a pooling, but it is supported by insurer funds.

Commissioner Michael Kahn: Whereas a catastrophic fund could be insured in many different ways?

Joel Laucher: Yes, a catastrophic fund could be taxpayers or any number of ways that you could structure that.

Joel Laucher: I did want to mention, actually during Commissioner Jones' tenure, we created this Availability and Affordability of Coverage for Wildfire Loss in Residential Property Insurance in the Wildland-Urban Interface and Other High-Risk Areas of California report. It has a lot of suggestions I think are valuable and it has a lot of data that is applicable to this situation. That is available as well.

Chair Carla Peterman: I agree with your comment, Commissioner Kahn, that we will need to look at the utility and insurance market. I can say at a high level the market has tightened, premiums have increased. Typically, the insurance premiums are recovered from ratepayers, but as those numbers are going up, the PUC is appropriately scrutinizing whether those are appropriate and what those costs are.

Commissioner Dave Jones: Just a couple of thoughts. CDI does not collect information on reinsurance placements. That doesn't apply to just utilities, that is across the board. The Department does not regulate reinsurance pricing. It does not regulate reinsurance underwriting, other than making sure that the reinsurers are qualified and are adequately capitalized in order to transact business in California. If you want that information about that, you are going to have to turn to the PUC or some of the ratings agencies.

In fact, S&P or Fitch's or AM Best in the last couple of months, each or one of them had studies on the reinsurance market generally speaking, the availability of reinsurance for direct writers of auto and home insurance. There was even a paper I think on the availability of reinsurance in the utility market as well. There are some third-party sources for that information that we could and should turn to.

Generally, internationally the reinsurance market is still pretty soft. Fitch's or S&P had a report that they released at the beginning of this year where they described how the reinsurers were disappointed that in the wake of the catastrophic wildfires in California in 2018 and 2017 that they weren't able to demand higher reinsurance prices. So there is a lot of capital out there looking for a home. At least during my tenure as CDI Commissioner, I was not impressed when any utility or anyone else that came to me said, "We can't find or afford insurance," but it does bear further scrutiny and investigation.

The slide with regard to insurer loss experience, I think it is a very compelling slide. Just to put into perspective though, these are California losses. Most of these companies are national companies. In fact, in January 2019, AM Best or Fitch or somebody put out a study on the P&C (property and casualty insurance) market overall in the United States and found that, in fact, the overall P&C industry had a 99% loss ratio nationally, so they actually made an underwriting profit according to that study. So it is important to keep in perspective; these are huge losses, but these are losses these companies have been reserving for quite some time.

FAIR Plan is the insurer's last resort. It is an insurance product. It is required by statute to be priced based on the risk; it is not subsidized. It is very different from the National Flood Insurance Program, which does not have to be priced based on the risk. By consequence, it is priced lower than the risk and

is subsidized to the tune of tens of billions of dollars by the federal Treasury because it is not collecting enough money to cover the risk. So something to keep in mind as we think about should we deviate from an insurance model that is premised on pricing based on risk. We have some national examples of what could happen when you do that and what the costs are, in addition to the potential of sending the wrong price signal when you begin to deviate from a product based on price.

I think it is important too to put the FAIR Plan numbers into context. They really are the canary in the coal mine. When I was Insurance Commissioner, I watched those numbers very, very carefully. They are going up for the incidence of writing wildfire insurance in the wildland-urban interface area. But there are about 3 million homes in the wildland-urban interface and about 1 million of them have been rated by the insurers as high or very high risk. We are still only seeing roughly 30,000 FAIR Plan policies sold there. And on top of that, another 20,000 or so are sold by the surplus lines, which is another market that people can go to if they can't find traditional, admitted insurance from one of the brand carriers.

So, all of the trends are bad. They are all are going in a bad direction, which is exactly why we should get ahead of it before it gets really, really bad. But it is important to keep it in some perspective. For those 30,000 people, they are not happy. And for the 20,000 that bought insurance surplus lines, they are not happy. What they have been forced to do is buy a product that they would prefer not to have because if you have got the FAIR Plan you need to buy another umbrella policy on top of that to cover all the other coverages. It is a challenge for them.

Finally, I did direct the Department to prepare a report in January 2018, which I can give to the Commissioners, on wildland insurance affordability and availability. There are some recommendations in that report. I would like to ask the CDI to present us with some options going forward with regard to how we might consider recommendations in the context of insurance that relates to the task we have been given as the Commission. I think that would be super helpful.

Joel Laucher: We would be happy to do that.

Commissioner Michael Wara: I want to try to clarify. You said that the FAIR Plan is priced on risk and doesn't consider affordability.

Joel Laucher: Correct.

Commissioner Michael Wara: Does that mean that the other 2 to 3 million homes in wildfire risk areas are not fully reflecting the risk and are reflecting a greater consideration of affordability across the rate structure?

Joel Laucher: My point is all rates are segmented to charge people with higher risk a higher premium. The point of mentioning the FAIR Plan is that if there was an expectation that this insurer of last resort somehow tempered their rates to make it not only available but affordable, that is not the case. Their rates are actuarially sound as well, so if you end up in a FAIR Plan, it is not going to be a bargain for you and it could be a very expensive alternative.

Chair Carla Peterman: I will make one request for the future, actually for all of our speakers. It would be helpful to get this information as well in nominal numbers. It was very interesting to hear about 69% percent increases in rates, but I don't have a great idea about how that compares to an annual utility bill, for example. So that would be helpful for the future.

Joel Laucher: When you say a 69% rate increase, of course, there is a range, even within Paradise based on the location of the home and the type of structure. So one could be a \$600 premium that gets a 50% increase and another person has a \$1,000 premium. It seems like it is a lot of money but it is all relative to the premium. But I understand what you are saying: give you some idea of what the current cost is and what the 69% means.

Chair Carla Peterman: I also know that you got some requests for information to provide to the Commission. I will ask that when you do that, and if the PUC also gets request, to do those through our Executive Officer Johnson so that we can make sure we are getting the right information from you and that all the Commissioners have it available.

Chair Carla Peterman: Mr. Baker, did you have any further comment on the utility insurance specifically?

Simon Baker: I was going to confirm, Chair Peterman, that your response and understanding to the question from Commissioner Kahn is essentially correct. As far as utility insurance costs that come forth to the Commission usually in an application of a general rate case. That is one of the several operations and maintenance costs that they seek cost recovery for, and then that goes through the whole reasonableness review of the Commission, and the Commission makes a finding as to the reasonableness of including those costs and rates.

Item 8: Discussion and Approval of Proposed Issues Areas for Expert Testimony for Future Meetings

Chair Carla Peterman: I will ask the Commissioners to ask any follow up questions. We are then going to turn to a brief discussion of what we will cover in the next few meetings. The last hour has given us some good ideas. And we want to make sure we leave time for public comment. So with that, let me ask my Commissioners if you have any final comments coming out of this last background context setting session.

Commissioner Michael Kahn: I would just like to make a comment on OPR's performance. It was terrific. This is a lot of stuff to put together in a short amount of time and I appreciate it.

Commissioner Pedro Nava: I just want to compliment the Chair. It is obvious from your skills that we will all be well served. I do think that the questions raised by the Commissioners during the course of the presentations laid out a roadmap for staff in terms of identifying areas that we think are going to be helpful to us satisfying our charge. I want to thank my other Commissioners for their thoughtful comments.

Chair Carla Peterman: As was mentioned, we are going to have three meetings around the state where we will get into more substantive discussions on topics. Staff have identified three general areas for those discussions and let's see if that is consistent with what the Commissioners think we should cover. It is a good opportunity to highlight anything that is missing or what you want to make sure we cover in each session. Executive Officer Johnson will have an opportunity to communicate with us individually as he fleshes out the agenda for these days.

1. General cost liability for wildfires and the specific review of legal infrastructure around utility liability
2. Insurance markets and the impacts of cost liability on those markets
3. Funding mechanisms for managing the cost of future catastrophic wildfires

Commissioner Michael Kahn: Because we are supposed to be thinking about utility infrastructure, if we could get some guidance on ways that we can help the utilities to cope with these problems or deal with utility infrastructure and alternatives that allow Mr. Baker to still stand up and say everything is being done. It would be very helpful to us, so I would add that to utility structure.

Chair Carla Peterman: I think that could come both under topics 1 or 3.

Commissioner Pedro Nava: Under Public Resources Code 4205 (c)(1), there is language that talks about making recommendations that make changes to law that would ensure the equitable distribution of costs among the affected parties. Some of the written material that was provided to us by staff indicates that the majority of costs are borne by the communities and that has to do with environmental impacts, reconstruction of infrastructure in a city or a town or a county.

So clearly we need to have a conversation around the impact of utilities, but we also need to get additional information on how local government and community-based organizations are dealing with that particular issue that is called out in the statute. I don't think we've heard much of that yet.

Commissioner Dave Jones: I agree with Commissioner Nava. I think it would be useful to get some expertise on what local communities are doing in the wake of these catastrophic fires to better prepare themselves.

I think it also touches back on the question that I know is not a central part of our charge but is something we need to be thinking about, which is this whole issue of land use and what implications that has for all of this. We can assume a static world that exists exactly as it is that has certain implications for the kinds of costs and liabilities and how we allocate those, or maybe the world is going to look different in some ways in terms of what communities are doing and what's happening on the ground. But I think having some sense of that will help inform our recommendations as to the core part of our charge.

Commissioner Michael Wara: I think we have heard some discussion on fund concepts as one of the core missions; to my mind, that is a pretty clear reference to wind catastrophe funds that exist in the southeast. I would like to hear from folks who have deep experience with how those funds were structured, who the ultimate risk bearer is when the fund's resources are exhausted, what else was done when those funds were created to actually reduce fiscal risk. I think more knowledge sharing across jurisdictions, because there are lots of jurisdictions that know about these kinds of major catastrophe problems, and how they've interacted with insurance markets and have taken approaches. Maybe they have learned some lessons that we can benefit from before we take a step in that direction.

Commissioner Michael Kahn: I agree with Commissioner Wara. We have heard, there's been a constant theme today, that is risk mitigation is really critical. During the electricity crisis, we discovered that the cheapest electron was the one we didn't use. We embarked on a conservation program.

I think the comment that Commission Nava made about the local communities bearing the brunt of the costs and Commissioner Jones' comment about local communities. To the extent we can find out what the local communities need or want in terms of support – to the extent that that can actually tie into lowering insurance rates and fires. If we can reduce the risk here, we will reduce the cost.

We are being told that is a goal, but we're also being told it starts locally. It is not top down. The Office of Emergency Services (CalOES) and the Governor's Office would probably confirm that. To the extent that we can learn about, maybe we can't solve it, but maybe we could make recommendations for long-term planning issues, and finding out more about incentivizing and helping local communities to lower the risk might be very valuable here. So I hope that we can try to get into that. I think there are resources in the Governor's Office for that.

Commissioner Pedro Nava: Part of what I think is included in this whole buffet of ideas that we're talking about it that when we talk about zoning and regulations for new construction, that is all well and good, but what I'm concerned with is that ultimately without some kind of remedy, the only people who are going to be in the wildland-urban interface are going to be those wealthy enough to construct homes with the appropriate roof, with the interior fire extinguishers, fire sprinkler systems, and the expensive materials who will also be able to pay for the supplemental fire insurance that insurers in many areas already require. For example, I live in Santa Barbara and homeowners in Montecito had homeowners insurance, but they also had another line of fire protection that were private firefighting resources. But I have got a feeling that when we take a look at people who live in places like Paradise and others, you are going to find the elderly, people on fixed incomes, and people on disability.

I know from the work that we did at the Little Hoover Commission that the average cost to remove a tree is \$1,000. So, on one of the slides that we were shown by Helge Eng, you had a house where CAL FIRE said, "this is way too many trees." Count the trees. That is probably a \$10,000 fix for that homeowner. That homeowner is not going to be able to afford it and it might be the only place they can afford to live anymore. So what we are talking about is the equitable distribution of cost among the affected parties is including those people who are the least able to pay, so that we don't end up prioritizing – to an even greater extent – people with money over those who don't have as much.

Chair Carla Peterman: I agree with everyone regarding the suite of things that need to get addressed, but I am more cautious about how much we will actually be able to address in the next six months. I think your comment, Commissioner Kahn, was great about we may need to learn but not solve. We recommend what we can and maybe some of those recommendations are to keep looking at certain issues. Some of the topics we will talk about are ones folks have been talking about for years, and others are newer and more nuanced, particularly those around land use. As long as we go in with that cautionary note that we will have to see where we are in June and do our best to give as robust recommendations as we can, I think we will be in good shape.

Related to that is making sure that we are really filling gaps. For example, when we think about how to mitigate risk utility infrastructure, we heard in the presentation (from Simon Baker and James Ralph) that there are wildfire mitigation plans in front of the PUC. So the question for us would be, what would be additive about our taking testimony review over those issues versus just taking note?

On this issue of engaging local communities and land use with Executive Office Johnson, we do have process meetings in the state to hear from local officials around some of the issues that came up, so I

would ask you to think about how do we use those meetings; particularly in areas that have already been through catastrophic wildfires to better understand what can be done in the land use arena. You don't always get to work with a group of people who are willing to take on more rather than less, so that is a promising start.

Commissioner Michael Kahn: I live in Napa and I know the local community is proactively figuring out what to do. I think, Mr. Johnson, that will be easier to get into than what we think. A lot of communities are being proactive for economic and other reasons.

Commissioner Pedro Nava: Besides people who are in the communities, there are three organizations that may be able to provide us some assistance: the League of Cities, the Association of Counties, and the Special Districts Association. So you may be able to do a one-stop shop for representatives in those entities that can tell us, "Here are the obstacles. Here is what our members have encountered," as they try to plow through the regulatory thicket as they try to rebuild and put their communities together.

Chair Carla Peterman: Executive Officer Johnson, do you think you have enough feedback from the dais today to put together a fantastic set of meetings?

Evan Johnson: Yes.

Item 9: General Public Comment

PUBLIC COMMENT 4: Kara Cross, Insurance Services Offices.

I represent the Insurance Services Office (ISO) and I also represent AIR. I wanted to offer both as a resource to the Commission. Insurance Services Office (ISO) – not the utility – provides wildfire risk assessment for insurers for underwriting purposes. So, you heard Mr. Laucher refer to fire scores. They are one of the organizations that provide fire scores for insurers and they are a licensed rating organization and they are regulated by the California Department of Insurance (CDI).

I also wanted to offer AIR as a resource. They provide catastrophic models, looking forward at catastrophes and they have also been involved in creating alternative funding mechanisms for catastrophe funding globally. So just offering both as a resource.

I do have one question. Mr. Helge's presentation was not on the website, will that be available to the public?

Evan Johnson: Yes, it will be up as soon as we're out of the room.

PUBLIC COMMENT 5: Seren Taylor, Personal Insurance Federation of California.

We represent large property and casualty insurers. We look forward to working with you as you address the important task in front of you. You talked about a focus on using the best science and data to make good decisions and I believe we have a lot of information that will help you to achieve that goal. Thank you for the opportunity to comment and participate in future conversations.

PUBLIC COMMENT 6: Gary Rosenbloom, AVP Risk Management at Sacramento State.

Gary Rosenbloom was unavailable for comment. However, in his comment card he noted: "Sac State had significant impacts. Sac State would like to collaborate and assist the commission. More details to follow."

PUBLIC COMMENT 7: John Shafer, Grandchildren's Future.

I hope Commission will make available the list of attendees at this meeting and the subsequent and any written submissions the same way that the PUC does in rate cases.

PUBLIC COMMENT 8: Nick Cronenwett, California Association of Counties (CSAC).

We are here; we are watching. Thank you to all of you for digging into these issues. We are excited to be helpful and be a resource. In response to what was discussed today, there is a lot on regards to disaster response. A few weeks ago, we had a fire summit, where we had all the counties impacted by fire sit around with the OES director, FEMA, and a lot of the lead state agencies on how to respond, so a lot of the regulatory issues on how we can help communities recover. It is actually one of our primary goals over the last year or so. It has been devastating, the 2017-2018 wildfires.

We are proud to say that we worked hard in supporting SB 901, a compromised package that went through the Legislature, including enhanced forest management funds, comprehensive wildfire mitigation plans, and a mechanism to handle the utility liability. We were pleased with the final outcome. We also support the current legal structure around utilities, and we support keeping inverse condemnation as it is, but we look forward to exploring additional mechanisms for protecting ratepayers and socializing the non-negligent costs. We are happy to be working with you moving forward and if there are any questions we can be helpful with.

PUBLIC COMMENT 8: Caroline Choi Senior Vice President of Corporate Affairs, Southern California Edison (SCE).

Caroline Choi was unavailable for additional public comment.

Item 10: Closing Comments and Adjournment

Chair Carla Peterman: Commissioner Kahn made a comment in the beginning about how we want to make sure we get good data and good information. I will complement that with I am really looking forward to hearing from everyone – not just what we can recommend, but what stakeholders can voluntarily do. We are in this new normal. We are all going to have to get out of our comfort zone and all think about how can we step wherever we represent and do more? So we are looking for that information as well.

Is there any other public comment? Commissioners, any final comments? We will see you in Redding. Meeting adjourned.