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BUSINESS MEETING  
BEFORE THE  
CALIFORNIA ENERGY COMMISSION

In the Matter of: )  
 ) 20-BUSMTG-01  
 *Business Meeting* )  
 \_\_\_\_\_ )

CALIFORNIA ENERGY COMMISSION  
THE WARREN-ALQUIST STATE ENERGY BUILDING  
ART ROSENFELD HEARING ROOM - FIRST FLOOR  
1516 NINTH STREET  
SACRAMENTO, CALIFORNIA 95814

THURSDAY, FEBRUARY 20, 2020  
10:00 A.M.

Reported by:  
Susan Palmer

APPEARANCES

Commissioners

David Hochschild, Chair  
Janea Scott, Vice Chair  
Karen Douglas  
Andrew McAllister  
Patricia Monahan

Staff Present: (\* Via WebEx)

Drew Bohan, Executive Director  
Darcie Houck, Chief Counsel  
Rosemary Avalos, Public Advisor's Office  
Kerry Willis, Staff Counsel  
Cody Goldthrite, Secretariat

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	i. <i>In the Matter of U.S. Department of Energy (High Level Waste Repository) (Atomic Safety Licensing Board, CAB-04, 63-001-HLW); State of California v. United States Department of Energy (9th Cir. Docket No. 09-71014)</i>	
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- vii. *In re: PG&E Corporation and In re: Pacific Gas and Electric Company*  
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- viii. *Chukwuemeka (Emeka) Okemiri v. California Energy Commission, et al.* (Sacramento Superior Court, Case No. 34-2018-00246019).
- ix. *State Energy Resources Conservation and Development Commission v. HyGen Industries, Inc.* (Sacramento County Superior Court, Case No. 34-2019-00252543)
- x. *National Electrical Manufacturers Association, et al. v. CEC, et al.* (U.S. Eastern District Court of California Case No. 2:19-cv-02504)
- xi. *Olson-Ecologic Testing Laboratories, LLC v. CEC.* (Orange County Superior Court Case No. 30-2019-01115513).
  
- b. Pursuant to Government Code section 11126(e), the Energy Commission may also discuss any judicial or administrative proceeding that was formally initiated after this agenda was published; or determine whether facts and circumstances exist that warrant the initiation of litigation, or that constitute a significant exposure to litigation against the Commission, which might include.

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P R O C E E D I N G S

FEBRUARY 20, 2020 10:05 a.m.

CHAIR HOCHSCHILD: Good morning. Let's begin with the Pledge of Allegiance.

(Whereupon the Pledge of Allegiance is recited)

CHAIR HOCHSCHILD: Thank you and good morning everybody. Before we begin I just want to reiterate we will be taking Item 11 no later [sic] than 1:00 p.m. today. I just want to read a statement about that. Item 11, the Sacramento Municipal Utilities District Community Solar Program will be heard no earlier than 1:00 p.m. today.

We have a significant number of individuals that wish to provide comment on this item. Pursuant to Title 20, Section 1104, the Presiding Member may limit or preclude oral comments as necessary to ensure the orderly conduct of business in order to ensure that everyone wishing to comment on Item 11 has an opportunity to speak. Public comment on this item will be limited to one minute per person. So that's for that item, but we'll continue with the three minutes per person for everything else.

So with that, let's get into the agenda. Is there a motion on the Consent Calendar?

COMMISSIONER MCALLISTER: I move consent.

CHAIR HOCHSCHILD: Moved by Commissioner McAllister. Is there a second?

1 COMMISSIONER DOUGLAS: Second.

2 CHAIR HOCHSCHILD: By Commissioner Scott. All in  
3 favor say aye.

4 (Ayes.)

5 CHAIR HOCHSCHILD: That motion passes.

6 Sorry, Commissioner Douglas, excuse me. That  
7 motion passes unanimously. Thank you.

8 Item 2 is off the agenda, so let's move on to  
9 Item 3, Palmdale Energy Project.

10 MR. WINSTEAD: Good morning Chair and  
11 Commissioners, my name is Keith Winstead. I am the  
12 Compliance Project Manager for the Palmdale Energy Project  
13 in the Siting, Transmission and Environmental Protection  
14 Division.

15 Staff is here today to recommend approval of the  
16 Palmdale Energy Project Request to Terminate Certification.  
17 With me today from the Chief Counsel's Office is Kerry  
18 Willis. The Project Owner will not be attending today.

19 The Palmdale Energy Project was first licensed by  
20 the CEC on August 10, 2011, as the Palmdale Hybrid Power  
21 Project, a 570-megawatt hybrid facility using combined  
22 cycle and solar trough technology.

23 The Palmdale Energy Project made efforts to meet  
24 market demands by amending plant design to a fast-start  
25 flexible natural gas-fired 645-MW combined-cycle power

1 plant, and removed the solar component. The amended  
2 project was approved by the CEC on August 9, 2017.

3 The project in the City of Palmdale was never  
4 constructed and there was no ground disturbance. On  
5 December 2nd, 2019 Palmdale Energy Project, LLC requested  
6 the California Energy Commission terminate their license.

7 Their reason for termination, as stated in a  
8 letter is, "There does not appear to be interest among the  
9 State of California, the CAISO, the investor owned  
10 utilities, or the Public Utilities Commission in  
11 contracting for new natural gas fired resources to support  
12 the growing need for flexible resources in the state."

13 Based on staff's analysis, staff concludes that  
14 the request to terminate would not have a significant  
15 effect on the environment or the environmental justice  
16 population, and would be consistent with applicable LORS.

17 Thank you. If you have questions, staff is  
18 available.

19 CHAIR HOCHSCHILD: All right, I have no  
20 questions. Is there public comment on this item? No?  
21 Commissioner Douglas.

22 COMMISSIONER DOUGLAS: I'll just comment briefly  
23 on this item then. I served on the Committee that issued  
24 the Presiding Member's Proposed Decision in 2011 for this  
25 project as a hybrid technology project, and then again in

1 2017 for the petition to amend the project to use the  
2 combined cycle technology only without the hybrid aspect.

3 As has been noted the project owner has stated  
4 that they were unable to secure a Power Purchase Agreement.  
5 That can happen and sometimes we will go through an  
6 extensive environmental review and public process for  
7 projects that very often at that time do not have a Power  
8 Purchase Agreement. And if those projects don't get a  
9 Power Purchase Agreement they won't be built. And that's  
10 what we're seeing here, so with that I support the staff  
11 recommendation and I move approval of this item.

12 CHAIR HOCHSCHILD: Okay, moved by Commissioner  
13 Douglas. Is there a second?

14 VICE CHAIR SCOTT: Second.

15 CHAIR HOCHSCHILD: Seconded by Vice Chair Scott.  
16 All in favor say aye.

17 (Ayes.)

18 CHAIR HOCHSCHILD: Okay. That motion passes  
19 unanimously. Let's move on to Item 4, Approval of  
20 Disadvantaged Communities Advisory Group New Member.

21 MS. CHEW: Good morning, Chair and Commissioners.  
22 My name is Kristy Chew. I am the Staff Liaison to the  
23 Disadvantaged Communities Advisory Group. You have already  
24 been provided with a proposed Resolution.

25 The proposed resolution would approve a

1 Disadvantaged Communities Advisory Group Member. A vacancy  
2 in the Group was created last year when another member  
3 vacated their position on the group.

4 The Disadvantaged Communities Advisory Group is  
5 an advisory body to the Energy Commission and the  
6 California Public Utilities Commission. It advises the  
7 Commissions on the effects of clean energy and pollution  
8 reduction programs in disadvantaged communities pursuant to  
9 Senate Bill 350.

10 Several candidates applied for the open position.  
11 Commissioners Scott and Douglas from the Energy Commission  
12 and Commissioners Rechtschaffen and Guzman-Aceves from the  
13 California Public Utilities Commission selected one  
14 candidate to recommend for appointment.

15 The appointee is Mr. Fred L. Beihn. Mr. Beihn  
16 worked for Southern California Edison's hydroelectric  
17 department for 25 years. He possesses a wide variety of  
18 knowledge and experience in the power generation and the  
19 electrical transmission and distribution systems.

20 In addition, more recently he has worked for his  
21 own company, Arrowhead Solutions, which provides consulting  
22 services to the power industry, on Native American issues,  
23 and is a real estate investment company.

24 He is affiliated with the North Fork Rancheria of  
25 Mono Indians of California and is currently the Vice

1 Chairman of the Tribal Council. In addition, he is on the  
2 Temporary Assistance of Needy Families Advisory Board,  
3 which is part of the tribal Social Services program. He  
4 also serves on the board of the tribe's Environmental  
5 Protection Department.

6 Mr. Beihn is very knowledgeable in Native  
7 American issues on an individual level and on a tribal  
8 organization level, government-to-government environmental  
9 relationships, and social services. He is well qualified  
10 to serve on the Advisory Group. I am available to answer  
11 any questions, and I believe that Mr. Beihn is on the  
12 phone.

13 CHAIR HOCHSCHILD: Mr. Beihn? No? Okay. All  
14 right. Vice Chair Scott or is there any public comment on  
15 this? Thank you. Vice Chair Scott?

16 VICE CHAIR SCOTT: All right. Well Christie  
17 provided a thorough and excellent summary of Mr. Bean and  
18 his qualifications. We are looking forward to working with  
19 him on the important work that the DACAG carries out. So  
20 if there are no questions I will move approval of Item 4.

21 CHAIR HOCHSCHILD: Okay, moved by Vice Chair  
22 Scott. Is there a second?

23 COMMISSIONER DOUGLAS: All right. I am about to  
24 second. I just wanted to add that I'm excited by  
25 supporting him. I think that Mr. Beihn has a great



1 background that can really support the work of the Advisory  
2 Troup. And I'm looking forward to working with him as our  
3 Lead on tribal outreach. I think his voice will be very  
4 valuable, especially with some of the experience he brings  
5 from tribal programs.

6 So I second.

7 CHAIR HOCHSCHILD: Okay. All in favor say aye.

8 (Ayes.)

9 CHAIR HOCHSCHILD: That motion passes  
10 unanimously.

11 Let's move on to Item 5, Integrated Energy Policy  
12 Report.

13 MS. RAITT: Good morning, Commissioners. Staff  
14 is requesting that you adopt the 2019 Integrated Energy  
15 Policy Report, or the 2019 IEPR for short. I'm Heather  
16 Raitt, the Assistant Executive Director for Policy  
17 Development. The Energy Commission prepares an IEPR every  
18 two years with updates in alternate years to provide energy  
19 policy recommendations to the Governor and Legislature.

20 Under Vice Chair Scott's leadership, the 2019  
21 IEPR draws on information gleaned from 25 workshops and  
22 webinars. The draft was posted on November 8th, 2019, with  
23 a request for public comments by November 27th. After  
24 careful consideration of the comments, the final version  
25 was posted on January 31st, with a second opportunity for

16

1 comments. An errata reflecting updates and edits in  
2 response to comments was posted yesterday and  
3 Commissioners, you have a copy of the errata, and there are  
4 copies available at the entrance to the hearing room.

5 On a very high level, the IEPR continues to focus  
6 on transforming California's energy system to reduce  
7 greenhouse gas emissions and making sure that low-income  
8 and disadvantaged communities share in the benefits of a  
9 clean energy future.

10 California met its 2020 greenhouse gas reduction  
11 goal four years ahead of schedule with the electricity  
12 sector leading the way. In 2017, greenhouse gas emissions  
13 in the electricity sector dropped to more than 40 percent  
14 below 1990 levels, helping to ensure the state is on its  
15 way to achieving the 2030 statewide GHG reduction target  
16 set by Senate Bill 32.

17 California's portfolio of resources has  
18 significantly changed over the last decade with natural gas  
19 generation declining by about 22 percent and renewable  
20 generation, including rooftop solar, more than doubling.

21 For the near-term, strategically located natural  
22 gas generation will continue to play a key role in  
23 integrating renewable resources and ensuring reliability.  
24 Currently, natural gas power plants provide 75 percent of  
25 the flexible capacity available to meet system needs.

1           The Energy Commission, the California Air  
2 Resources Board and the California Public Utilities  
3 Commission have initiated a collaborative effort to  
4 implement SB 100, which will set the framework to further  
5 decarbonize the state's electricity sector to become 100  
6 percent zero carbon by 2045.

7           California's building stock accounts for almost a  
8 quarter of statewide greenhouse emissions, including fossil  
9 fuel consumed onsite such as gas or propane for heating and  
10 electricity consumption such as for lighting, appliances  
11 and cooling. Decarbonizing the building sector requires  
12 clean supply, deep energy efficiency improvements, and  
13 demand flexibility.

14           Traditional energy efficiency programs need to  
15 evolve and focus more directly on energy equity and market  
16 transformation efforts related to low-carbon technologies,  
17 whether within electric or gas end-uses or in support of  
18 fuel substitution.

19           To reduce greenhouse gas emissions in buildings,  
20 options include making gas-powered products more efficient,  
21 electrifying end uses previously served by natural gas and  
22 switching to low-greenhouse gas fuel sources, such as  
23 renewable natural gas.

24           Load flexibility can help system operators manage  
25 steep load ramps, such as in the evening when load remains

1 high and the sun sets. Flexibility will also reduce  
2 greenhouse gas emissions by helping us maximize the use of  
3 renewable energy and avoid using electricity when it has  
4 high carbon content.

5           Although the state has reduced greenhouse gas  
6 emissions overall, emissions from transportation increased  
7 six percent from 2013 to 2017. Transportation emissions  
8 account for roughly 50 percent of in-state greenhouse  
9 emissions when including emissions from refineries.

10           A statewide shift from the use of vehicles that  
11 run on fossil fuels to those that run on electricity,  
12 whether in the form of battery-electric vehicles, plug-in  
13 hybrid electric vehicles, or fuel cell electric vehicles,  
14 is essential for reducing emissions.

15           California leads the nation in ZEV deployment,  
16 with over 650,000 battery electric vehicles and plug-in  
17 hybrid electric vehicles sold as of September 2019 or  
18 roughly half the national total.

19           The refueling infrastructure must grow  
20 dramatically to support California's ZEV goals. The CEC  
21 will complete its first charging infrastructure assessment  
22 by the end of 2020. The CEC is also updating the state's  
23 Vehicle Grid Integration Roadmap, which will identify steps  
24 to implement technologies that can lower costs for plug-in  
25 electric vehicle drivers, recharging station owners, and

1 utility customers in general.

2 Trends in autonomous vehicles and mobility as a  
3 service are also transformative and require further  
4 consideration in planning efforts.

5 State and local agencies have made good progress  
6 to advance energy equity in disadvantaged and low-income  
7 communities. For example, the EPIC program invested about  
8 31 percent of its technology demonstration and deployment  
9 funds to projects in disadvantaged communities and an  
10 additional 34 percent to projects in low-income  
11 communities.

12 California must remain committed to advancing  
13 energy equity to ensure that low-income and disadvantaged  
14 communities, as well as tribal and rural communities, reap  
15 the benefits of a transformed clean energy future.

16 Other areas for further work include developing  
17 attainable opportunities to finance energy upgrades,  
18 developing one-stop shops to increase access to clean  
19 technologies, advancing retrofits in low-income multifamily  
20 housing, training and dedicating staff to community  
21 outreach, and providing direct support to community based  
22 organizations.

23 The recommendations to advance energy equity will  
24 ensure that the state continues to implement the spirit of  
25 SB 350 while working to achieve a clean energy future.

1           The state's planning efforts must reflect and  
2 account for rapid changes in energy markets such as the  
3 growth of solar energy storage and zero emission vehicles  
4 as well as climate change impacts on supply and demand.  
5 California's planning efforts continue to evolve as  
6 historically silent sectors such as buildings, electricity,  
7 and transportation are becoming increasingly intertwined.

8           The CEC is conducting critical research to  
9 identify strategies, analytics, and technological solutions  
10 to help plan for and achieve our energy and climate goals.  
11 In light of climate change policies and energy reliability  
12 challenges, the state must develop strategies for the  
13 replacement of aging natural gas infrastructure in Southern  
14 California

15           Energy reliability in Southern California remains  
16 challenging mainly due to breakdowns in the region's aging  
17 natural gas infrastructure. The Energy Commission, CPUC,  
18 the California ISO, and Los Angeles Department of Water and  
19 Power continue to monitor the situation and implement  
20 solutions.

21           The forecasts for electricity and natural gas  
22 demand inform planning of resource procurement and  
23 transmission investments in the CPUC's Integrated Resource  
24 Planning process and the California Independent System  
25 Operator's Transmission Planning Process. In addition, the

1 CEC provides monthly peak demand forecasts in coordination  
2 with the California ISO and the CPUC for evaluating  
3 resource adequacy.

4           Since 2013, the Energy Commission, the CPUC, and  
5 the California ISO have worked closely together to align  
6 their processes, using a common forecast to the extent  
7 possible for their respective planning purposes. The  
8 Energy Commission adopted a new 10-year electricity and  
9 natural gas demand forecast at the January 22nd business  
10 meeting. The 2019 mid baseline forecast shows about a 4  
11 percent lower system peak and 7 percent lower electricity  
12 sales by 2030 than previously forecast. This is largely as  
13 result of increased PV adoption, projected electricity rate  
14 increases, new savings from building and appliance  
15 standards, and slower economic and demographic growth

16           The transportation forecast aims to capture  
17 changes in consumer preferences influenced by clean vehicle  
18 policies, technology investments, and global market  
19 pressures. In the mid-demand case, gasoline consumption is  
20 forecasted to decrease, while electricity and natural gas  
21 consumed for transportation increase through 2030. The  
22 growth in electric consumption is mostly a result of growth  
23 in light-duty vehicle electrification, while the growth in  
24 natural gas consumption reflects increased fuel  
25 diversification in trucks and buses.

1           The forecast results in between 3.7 million and  
2 4.4 million light-duty ZEVs on the road in the mid and high  
3 cases in 2030. In the aggressive and bookend cases  
4 designed to reflect the most optimistic scenarios, the  
5 light-duty ZEV stock is 5.2 million and 5.5 million,  
6 respectively.

7           The mid demand case forecasts more than 78,000  
8 medium-duty and heavy-duty ZEVs in 2030. The high demand  
9 case forecasts almost 120,000 medium and heavy-duty ZEVs by  
10 2030.

11           The Energy Commission's ongoing investments in  
12 research and development are critical tools for adapting to  
13 the changing climate and reaching carbon neutrality in a  
14 resilient and cost-effective manner.

15           Efforts to protect safety and increase resiliency  
16 have taken on renewed urgency as planned power shutoffs  
17 intended to protect public safety during extreme wildfire  
18 risk were used in unprecedented levels in October 2019.

19           Climate science must be actionable on a local  
20 level, and the state must prioritize research and actions  
21 that support climate-resilience in California's communities  
22 that are most vulnerable to climate change. Planning for  
23 the effects of climate change in the energy sector,  
24 identifying pathways to achieve deep decarbonization of  
25 energy use, and developing innovative solutions must be



1 rooted in science-based understanding.

2           So I'd like to conclude by saying that  
3 California's leadership continues to be critical to achieve  
4 a clean energy future. And the recommendations in the IEPR  
5 will help us meet our climate and energy goals.

6           That concludes my presentation. Again, staff  
7 requests that you adopt the 2019 IEPR, incorporating the  
8 changes detailed in the errata. Thank you.

9           CHAIR HOCHSCHILD: Great. Thank you, Heather,  
10 and thank you to Vice Chair Scott and Commissioner  
11 McAllister for all your work on this, this year. It is a  
12 lot of work. It is a lot of time. It's a lot of  
13 workshops. It's a lot of document reviews and it's a big  
14 additional job on top of what you're all do every day, so I  
15 just want to acknowledge that. And, Heather, thank you for  
16 keeping the trains running on this document over all these  
17 years.

18           I didn't get any blue cards, but is there anyone  
19 in the room or on the phone wishing to make a public  
20 comment? If not, let's turn it over to Vice Chair Scott.

21           VICE CHAIR SCOTT: Okay. Wow. It's an exciting  
22 morning. Thank you, Heather, so much for your excellent  
23 presentation. As you all know the development of our IEPR  
24 is always a very public and transparent process. And I  
25 want to note that we appreciate all the stakeholder and

1 public input that we received. As Heather mentioned, we  
2 held 25 workshops and webinars to get the information that  
3 fed into the 2019 IEPR. And we had public comment periods  
4 following the posting of -- actually public comment periods  
5 following the workshops, but also the posting of both the  
6 draft and the final. So we appreciate the comments that we  
7 received from everyone. We carefully considered those  
8 comments and made revisions in response to those comments  
9 where we felt it was appropriate.

10 I think these themes that we talked about in the  
11 IEPR this year are really big themes. A lot of challenging  
12 topics and one of which was front and center is how we  
13 transition to a decarbonized energy system in an equitable  
14 way.

15 And we recognize that there are multiple pathways  
16 for how to get there. So what we really tried to do with  
17 this year's IEPR was spend some time being deliberate and  
18 measured and hearing from experts all around this space  
19 about which pathways they think are the best ones, what  
20 combinations should the state be using? How can we get  
21 where we need to go. And so we really spent some time  
22 digging into that and exploring that area.

23 I wanted to highlight also what Heather said on  
24 equity. It was a theme of course throughout the IEPR this  
25 year, but we also took the opportunity to really dig in and

1 assess the progress that has been made to date after SB 350  
2 was put forward. And a lot of what we talked about during  
3 that workshop, which was kind of a marathon, and had a lot  
4 of really good information, each one of the panels probably  
5 could have been its whole own day or whole own week of  
6 information. But this all tied back to the SB 350 Barriers  
7 Study. And let's you see the progress that the state and  
8 all the agencies have made working together.

9           And as Heather mentioned what we want to do is  
10 ensure that the state continues to implement the spirit of  
11 SB 350 while we're working to achieve the 100 percent clean  
12 energy future and really make sure that all Californians  
13 are engaged and involved in the transition.

14           I also wanted to mention a little bit about the  
15 10-year demand forecast that we did of course this year.  
16 And so we always do in the odd years for the IEPR.

17           And I want to commend our Energy Assessments  
18 Division for the excellent work that they did on that.  
19 Because as our energy system continues to evolve there's a  
20 number of new complexities that are added to the forecast.  
21 And our team is doing a great job keeping up with that.  
22 There's a lot of big data. There's a lot of regional data.  
23 There's a lot of local data. Technologies are changing.  
24 Everything is moving really quickly. And staying on top of  
25 that to help forecast for the state is an important job and

26

1 they do a great job.

2 They also work really collaboratively with our  
3 sister agencies. And they do this all in a robust and  
4 transparent public process. So I wanted to call some  
5 attention to that.

6 And then I kind of want to transition into the  
7 thank yous for folks. So bear with me. There were 25  
8 workshops. There's a ton of work that went on. Lots of  
9 staff helped put this together. We had sister agencies  
10 come in. I really appreciate all of our sister agencies  
11 for lending their expertise both from the dais and also in  
12 the presentations and all of the experts who helped us and  
13 participated in the workshops, provided comments,  
14 participated on panels. This is how we get a lot of great  
15 information. And it is a lot of fun for me to hear from  
16 experts from all around the world, all around the state, on  
17 these cutting edge topics in these workshops. It's just  
18 what you're always learning something new. And I think  
19 that's something really fantastic about the Integrated  
20 Energy Policy Report.

21 So let me start by thanking also our IEPR team,  
22 so Heather Raitt, Stephanie Bailey, Raquel Kravitz, Denise  
23 Costa and Harrison Reynolds. These guys do an amazing job  
24 every day. They run these workshops. They get the notices  
25 out. They make sure all the panelists have everything that

27

1 the need. And it just goes smooth all of the time. And  
2 it's because they put a lot of dedicated thoughtful hard  
3 work into our running that. And so I just want to say how  
4 much I appreciate the fantastic work that you all do every  
5 day.

6 I want to thank Commissioner McAllister who is my  
7 Lead on this year's IEPR. And he really did a lot of  
8 digging into the forecasting work and also his team, Brian  
9 Early and Fritz Foo. You guys have all been really  
10 terrific partners and it was a lot of fun to work with you  
11 on this year's IEPR.

12 There a lot of folks who took the lead on the  
13 chapters. So I want to say thank you to Melissa Jones and  
14 my Advisor, Linda Barrera, who worked on the electricity  
15 chapter, to Jennifer Campania, Lana Wong and their team for  
16 the expertise on the natural gas sector and the challenges  
17 related to Southern California reliability. To Kristy Chew  
18 for her continued leadership on a number of the  
19 Commission's equity efforts. To Nick Fugate, Cary Garcia,  
20 Heidi Javanbakht for their great work on the demand  
21 forecast and transportation forecast; Michael Kenney and  
22 Heriberto Rosales on the building decarbonization and  
23 energy efficiency; Charles Smith and his longstanding  
24 leadership here at the Energy Commission in the  
25 transportation space; Susan Wilhelm, for her expertise on

1 climate science and the adaptation work here at the Energy  
2 Commission.

3           And I can't say thank you to everybody who's on  
4 this list, but please do take a look at the  
5 acknowledgements page of our IEPR. There's a lot of folks  
6 who worked really hard to help pull this together. And I  
7 want to acknowledge them and the terrific work that they  
8 did as well.

9           And then finally to my fellow Commissioners, it's  
10 always great to work with you on this as well. And I  
11 appreciate your unique and invaluable set of background and  
12 experiences that really helped contribute to make the IEPR  
13 as robust a document as it can be. And so with that, I do  
14 want to say a hearty thank you and turn it to others for  
15 comments.

16           CHAIR HOCHSCHILD: Thank you Madam Vice Chair.  
17 Commissioner McAllister?

18           COMMISSIONER MCALLISTER: Yeah, I'm so glad you  
19 got the thank yous, because I would have missed somebody  
20 for sure. And I think you did a better job than I would.  
21 So thank you very much.

22           And I wanted to just say thank you to Vice Chair  
23 Scott for leading the IEPR this year. It's really been a  
24 pleasure to work with you on this and I've tried to  
25 surgical with my involvement. So you covered the whole you

1 know everything under the umbrella. And then I feel like  
2 I'm forecasting and buildings and some of the other SoCal  
3 reliability. I really tried to focus my efforts, so thanks  
4 for creating a space for that.

5 I think John Geesman still has the record of  
6 number of workshops though. I think it's up in the  
7 sixties. I don't know who was here before but he -- and  
8 actually it kind of is emblematic, I think he really liked  
9 the IEPR. And it sorts of gets this bum rap like "Oh, my  
10 gosh. It's so much work!" I mean we put so much pressure  
11 on staff and Heather and your team, you know.

12 CHAIR HOCHSCHILD: I hope that's one record we  
13 never break in doing 60 workshops.

14 COMMISSIONER MCALLISTER: But it sort of gets  
15 this workshop purgatory kind of brand, but it's actually,  
16 in my view, it's just one of the huge upsides of being at  
17 the Commission is that we get to keep sharp. We get all  
18 these exposures to the leading edge of these discussions.  
19 And we get the convening workshops. We have convening  
20 power. We get good people in the room. And good things  
21 happen.

22 And so anything we're talking about for all of  
23 us. And so it's really a pleasure to be in the room with  
24 you and my colleagues and all of the stakeholders on any  
25 given topic to actually learn and get up to date and make

1 sure that our policies reflect the leading edge of thought.  
2 So that's really one of the main reasons we do or at least  
3 that I really enjoy doing the IEPR. And I think our  
4 authority back in the '70s you know (indecipherable) kind  
5 of what it laid out. So that's what we're supposed to be  
6 doing.

7           So I wanted to assure everyone that we do, just  
8 as Vice Chair Scott said, we do look at every comment and  
9 consider it and so that is just a very, very robust  
10 process. And staff goes through them with a fine tooth  
11 comb at every round and the document reflects that.

12           And then just a few topics I want just pass some  
13 general thank yous about. So buildings, that team,  
14 buildings and building decarbonization, really I want to  
15 thank all the stakeholders for their contributions there.

16           The forecasting team deserves another plaudit, I  
17 think. Both the Energy Assessments Division, Steve, and  
18 his team, everybody that's involved in the forecast. I  
19 think just acknowledging the joint effort that we go  
20 through with our sister agencies and the utilities and  
21 everyone inform the forecast and iterate and again make  
22 sure that it's fully up to date. And we agree on the vast  
23 majority of the issues, but those are -- every time we have  
24 to work through a lot of detail.

25           In particular, I think, as the methodology, Vice



1 Chair Scott alluded to this as well, is the methodology as  
2 data it gets more plentiful. And as the issues get more  
3 complex we have to wrestle with and as the energy systems  
4 get more nodal and more complex, our methodology has to  
5 match that for the forecast. And we want to go down and be  
6 able to forecast increasingly toward the demand side. It's  
7 a lot more data. It's a lot of analytical challenge.

8 And so rising to that channel just something that  
9 the Assessments Division is really doing and targeting big  
10 things in the future as well. So I'm very optimistic about  
11 that.

12 On the SoCal Reliability Chapter, I want to just  
13 thank our colleagues largely at the PUC as well as the  
14 staff here at the Energy Commission. They're complex  
15 topics and a lot goes into the process there to get to  
16 where the chapter ends up. So I wanted to just thank staff  
17 for helping facilitate that conversation.

18 And then all the natural gas stakeholders, you  
19 know that chapter and the work we did this round on natural  
20 gas. I think there's lots of different opinions about  
21 natural gas. It's a bit of a thorny issue. And I think  
22 everybody coming to the table to put their cards down and  
23 kind of have a discussion is really important.

24 There are themes going forward in all of these  
25 topics that I'm talking about that future IEPRs will pick

1 up and have to pick up. And so I think integrating those  
2 conversations will continue to be a challenge, but I think  
3 our process can really capture that and manage it nicely.

4 So anyway, those are the comments I had on that.  
5 I want to again thank Vice Chair Scott for all your  
6 leadership and keeping everything on track and working with  
7 staff really every day on it. So thanks.

8 CHAIR HOCHSCHILD: Any other comments from the  
9 Commissioners?

10 COMMISSIONER DOUGLAS: So briefly I also wanted  
11 to thank Vice Chair Scott, Commissioner McAllister, the  
12 staff team, and the interagency team. I had the  
13 opportunity to take part in a number of the workshops we  
14 had for IEPR. I probably focused most on the equity  
15 workshops and chapter climate change adaptation, the  
16 natural gas assessment chapter, which had a lot of policy  
17 issues to sift through.

18 And I just also wanted to say I really value the  
19 process. I really value people coming forward with their  
20 ideas. The IEPR is a chance for us to take a really  
21 forward looking perspective on the challenges and the  
22 opportunities facing us. And I think we did that here.  
23 And I think there's a lot here to build on, so thank you.

24 CHAIR HOCHSCHILD: Commissioner Monahan?

25 COMMISSIONER MONAHAN: Yes. I'll reiterate my

1 thanks and how impressed that 25 -- that actually sounds  
2 like a lot of workshops, 25. So and as the newest member I  
3 just want to say that I was involved in reviewing IEPRs  
4 like 12 years ago when I worked at the Union of Concerned  
5 Scientists. And you may feel like maybe it's a groundhog  
6 day every two years I think to do this monumental job. But  
7 I've got to say it was notable reading through the  
8 difference 12 years ago compared to today.

9           And so actually it helps to have this like  
10 longer-term perspective on the IEPRs when you see how much  
11 the IEPRs have changed to reflect California's increased  
12 commitment to climate and clean energy. I mean profoundly  
13 transformational. And I thought about how this is really  
14 setting the course for the nation. I mean I think the  
15 nation is behind us in most cases.

16           But in terms of this, how do we stimulate a clean  
17 energy economy? How do we create jobs here in California  
18 that are good and durable? As we clean up the grid, clean  
19 up our transportation system, clean up buildings and the  
20 opportunity for us to have this future where everybody  
21 benefits is right before us.

22           And I think the IEPR with its nerdy hundreds of  
23 pages actually emblematic of that, so just kudos to you all  
24 and to the team and to Heather and to everybody who was  
25 involved in this.

1           And I want to build on this idea that we're  
2 always improving our analytical capabilities to be able to  
3 address these changing conditions. And as Heather outlined  
4 in transportation, there's all these transformational  
5 changes. We're trying to figure out with the EAD what does  
6 that look like in terms of our analysis. And increasingly  
7 how do we analyze what it means if we do EV charging  
8 correctly and what does it mean if we do EV charging  
9 incorrectly to the grid and to our demand forecast. And as  
10 all these thing start coming together this is a great --  
11 the IEPR is the place where we get to sink our teeth into  
12 these thorny issues. And really wrestle analytically and  
13 identify what are the policies we need to get to the end  
14 game that we all want?

15           So that's all I have to say. So thank you.

16           CHAIR HOCHSCHILD: Thank you, Commissioner. All  
17 right, is there a motion for Item 5?

18           VICE CHAIR SCOTT: I'll move approval of Item 5  
19 with the errata.

20           COMMISSIONER MCALLISTER: I will second.

21           CHAIR HOCHSCHILD: All right. All in favor say  
22 aye.

23           (Ayes.)

24           CHAIR HOCHSCHILD: That motion passes  
25 unanimously.

1           Let's move on to Item 6. Before we take that up,  
2 I just wanted to make a few brief comments on that. We're  
3 hearing today from a number of local governments about  
4 their proposed energy codes.

5           I just want to be clear. The California Energy  
6 Commission, as an agency, we fully support and welcome and  
7 encourage local government leadership to decarbonize the  
8 building sector. It's been absolutely essential. In fact,  
9 Governor Newsom, when he was the Mayor of San Francisco,  
10 convened an event called World Environment Day where we had  
11 the mayors of the 100 biggest cities in the world come  
12 together, in San Francisco, to sign urban environmental  
13 accords with each other.

14           We are in today an urban society, both here in  
15 the United States and globally. In fact the trend,  
16 population-wise, continues toward urban areas. And so  
17 leadership at the local level, particularly in cities is  
18 essential.

19           However, I want to be clear that the  
20 responsibility of the Energy Commission here is highly,  
21 highly prescribed. So we are basically looking at two  
22 things. Did the proposed code -- does it violate Title  
23 1024 or is it actually stronger than our state energy code?  
24 And did the local government consider cost? And if the  
25 answer to those two questions is yes, the policy gets

1 approved. That's been how we've been doing this as it will  
2 be going forward. We've approved over 100 Reach Codes from  
3 local governments since 2000. And as I said we want to see  
4 more of that, but the venue for debating the specifics of  
5 the policies is not at the Energy Commission. It's at the  
6 local process, local hearings of each of these local  
7 governments.

8 I just want to make that clear, because I think  
9 the volume of these has been increasing. And I think it's  
10 worth just noting what our scope of responsibilities is, so  
11 with that let's go take up Item 6.

12 **ITEM 6:**

13 MS. DROZDOWICZ: Good morning Chair and  
14 Commissioners. The California Public Resources Code  
15 requires locally adopted building energy standards to  
16 result in a reduction of energy consumption levels,  
17 compared to the requirements in the California Energy Code.

18 As a consequence, in order for a local standard  
19 to be enforceable, the local jurisdiction must file its  
20 determination that its standards are cost-effective with  
21 the CEC. And the CEC must find that the local standards  
22 will require a reduction of energy consumption levels  
23 compared to the statewide Energy Code.

24 Nine jurisdictions have submitted applications  
25 for Commission consideration at this Business Meeting.

1 They are the cities of Berkeley, Brisbane, Healdsburg,  
2 Milpitas, Mountain View, Palo Alto, Santa Rosa, Windsor,  
3 and the Town of Los Gatos.

4           Among them, four jurisdictions require that new  
5 low-rise residential construction be all-electric. They  
6 are Santa Rosa, Windsor, Palo Alto and Los Gatos. One  
7 jurisdiction, Mountain View, goes further and requires that  
8 all new construction be all-electric.

9           Four jurisdictions require that new construction  
10 is "electric preferred," with higher efficiency  
11 requirements for mixed fuel buildings, as well as pre-  
12 wiring for future replacement of any gas equipment with  
13 electric. They are Berkeley, Milpitas, Healdsburg, and  
14 Brisbane. One jurisdiction, Palo Alto, requires electric  
15 preferred for all buildings other than low-rise  
16 residential, pairing it to their requirement that low-rise  
17 residential construction be all-electric.

18           Six jurisdictions require solar photovoltaic  
19 systems on buildings not subject to the 2019 Energy Code  
20 photovoltaic requirements. They are Santa Rosa, Berkeley,  
21 Mountain View, Milpitas, Palo Alto and Brisbane. Two of  
22 these, Brisbane and Milpitas, allow Solar Thermal Hot Water  
23 to be installed instead of PV.

24           Some of the adopted local ordinances also include  
25 provisions that are energy related, but not subject to CEC

1 approval, which I mention only for completeness. Berkeley,  
2 Mountain View and Milpitas include provisions for electric  
3 vehicle charging infrastructure. Santa Rosa and Los Gatos  
4 include pre-wiring provisions for battery storage systems.  
5 And Berkeley and Mountain View also include green building  
6 provisions unrelated to energy use or efficiency.

7           Staff posted the complete applications, including  
8 the local ordinances and adopted cost effectiveness  
9 analysis, on the CEC's website under Docket 19-BSTD-06 for  
10 either a mandatory 60-day public review, and that was for  
11 ordinances posted in 2019, or a 15-day public review for  
12 ordinances posted after January 1st of this year.

13           The following public comments were received  
14 before the close of the comment period. The Western  
15 Propane Gas Association urged deployment of all clean  
16 energy sources to meet the challenge of climate change and  
17 decarbonization. PG&E, provided letters of support for  
18 applications from the cities of Berkley, Brisbane,  
19 Healdsburg, Los Gatos and Milpitos, Mountain View and  
20 Windsor. We also had letters of support from over 20  
21 individuals and several nonprofits.

22           The law firm of Miller, Starr, Rigalia requested  
23 that the CEC deny the applications of the cities of Windsor  
24 and Santa Rosa based on pending legal actions they filed  
25 against those cities. These and other comments received



1 were not germane to the application process pursuant to  
2 Public Resources Code 25402.1(h)2.

3           Staff has reviewed the applications to determine  
4 whether the local ordinances will result in the reduction  
5 of energy consumption levels permitted by the 2019 Energy  
6 Code, per the requirements in the Public Resources Code.  
7 Staff found that the standards will reduce the amount of  
8 energy consumed, and will not lead to increases in energy  
9 consumption inconsistent with state law. Staff further  
10 confirmed that each of the jurisdictions publicly adopted a  
11 finding of cost effectiveness for the standard.

12           Because staff has found that the applications  
13 meet all the requirements of the Public Resources Code,  
14 staff recommends approving the enforcement of the  
15 ordinances. I am available to answer any questions that  
16 you might have. Thank you.

17           CHAIR HOCHSCHILD: Great. Thank you.

18           Let's go to public comment. Why don't we start  
19 with Daniel Barad from the Sierra Club, California.

20           MR. BARAD: Good morning, Daniel Barad here on  
21 behalf of Sierra Club California representing 13 local  
22 chapter in California, half a million members and  
23 supporters throughout the state.

24           I'm here to express our strong support for the  
25 Energy Commission's approval of these local ordinances or

1 Reach Codes today.

2           These Reach Codes are the result of statewide  
3 cost effectiveness analysis and an extensive stakeholder  
4 engagement process. Most if not all of the Reach Codes  
5 before the Commission today were unanimously approved by  
6 city councils and were broadly supported by community  
7 members.

8           This local democratic process is leading the way  
9 for the state to implement decarbonization solutions that  
10 are critical in the fight against climate change. These  
11 Reach Codes are not just a measure to reduce our GHG  
12 emissions, they will also lower the cost of new  
13 construction and reduce indoor and outdoor air pollution  
14 and their associated health and economic impacts.

15           These cities are providing bold leadership that  
16 is necessary to combat climate change, clean the air and  
17 improve housing and energy affordability.

18           Again, Sierra Club California supports the  
19 Commission's approval of these Reach Codes and urges the  
20 Commission to build upon this local leadership in the 2022  
21 code cycle. Thank you.

22           CHAIR HOCHSCHILD: Great, thank you.

23           Next let's just go to Kelly Cunningham from PG&E.

24           MS. CUNNINGHAM: Just here to public reiterate  
25 our support. PG&E strongly supports California's clean air

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1 goals and is proud to serve electric and natural gas to the  
2 jurisdictions we serve.

3 PG&E does welcome the opportunity to avoid  
4 investments in new gas assets that later might prove  
5 underutilized as local governments and the state work  
6 together to realize long-term decarbonization objectives.  
7 With this is mind, PG&E supports local government policies  
8 that promote all electric new construction when it is cost  
9 effective.

10 Beyond new construction, PG&E believes a  
11 multifaceted approach is needed to cost effectively achieve  
12 California's broader economy-wide long-term GHG reduction  
13 objectives. And this includes transportation and building  
14 electrification as well as decarbonizing the gas system  
15 with renewable natural gas and hydrogen.

16 We thank you for the opportunity to voice support  
17 for all the ordinances up for approval today, both those we  
18 serve and those we support through our Reach Codes  
19 Technical Assistance Program, which is a statewide effort  
20 non-inclusive. Thank you.

21 CHAIR HOCHSCHILD: Thank you.

22 Let's go on to Pierre Delforge from NRDC.

23 MR. DELFORGE: Chair and Commissioners, good  
24 morning, Pierre Delforge from the Natural Resources Defense  
25 Council. The nine local building codes in front of you

1 today are an example of California policy at its best;  
2 local governments exercising their legal authority to  
3 protect their constituents from the climate, health and  
4 safety and economic impact of fossil fuels.

5 In doing so they are developing the market for  
6 clean buildings and heating equipment paving the way for  
7 expanding clean and affordable new construction to all  
8 Californians for future statewide policies.

9 To date, 28 local governments in California have  
10 exercised this authority on this building cycle or this  
11 building code from Carlsbad, in San Diego County; Santa  
12 Monica in LA; San Jose in the Bay Area and the City of  
13 Davis next door. They've done so through extensive  
14 stakeholder processes to determine that these standards  
15 will make buildings more affordable to build and to live  
16 in.

17 This local democratic process is setting an  
18 example for the state and the nation to fight climate  
19 change at a time when wild fires in Australia, in the  
20 Amazon, and in our own state are stark reminders of the  
21 kind of crisis, which is upon us and which requires urgent  
22 and bold leadership. These 90 days are providing this bold  
23 leadership.

24 For these reasons we urge approval. Thank you.

25 CHAIR HOCHSCHILD: Thank you.

1           Let's move on to Martha Helak from SMUD.

2           MS. HELAK: Thank you. Thanks for the  
3 opportunity to comment today. I just wanted to say that  
4 SMUD strongly supports the state's decarbonization efforts  
5 to reduce greenhouse gas emissions by promoting building  
6 electrification and increasing the development of renewable  
7 resources.

8           As the Commission knows, in December, 2019, you  
9 approved our IRP that identified the need for significant  
10 amount of additional renewable resources and sets and  
11 accelerated goal for net zero by 2040, five years ahead of  
12 SB 100. Utilities like SMUD are decarbonizing buildings  
13 through clean electricity. And building electrification is  
14 crucial to meeting California's pioneering greenhouse gas  
15 and carbon reduction goals.

16           These Reach Codes presented today are absolutely  
17 a step in the right direction. They are a great tool for  
18 utilities and consumers to leverage to help meet  
19 California's goals. We also feel that this will present an  
20 opportunity for contractors and consumers to start getting  
21 comfortable with all electric technology.

22           So SMUD encourages the Commission to approve  
23 these Reach Codes and to keep inspiring the positive moment  
24 we're building here today. Thank you.

25           CHAIR HOCHSCHILD: Thank you.

1           Let's move on to Steve Uhler.

2           MR. UHLER: My name is Steve Uhler, that's U-h-l-  
3 e-r. The CBECC program, I'm wondering what kind of  
4 modifications are going to be required in order to  
5 implement these standards. I take it that you've read all  
6 my comments related to this subject matter.

7           I'm really interested in a quoted statement in  
8 the finding and resolution that didn't show up until Friday  
9 evening, this last Friday, that talks about substantial  
10 change in factual. Yet it doesn't site any law that that's  
11 about. I'd like to know what that is about.

12           The findings that the Commission has found, did  
13 they ensure that the proper version of CBECC was used? Did  
14 they ensure that CBECC doesn't have any critical faults,  
15 particularly when it comes to going all electric.

16           As you just voted for the IEPR, I see that you  
17 agree that electricity has carbon in it. And that carbon  
18 is from a fossil fuel being burnt and there's energy and  
19 there's calculation that would show that all-electric homes  
20 for quite a while into the future will actually use more  
21 energy, because they are -- when you turn on that stove at  
22 dinner time you're firing up most likely a peaker plant.  
23 And that's in that consideration.

24           So also I have requested, and I have requested  
25 multiple times, the certification process for the CBECC

1 program. On Thursday I received a link to a code  
2 management directory that's on the web. And after going  
3 through there I found things like missing standby losses  
4 for things like small electric water heaters.

5 I also didn't find any flow chart for any of the  
6 software. So I have a concern that the folks that are  
7 using this software, the Commission has really delivered  
8 something that allows them to calculate what the energy use  
9 will be when these codes are in place.

10 And then also what is the effect of 25402.2,  
11 because you can prohibit somebody from doing any of this  
12 stuff. These would be a building standard not otherwise in  
13 statute, so are you going to follow through with 25402.2?

14 Thanks.

15 CHAIR HOCHSCHILD: Thank you.

16 Let's move on to Kevin Messner from the  
17 Association of Home Appliance Manufacturers.

18 MR. MESSNER: Thanks. Good morning, Kevin  
19 Messner with the Association of Home Appliance  
20 Manufacturers. I just wanted to comment on we represent  
21 products in the home that are dryers and cook tops in the  
22 (indiscernible) space. So what we make both electric --  
23 our members make both electric and gas appliances. But I  
24 just this larger issue, I just wanted to express caution in  
25 the sense there's cooking, gas cooking, there is a lot of

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1 interest in ability to cook using a gas cook top.

2 And also for dryers, for the larger dryers, gas  
3 drying can be more efficient the larger you get and the  
4 need for that energy. And also cycle times also enter into  
5 it, which has been an issue that's come out larger and  
6 federally as well, cycle times.

7 And also that there are potentially alternatives  
8 beyond -- if natural gas is the worry, there are other  
9 alternatives that could come down the pike, so you could  
10 plumb a house and still use other potential alternatives in  
11 the future. So I just wanted to raise those.

12 Like I say our members make both appliances, so  
13 they'll sell them both. But there are consumer interests  
14 in having a choice and the ability to use both. So thank  
15 you.

16 CHAIR HOCHSCHILD: Thank you.

17 Do we have any public comment on the phone? All  
18 right, let's move on. Commissioner McAllister?

19 I'm sorry. Bob Raymer? I didn't have your card,  
20 yeah go ahead.

21 MR. RAYMER: My apologies. I didn't put in a  
22 blue card. But I'm Bob Raymer with the California Building  
23 Industry Association. And while we don't have a position  
24 on the local ordinances before you today, I wanted to bring  
25 to your attention an odd situation that's popped up in just

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1 the last two days.

2           Whether it's by local mandate or through a  
3 variety of local initiatives, the building industry has  
4 always been every interested in trying to acquire a variety  
5 of incentives, be them regulatory or financial economic  
6 incentives to help encourage the building industry to go in  
7 certain directions. And over the years the new solar home  
8 program, the PV compliance credit, now the battery storage  
9 credit, it helps the industry sort of move in directions at  
10 a relatively balanced speed. And they've had enormously  
11 great results.

12           Oddly enough, as you look at all these ordinances  
13 though, the common theme is electrification. We understand  
14 that the state's going to that. And we want to be a party  
15 to that.

16           Over the last two days in two separate venues  
17 I've come across an instance where I'm hearing that local  
18 jurisdictions are requiring gas line extensions to homes  
19 that will be all electric. And I'm not familiar with  
20 statute that requires that. I'm not familiar with the PUC  
21 whether it be Rule 15, 15.1 or 16. I have no idea why this  
22 is. We're going to be looking into it, but I suspect we're  
23 probably going to be coming to the CEC and the PUC for  
24 assistance in this.

25           But as you can imagine not having to put in the

1 gas line extension will save us probably about \$1,500 to  
2 \$2,000 a house in large production housing communities. So  
3 with that I just want to put that on your radar, but we're  
4 going to be following up on that. Thank you very much.

5 CHAIR HOCHSCHILD: Great. Thank you so much,  
6 appreciate it.

7 Commissioner McAllister?

8 COMMISSIONER MCALLISTER: Thanks, Mr. Raymer.

9 So I guess I wanted to actually just make a  
10 couple of brief comments and actually first ask staff a  
11 question. Because this issue of diminution of energy  
12 consumption, I think maybe Peter you could sort of walk us  
13 through what that looks like in these cases of all  
14 electrification.

15 MR. STRAIT: Sure, so the Energy Commission has  
16 previously found that switching from a depletable resource  
17 to a renewable resource is conservation of our depletable  
18 energy reserves, of like our strategic gas reserves and  
19 what have you.

20 In that respect, any load that you can shift from  
21 being a non-renewable mode to a renewable load saves  
22 energy. And so this electrification means these resources  
23 can now first leverage the renewable portfolio that we have  
24 in California where nearly half, more than half depending  
25 on time of day, of our energy is coming from renewable

1 sources just by being connected to the grid. And it  
2 enables that building to make use of onsite renewable  
3 technologies.

4 So for that reason we find that these  
5 electrification ordinances do lead to energy savings. They  
6 are -- So on that bases we were able to find that that  
7 minimum bar of diminution is met.

8 COMMISSIONER MCALLISTER: And maybe there's an  
9 example regarding the electric ready homes, right? That  
10 sort of then some pretty easy assumptions you can kind of  
11 kind of get to a future where that diminution has actually  
12 happened.

13 MR. STRAIT: Correct. In fact I would say  
14 electric ready pairs very nicely with solar ready. At the  
15 moment that you want to install solar panels, if you still  
16 have gas equipment and now you have a solar resource --

17 COMMISSIONER MCALLISTER: I'm, sorry. I meant to  
18 say solar ready, sorry.

19 MR. STRAIT: Oh sorry. So yes, we adopted solar  
20 ready requirements many years ago to enable that to make  
21 houses more likely to be able to install solar. A certain  
22 percentage of those will eventually install solar where  
23 they otherwise wouldn't have because they don't have the  
24 right roof space. So that too we can project and say this  
25 is going to lead to some non-zero amount of savings from

1 people being able to do this.

2           And as we look at electric ready requirements  
3 that some of these are electric preferred or electric  
4 ready, certainly those go hand-in-hand just to say when  
5 you've got the solar resource onsite you can impair that to  
6 electric equipment.

7           Electrification means now that you have electric  
8 equipment there you can easily pair that to onsite solar  
9 and get a lot of benefit out of it.

10           COMMISSIONER MCALLISTER: Yeah, great. Okay, so  
11 I just wanted to put it out there, so thanks for that more  
12 detailed explanation. And then I guess the only other  
13 thing is that as in the past, and I was not at the business  
14 meeting where we adopted a bunch of these a couple of  
15 months ago, but we're not in business of second guessing  
16 the motivations of the local governments. They bring these  
17 applications. We check the boxes and if legal has anything  
18 they want to further explain about that you'd be more than  
19 welcome.

20           But in terms of having made a finding that it is  
21 cost effective and are showing on the energy front that it  
22 actually is a diminution, that's really all we have to do.  
23 And you know, local government leadership, we know how  
24 important it is and so we want to support their actions and  
25 not sort of -- yeah, and as long as they comport with the

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1 state law and regulations.

2 So is there anything else to be said there? No.  
3 It's okay. Good.

4 CHAIR HOCHSCHILD: Any other credits from other  
5 Commissioners on this item. If not do we have a motion on  
6 Item 6?

7 COMMISSIONER MCALLISTER: I move this item.

8 CHAIR HOCHSCHILD: Is there a second?

9 COMMISSIONER DOUGLAS: Second.

10 CHAIR HOCHSCHILD: All in favor say eye.

11 (Ayes.)

12 CHAIR HOCHSCHILD: That motion passes  
13 unanimately.

14 Let's move on to Item 7, Association of Home  
15 Appliance Manufacturers Kitchen Range Hood Directory and  
16 Program Approval

17 MR. STRAIT: This item is actually mine, so I'll  
18 go ahead and get started.

19 First, good morning Chair and Commissioners,  
20 ASHRAE Standard 62.2, titled "Ventilation and Acceptable  
21 Indoor Air Quality in Low-Rise Residential Buildings,"  
22 requires that product performance for kitchen range hoods  
23 be verified using a rating program and directory of product  
24 listings overseen by the Home Ventilating Institute or HVI.  
25 The Energy Code incorporates ASHRAE 62.2 by reference, and

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1 as a consequence includes identical requirements to verify  
2 kitchen range hood product data using the HVI directory.

3 Provisions in the California Administrative Code,  
4 that is Title 24, Part 1, that pertain to the Energy Code  
5 include a provision in Section 10-109 stating that, and I  
6 quote, "The Commission may authorize alternative procedures  
7 or protocols that demonstrate compliance with Part 6."

8 The Association of Home Appliance Manufacturers,  
9 or AHAM has created a product testing and listing program  
10 for kitchen range hoods under their Verifide program, with  
11 the goal of providing the same service as is provided by  
12 the HVI Certified Rating Program under ASHRAE Standard  
13 62.2. AHAM is seeking approval under section 10-109 for  
14 the 2019 code cycle to allow use of its directory for  
15 demonstrating compliance.

16 AHAM's initial application was reviewed by staff  
17 and posted for public review on November 4th, 2019. Staff  
18 provided commentary and feedback on the application and  
19 also supplied AHAM with the public commentary received  
20 during that public review period. AHAM revised their  
21 application to account for staff and public feedback, and  
22 their revised application was posted for additional public  
23 comment on January 31st, 2020. Staff is now bringing the  
24 revised application before the Commission for approval.

25 Staff finds that it is reasonable to expect that

1 following the AHAM procedures would lead to the same  
2 results as the ASHRAE Standard 62.2, noting that AHAM's  
3 application commits to obtaining accreditation to perform  
4 all of the necessary tests.

5 Staff received public comments from several  
6 manufacturers, both in support of and opposed to their  
7 proposal. Six manufacturers and one member of the public  
8 expressed support, and eight manufacturers and HVI  
9 expressed opposition. The primary topics of the comments  
10 were whether having an alternate standard would create  
11 confusion or would create beneficial competition, and  
12 whether additional rating capacity was needed.

13 Staff notes that approval of alternatives under  
14 section 10-109 is for the 2019 Energy Code cycle. Staff is  
15 currently tracking ASHRAE's development of amendments to  
16 62.2 standard, including updates to rating requirements.  
17 Staff will take up the question in the 2022 rulemaking  
18 proceeding of whether to adopt Energy Code language  
19 allowing an alternative to ASHRAE specifications or to  
20 adhere to ASHRAE going forward.

21 Staff also notes that approval only applies to  
22 the material brought before the Commission and not to any  
23 subsequent changes to the program described in AHAM's  
24 application.

25 Staff finds that AHAM meets the criteria

1 necessary for consideration by the Commission and therefore  
2 recommends that AHAM's application materials be approved,  
3 which would authorize use of their directory as an  
4 alternative to use of HVI's directory under the ASHRAE  
5 Standard 62.2 for the 2019 code cycle, provided that all of  
6 the conditions specified in their submitted materials are  
7 fully adhered to.

8 I am available to answer any questions.

9 CHAIR HOCHSCHILD: Great. Thank you.

10 We do have some public comment on this item. And  
11 we have Kevin Messner from the Association of Home  
12 Appliance Manufacturers to come first.

13 MR. MESSNER: Thank you. Good morning, I am  
14 pleased to be here to in favor of a CEC action. So this is  
15 a great place to be. Really, really I am pleased to have  
16 this before you today.

17 I just want to make one note on some of the  
18 manufacturers that have wrote in, in opposition, don't  
19 manufacture range hoods.

20 I did want to point out that I was here almost  
21 two years ago and when the Building Codes were approved and  
22 mentioned the monopoly that could be created. And Peter  
23 was there and he said we have a process if any other thing  
24 comes up. And at that point we did not even have in mind a  
25 possibility of doing anything. But through this process we

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1 did the application and I truly just want to say thank you  
2 Peter, truly, really, because truly he has been honest and  
3 straightforward through this whole thing. And even came  
4 and worked on this I know when he was sick, so I mean  
5 that's above and beyond, so really thank you, Peter.

6 We think this is a good application. We've  
7 worked hard on it. And just really ask you to approve this  
8 and we will keep wanting to work on the other issues that  
9 are on this program, largely in the Building Code that  
10 comes next cycle. There's a lot of work that needs to be  
11 done. But I'm happy to answer any questions that you guys  
12 have or that may come up with other future commenters.  
13 Thank you.

14 CHAIR HOCHSCHILD: Thank you.

15 Let's move on to Stephen Gatz of Whirlpool.

16 MR. GATZ: Good morning, Steve Gatz. My name is  
17 Steve Gatz representing Whirlpool Corporation and I too am  
18 pleased to hear that the Commission is in favor of this  
19 proposal.

20 We strongly support AHAM as the ultimate  
21 certification body. This is not primarily an issue of  
22 existing lab capacity. It would also provide manufacturers  
23 a single source for performance standard issues across  
24 multiple product lines. Our dishwashers, refrigerators,  
25 cooking appliances and numerous others are overseen by

1 AHAM. They utilize consensus based policies and procedures  
2 have existing relationships with the Department of Energy,  
3 Energy Star, CEC obviously and global involvement with IEC  
4 performance standards where we've already started working  
5 to bring some of the US type requirements over to  
6 international ones for harmonization.

7 I'd also like to provide some specific responses  
8 to some of the latest HVI objections. That wasn't my  
9 intent, but they just pretty much targeted some of us  
10 manufacturers. While they state, as Kevin said, that it's  
11 manufacturers their members are strongly opposed to AHAM.  
12 We were not consulted and several other members have also  
13 presented their support for AHAM. And most of the supports  
14 for HVI came from members, as Kevin said without listed  
15 range hoods.

16 Several members have commented how ASHRAE 62  
17 references (indiscernible) HVI. We agree with those  
18 comments, but they're separate clauses in the Building  
19 Code. And HVI's not in a position to start qualifying  
20 competitive labs. It's just an obvious conflict of  
21 interest. The backlog that was created by HVI is currently  
22 the pig in the python, as one referred to it, was created  
23 because the condition that was required for California  
24 wasn't previously required and created a whole bunch of  
25 work load for everyone.

1           The reinstatement of AMCA as an alternate lab,  
2 was approved back in September of 2018. However it was  
3 purposefully omitted from many of their meetings, two  
4 general membership meetings and wasn't discussed again  
5 until June of 2019. So it definitely put us in a difficult  
6 position.

7           Equitable rating programs such as AHAM provide  
8 manufacturers, or allow manufacturers, to choose a  
9 certification body based upon factors they consider  
10 important such as membership costs, responsiveness and  
11 interaction with other bodies such as ASHRAE and as I  
12 mentioned the IUC.

13           We also support the repeal of the requirement for  
14 sound testing proposed by APTEC (phonetic) at the working  
15 speed condition that's currently in the 2019 requirements  
16 as it's not in alignment with ASHRAE 622, which recently  
17 voted to reject that. We do understand that's a separate  
18 issue. I just wanted to point out our support for that as  
19 well. Thank you.

20           CHAIR HOCHSCHILD: Thank you. Let's move on to  
21 Jon Schlosser from GE Appliances.

22           MR. SCHLOSSER: Thank you, Commissioner. This is  
23 John Schlosser of GE Appliances. I appreciate your time  
24 today. At Whirlpool, we're a manufacturer of range and  
25 ventilation products and in support of AHAM's petition.

1 I would like to know a couple of things  
2 initially. Our account of those manufacturers in support  
3 is a little different than Mr. Strait's. I count eight  
4 manufacturers in support of this petition, in addition to  
5 one member of the public and one third-party laboratory.

6 I would note that GE Appliances as well as  
7 Whirlpool and (indecipherable) have had employees as  
8 members of the board of HVI, so we do not come at this  
9 issue from an outsider track.

10 In addition to a component of Title 24 previously  
11 cited as 10109(h), which of course gives the Commission the  
12 ability to approve alternate verification methods, because  
13 of the concerns in particular kitchen range hoods if you go  
14 to the reference appendix of Title 24, 2019, RA3.7.4.3  
15 specifically states that verification can be done through  
16 the HVI or I quote, "another directory of certified  
17 products performance ratings approved by the Energy  
18 Commission."

19 That is that issues with HVI's monopoly were  
20 considered at the time of the 2019 Title 24 and additional  
21 language was included by the Commission in this particular  
22 section, because of the Commission's good foresight in  
23 getting the (indiscernible) may occur.

24 I'll reserve my comments from there, but happy to  
25 take any questions or respond to any concerns.

1 CHAIR HOCHSCHILD: Thank you.

2 Any more comments in the room or on the phone?

3 If not, let's go to Commissioner McAllister.

4 COMMISSIONER MCALLISTER: All right, so I  
5 appreciate, Mr. Messner, your comment to support something  
6 here at the Energy Commission. It's good to mix it up  
7 every now and then. But this is pretty straightforward. I  
8 think the commenters have laid it out pretty clearly.

9 I guess I would just highlight the need for  
10 consistency and harmonization and equivalences in the  
11 various steps, so we know what we're getting whatever list  
12 they're on. And so if that means continuing to work with  
13 ASHRAE or kind keeping together on that, how many mics you  
14 have in all the different issues of the test procedure,  
15 then I would just encourage staff and AHAM and stakeholders  
16 to work together to make sure that we have that  
17 equivalence. And there's no doubt, there's no favorable  
18 treatment by being on one or the other list, because that  
19 would be bad.

20 But other than that it's very straightforward and  
21 I would move this item.

22 CHAIR HOCHSCHILD: Thank you. Is there a second?

23 COMMISSIONER DOUGLAS: Second.

24 CHAIR HOCHSCHILD: Second by Commissioner  
25 Douglas. All in favor say aye.

1 (Ayes.)

2 CHAIR HOCHSCHILD: That motion passes  
3 unanimously.

4 Let's move on to Item 8, Right-Energy Title 24  
5 Residential Compliance Software.

6 MR. FROESS: Good morning Chair and  
7 Commissioners. My name is Larry Froess, a Senior  
8 Mechanical Engineer in the Building Standards Office and  
9 Project Manager of Compliance Software.

10 I'm here to ask for your approval of Wrightsoft's  
11 Right-Energy Title 24 Version 2019.1.1 software as an  
12 alternative calculation method for showing compliance with  
13 the 2019 Energy Code for newly constructed low-rise single-  
14 family residential buildings.

15 Staff has confirmed that the Applicant is in  
16 compliance with the requirements of the adopted Alternative  
17 Calculation Method Approval Manual.

18 CBECC-Res 2019 was approved in May of 2019 as the  
19 CEC's version of compliance software. And by approving  
20 Right-Energy Title 24 Version 2019.1.1, the building  
21 industry will have another choice of software with an  
22 alternative user interface to demonstrate compliance with  
23 the 2019 Energy Code.

24 Thank you and I'm available to answer any  
25 questions you may have.

1 CHAIR HOCHSCHILD: I do not see public comment on  
2 this item. Is there anyone in the room wishing to make a  
3 comment? Mr. Uhler. Yeah, go ahead.

4 MR. UHLER: My name is Steve Uhler, U-h-l-e-r.  
5 I've been in search of the certification process that's  
6 required by Public Resource Code 25402.1(a). You're  
7 supposed to have a procedure, a process for certifying  
8 items such as this, not specifying, certifying.

9 And I, in contact with your public records  
10 attorney about this, he does state that this is not his  
11 area of expertise. So I'm wondering does the Commission  
12 have a supervising attorney for your records attorney.

13 The compliance manager is supposed to be  
14 certified, but nowhere in the ACM manuals, approvals and so  
15 one does it describe this process of certifying. How it's  
16 tested, how the code modules are controlled, which showed  
17 up heavily. I had one of my assistants go through this  
18 SVE, this sub version control system that the Commission  
19 appears to be using now, and came up with a number of items  
20 that are disturbing as far as knowing are you actually  
21 executing the correct code.

22 In the current version, 19.1, there are items  
23 that don't function. And the person who writes the tech  
24 manuals has identified, "Yeah, that's correct. They don't  
25 work." So I'm really concerned about this certification

1 process. How's it's happened. This applies even over to  
2 these local codes.

3 I'm not seeing the kind of stuff that even a  
4 small manufacturing firm would do to do forecasting or  
5 planning or costing. Job costing is basically what I'm  
6 talking about. So I'm concerned that we're building upon a  
7 system that has not actually been tested fully. And you  
8 don't actually have Title 20, which would require Title 20  
9 code, to certify this. It's not Title 24. This is a  
10 standard that's called out in statute.

11 So I've made a public record request. It hasn't  
12 been complied with. I'd really like to know what this  
13 certification process is that is required in 25402.1(a).  
14 Thank you.

15 CHAIR HOCHSCHILD: Thank you.

16 Is there any other public comment on this item  
17 either in the room or on the phone? No?

18 Commissioner McAllister?

19 COMMISSIONER MCALLISTER: Larry, maybe you could  
20 just the process that we go through to get something on the  
21 business meeting agenda and evaluate it.

22 MR. FROESS: Sure. Yeah, we have the Alternative  
23 Calculation Methods Approval Manual, which is the adopted  
24 document. That specifies that the third part software  
25 vendor runs our tests. We have a --I forgot how many test



1 files it would be in, our expert knows. And we run the  
2 tests through that certified -- through the proposed  
3 software. And if the results are within a pretty fine  
4 margin of compliance margin, then it meets our approval  
5 requirements.

6 So then we post it -- we notify it through the  
7 business meetings. And we get approved.

8 COMMISSIONER MCALLISTER: Yeah. Thanks.

9 And then going forward there's a process for I  
10 think anybody who wants to say, "Hey, I noticed something."  
11 They can give staff a heads up (indiscernible) --

12 (Overlapping colloquy.)

13 MR. FROESS: Yeah, (indiscernible) we have the  
14 residential and commercial support emails. And  
15 (indecipherable) it's been is one of the big ones for the  
16 residential. I'm on the commercial side.

17 COMMISSIONER MCALLISTER: Yeah, so I just want to  
18 reassure that there is a process in place and it's well  
19 known, so all right.

20 CHAIR HOCHSCHILD: Is there a motion?

21 COMMISSIONER MCALLISTER: Yes, so I'll move Item  
22 8.

23 CHAIR HOCHSCHILD: Is there a second?

24 VICE CHAIR SCOTT: Second.

25 CHAIR HOCHSCHILD: Second by Vice Chair Scott.

1 All in favor say eye.

2 (Ayes.)

3 CHAIR HOCHSCHILD: That motion passes  
4 unanimously. Let's move on to Item 9, Adopting Energy  
5 Commission Determination Finding Glendale Water and Power's  
6 Integrated Resource Plan Consistent with the Requirements  
7 of SB 350

8 MS. GILL: All right. Good Morning Chair and  
9 Commissioners, my name is Liz Gill. I am in the Planning  
10 and Modeling Unit in the Energy Assessments Division, and I  
11 reviewed the Glendale IRP. Today I will present the review  
12 of Glendale Water and Power's IRP and propose adopting the  
13 Executive Director Determination finding it consistent with  
14 SB 350 requirements, specifically Section 9621 of the  
15 Public Utilities code.

16 As a status update all 16 POUs have submitted  
17 their IRPs, 15 Executive Director determinations have been  
18 adopted. And today we bring forth the final IRP for  
19 adoption.

20 The next step is that the POUs are required to  
21 adopt their next IRP by January 1st, 2024. So we expect to  
22 repeat this cycle in about four years.

23 As reviewed in their IRPs the POUs must plan to  
24 meet the 2030 CARB-established GHG reduction targets and  
25 renewable portfolio standard requirements. Along with the

1 GHG reduction and renewable energy goals, staff reviewed  
2 the IRPs to ensure the POUs adequately addressed preferred  
3 resources and key planning areas, including energy  
4 efficiency and demand response, energy storage,  
5 transportation electrification, reliability, and minimizing  
6 local air pollutants with an early priority on  
7 disadvantaged communities.

8           So this slide provides an overview of Glendale  
9 Water and Power. Most of Glendale's customers are  
10 residential. However, most of the load is commercial,  
11 which is pretty typical. Glendale plans to fall under  
12 CARB's GHG reduction targets. They plan to reduce their  
13 GHG emissions to around 195,000 metric tons of CO2  
14 equivalent by 2030. Part of this reduction is because  
15 Glendale stops receiving coal-powered electricity from the  
16 Intermountain Power Plant or IPP, by 2025, which will be  
17 replaced with natural gas generators.

18           Glendale is also planning on meeting the 60  
19 percent RPS by 2030 through procuring additional wind and  
20 solar resources.

21           Between 2019 and 2030 there are several planned  
22 changes to Glendale's Resource Mix. In addition to adding  
23 new solar and wind resources and the replacement of IPP  
24 with natural gas generators Glendale will replace Grayson  
25 Power Plant Units 1 through 8, which are scheduled to

1 retire in 2021 and is a key resource for local reliability.

2           Glendale found the replacement resource mix that  
3 could meet local reliability to be local distributed energy  
4 resources and load reduction, battery storage, and natural  
5 gas-fired internal combustion engines.

6           However, before any internal combustion engines  
7 can be procured, the Glendale City Council is requiring  
8 Glendale to conduct another request for offers for  
9 additional zero carbon resources and to receive City  
10 Council approval.

11           All right, so in conclusion staff finds the  
12 Glendale IRP for the -- or staff has reviewed the Glendale  
13 IRP for the 2030 GHG reduction target, the renewable energy  
14 procurement targets along with the SB 350 requirements to  
15 address preferred and clean resources.

16           Based on the review, staff finds the Glendale IRP  
17 to meet the requirements of SB 350. We received no  
18 comments on the staff review paper or the Executive  
19 Director Determination.

20           We have representatives from Glendale Water and  
21 Power today via WebEx.

22           So I am requesting the CEC to adopt the Executive  
23 Director determination finding Glendale's IRP consistent  
24 with the requirements of PUC 9621. And with that thank  
25 you. I am happy to answer any questions.

1 CHAIR HOCHSCHILD: Thanks. I don't have any  
2 cards on this item. Are there any folks or is Glendale on  
3 the line? No? I don't have a card from them either, so  
4 let's go to Commissioner McAllister.

5 COMMISSIONER MCALLISTER: You said Glendale was  
6 on the WebEx or something?

7 MS. GILL: They said they would be attending via  
8 WebEx.

9 COMMISSIONER MCALLISTER: Okay.

10 CHAIR HOCHSCHILD: Go ahead.

11 COMMISSIONER MCALLISTER: Okay, so  
12 congratulations on getting to the final first round of  
13 IRPs. And you can probably not rest for four years, but at  
14 least it's a milestone and it's important. And I just have  
15 to say thanks to you, Liz and Melissa and Paul and Mark and  
16 Siva's team, everybody who has been managing this process  
17 throughout. Because it's really, if you look at the sum  
18 total of all of the IRPs from the publicly owned utilities  
19 it's a quite compelling story how intentional and how  
20 proactive they are being in getting to their goals that are  
21 in turn our goals.

22 So I'm really happy to be at this place and I  
23 don't see any problems with this plan. I think it's a  
24 great one and am happy to move Item 9.

25 CHAIR HOCHSCHILD: Item 9. Is there a second for

1 Item 9?

2 COMMISSIONER DOUGLAS: Second.

3 CHAIR HOCHSCHILD: Commissioner Douglas seconds.

4 All in favor say aye.

5 (Ayes.)

6 CHAIR HOCHSCHILD: That motion passes

7 unanimously.

8 Let's move on to Item 10, Bay Area Air Quality

9 Management District.

10 MR. CAZEL: Good morning. My name is Phil Cazel

11 from the Advanced Vehicle Infrastructure Office. And I am

12 presenting for possible approval a contract with the Bay

13 Area Air Quality Management District that will provide \$5

14 million to the Energy Commission's Clean Transportation

15 Program funding for hydrogen refueling stations under a

16 competitive solicitation.

17 This \$5 million is a part of the nearly \$423

18 million allocated to California from the Volkswagen

19 Environmental Mitigation Trust created in October 2016 as

20 part of a class action lawsuit settlement against

21 Volkswagen for using illegal software devices to cheat

22 emissions tests in certain VW diesel vehicles.

23 The California Air Resources Board is the lead

24 agency for implementing the use of Mitigation Trust funds

25 in California and selected the Bay Area Air Quality

1 Management District to administer those funds for two of  
2 the five mitigation categories. And those are Zero-  
3 Emission Freight and Marine Projects; and Light-Duty Zero-  
4 Emission Infrastructure.

5           There was a \$10 million allocation for light-duty  
6 infrastructure projects, to be divided evenly between  
7 electric vehicle charging stations and hydrogen refueling  
8 stations. And although these funds are administered by the  
9 Bay Area Air Quality Management District, they will be used  
10 statewide to add to the portfolio of hydrogen refueling  
11 stations funded by the Energy Commission.

12           Energy Commission staff will evaluate  
13 applications received for hydrogen stations and propose  
14 those highest scoring four awards to be approved at a  
15 future Business Meeting later this year.

16           Staff recommends approval of this proposed  
17 contract to receive and utilize the additional \$5 million  
18 for anticipated hydrogen station grant awards. And this  
19 additional funding will accelerate the development of at  
20 least 100 publicly available hydrogen refueling stations  
21 authorized under Assembly Bill 8 and will increase the  
22 hydrogen refueling capacity in California to meet the  
23 projected demand for continued rollout of fuel cell  
24 electric vehicles.

25           Eric Brown from the California Air Resources

1 Board and Karen Schkolnick from the Bay Area Air Quality  
2 Management District are here today and all of us are happy  
3 to answer any questions you may have. And I think there  
4 are a couple of commenters as well. Thank you.

5 CHAIR HOCHSCHILD: Thank you.

6 Yeah, let's move first to Gia Vacin, ZEV Market  
7 Development Program Manager.

8 MS. VACIN: Hi. Good morning Chair and  
9 Commissioners. I am Gia Vacin. It's a hard one, yeah, the  
10 ZEV Market Development Program Manager with GO-Biz. And  
11 I'm here to express my support for this transfer of funds.

12 Your excellent team here worked very hard to  
13 create a really strong solicitation in the last GFO-19602.  
14 And it does a really good job of balancing government and  
15 industry needs in helping to unlock scale. So I applaud  
16 the staff and leadership's effort and focus on  
17 accomplishing this.

18 Adding the Bay Area AQMD VW mitigation funds to  
19 these funds will help streamline funding processes and also  
20 will help maximize the impact of the mitigation funds. And  
21 it will also make things easier for applicants, which  
22 hopefully will free up more time to go out there and build  
23 more infrastructure.

24 It sends a positive signal to industry as well  
25 that government continues to be thoughtful in our approach



1 to funding. And we're actively working together to stay  
2 aligned at the regional and state levels. So again I  
3 support the approval of this agenda item and thank you.

4 CHAIR HOCHSCHILD: Thank you. Let me just thank  
5 GO-Biz for all the work in transportation. You guys have  
6 been magnificent and really proactive on everything from  
7 this stuff to helping with the permit expediting of getting  
8 charging infrastructures built out and many other things.  
9 We just really appreciate all you and your team and Tyson  
10 and everyone else over there does, so thank you.

11 MS. VACIN: Thank you. Yeah, we're glad to do  
12 it. Thanks.

13 CHAIR HOCHSCHILD: Let's move on to Andrew  
14 Martinez, Staff Air Pollution Specialist with CARB.

15 MR. MARTINEZ: Good morning Chair and  
16 Commissioners, Staff Air Pollution Specialist on the ZEV  
17 Infrastructure Section at CARB, focusing on hydrogen  
18 infrastructure in particular.

19 I just want to make some quick comments this  
20 morning. CARB has been collaborating with the Energy  
21 Commission on hydrogen network planning and analysis for a  
22 number of years, especially on the infrastructure needs  
23 through the Clean Transportation Program. And that has  
24 been a very successful collaboration to date.

25 We want to express our support for this item,

1 especially as it has the potential to accelerate the build  
2 of new fueling infrastructure to enable greater fuel cell  
3 electric vehicle deployment and which of course is greater  
4 ZEV deployment overall.

5           These funds will help support the AB 8 goals as  
6 Phil mentioned of at least 100 stations by 2024. They'll  
7 also help support the goal of 200 stations by 2025, per  
8 Executive Order B-4818 and of course our broader ZEV  
9 deployment and carbon neutrality goals.

10           Additional funds now can help get this new  
11 industry closer to economies of scale and continue to  
12 advance the possibility of ZEV adoption for a broader base  
13 of Californians.

14           I do also want to note that this particular item  
15 builds on successful collaborations, our history of  
16 successful collaborations in the past between CARB, Energy  
17 Commission and Bay Area Air Quality Management Districts  
18 for ZEVs over all, but also in particular for fuel cells.  
19 So for all those reasons we just wanted to express our  
20 support. Thank you.

21           CHAIR HOCHSCHILD: Thank you. Well, with  
22 apologies I always thought my last name was the hardest one  
23 to pronounce, but today (indecipherable) I hope I'm not --  
24 Karen Schkolnick, Director of Strategic Initiatives with  
25 Bay Area Air Quality Management District. Did I say that

73

1 right?

2 MS. SCHKOLNICK: Hi. Good morning.

3 CHAIR HOCHSCHILD: Did I say that right?

4 MS. SCHKOLNICK: Yes, it's Schkolnick and it kind  
5 of rolls off the tongue.

6 Good morning. I'm with the Bay Area Air Quality  
7 Management District. And as you heard we're under contract  
8 with Air Resources Board for the implementation of the  
9 hydrogen light-duty fueling infrastructure solicitation,  
10 using Volkswagen NOX mitigation funding. And I'm just here  
11 to express our appreciation to the California Energy  
12 Commission for consideration of this proposal.

13 As you've heard, we really feel that it's a model  
14 for helping to make more efficient the application process  
15 and the operation for applicants and operators.

16 And I also just want to thank the staff on your  
17 team, specifically Jean Briones (phonetic) and Phil Cazel  
18 who you heard from earlier, for all of their work to make  
19 this happen. So thank you.

20 CHAIR HOCHSCHILD: So let's see, is this item,  
21 Commissioner Monahan (indecipherable).

22 COMMISSIONER MONAHAN: Yeah, I just want to say  
23 that just historically VW -- the fact that the California  
24 Air Resources Board was able to identify the problem, and  
25 really it took a long time for VW to admit that they had

1 installed the software that disabled the equipment, and  
2 caused an increase in pollution in California and across  
3 the entire world. And it really did change -- in some way  
4 I feel like this changed the world in a big way.

5 Now VW led by Audi is really cementing their  
6 commitment to vehicle electrification. And we're seeing  
7 other automakers step up around the world.

8 I strongly support this item, because we at the  
9 Energy Commission really have been leading, I would say the  
10 world on how do we do infrastructure correctly. And we  
11 want to socialize that actually. Part of the reason I went  
12 to China was so that we could socialize that, because if  
13 we're able -- if China moves on fuel cells, the world moves  
14 on fuel cells. So how do we create a market globally? And  
15 especially in our hardest to electrify of the  
16 transportation sector, which is heavy duty.

17 So our solicitation now does include heavy duty,  
18 which is particularly appropriate given VW's diesel. We  
19 want to reduce diesel pollution generally in the state, so  
20 this is a perfect fit for us. And glad to hear that that's  
21 a good relationship between the Bay Area Air Quality  
22 Management District, the Air Resources Board, GO-Biz, our  
23 team here at the CEC with Phil and Jean and others involved  
24 in making sure that we are doing all we can to move forward  
25 on transportation electrification.

1           So I just strongly support this item.

2           CHAIR HOCHSCHILD:   Terrific.

3           Yeah, Vice Chair Scott?

4           VICE CHAIR SCOTT:   Yeah, I just wanted to echo  
5 those thoughts and say how much we appreciate the great  
6 partnership with the Bay Area Air Quality Management  
7 District on this and also with our sister state agency.  
8 That it takes a village on the hydrogen infrastructure and  
9 we certainly have one.

10           And I think this is just a great example of good  
11 government, right? This is us working together to leverage  
12 our dollars, to leverage our expertise, and to move forward  
13 on a goal that's an overarching goal for all of us. So I  
14 want to add my support.

15           CHAIR HOCHSCHILD:   Great. Thank you. Would you  
16 be willing to make a motion?

17           VICE CHAIR SCOTT:   I will move approval of Item  
18 10.

19           CHAIR HOCHSCHILD:   Is there a second?

20           COMMISSIONER DOUGLAS: I will second.

21           CHAIR HOCHSCHILD:   All in favor say aye.

22           (Ayes.)

23           CHAIR HOCHSCHILD:   That motion passes  
24 unanimously. Let's move on to Item -- oh, actually Item 11  
25 we're going to hold. So at this point what we'll do is

1 just skip Item 11 and let's go through as much of the rest  
2 of the agenda as we can get through.

3 Then we'll break for lunch at noon and we'll come  
4 back at 1:00, so let's go on to Item 12.

5 Is there a motion to approve the minutes?

6 (Off mic colloquy.)

7 CHAIR HOCHSCHILD: Oh excuse me. That's a good  
8 comment. Let's approve -- why don't we get the motion for  
9 -- well actually no, guys can we just do one motion for  
10 Item 12 or should we do two separate?

11 (Off mic colloquy.)

12 MS. HOUCK: You should do two separate motions.

13 CHAIR HOCHSCHILD: Two separates for --

14 COMMISSIONER DOUGLAS: All right, so I move  
15 approval of item 12a.

16 CHAIR HOCHSCHILD: 12a, is there a second for  
17 12a?

18 VICE CHAIR SCOTT: Second.

19 CHAIR HOCHSCHILD: Okay, second by Vice Chair  
20 Scott. All in favor say aye.

21 (Ayes.)

22 CHAIR HOCHSCHILD: And for Item 12b?

23 COMMISSIONER DOUGLAS: Move Item 12b.

24 VICE CHAIR SCOTT: Second.

25 CHAIR HOCHSCHILD: All in favor say aye.

1 (Ayes.)

2 CHAIR HOCHSCHILD: And Commissioner McAllister  
3 has abstained from 12b. Let's move on to Item 13. I'm  
4 sorry.

5 UNIDENTIFIED SPEAKER: (Indiscernible.)

6 CHAIR HOCHSCHILD: Pardon me. Yes, I abstained  
7 as well from 12b. Thank you. I missed that as well, so  
8 that's a 3-0 vote.

9 Let's move on to Item 13, Lead Commissioner  
10 Reports. Yeah, Commissioner Monahan.

11 COMMISSIONER MONAHAN: Well, the big news in my  
12 life I think, as you all know, is I had my Senate Rules  
13 Committee Confirmation Hearing last week and am waiting  
14 hopefully in the next week or so the Senate will vote and  
15 then I'll have my five years. Hopefully the Senate will  
16 vote. But it was really fun to be at this with my family,  
17 which is really an unusual situation where your teenage  
18 daughters get to see you in front of a Senate Rules  
19 Committee. I'm happy to say that they all really enjoyed  
20 it, which was a surprise to me.

21 And I also wanted to let you all know that we  
22 talked about how we've been reconstituting the Advisory  
23 Committee for the Clean Transportation Program. We have  
24 done that and we're having our first meeting next month, so  
25 excited to kick that process off. We're going to be

1 presenting a three -- plan basically to the end of the  
2 program to the Advisory Committee. And we'll see how what  
3 kind of responses they get and looking forward to adjusting  
4 the plan based on their input and public input as well.

5           So just what I'm most excited about with the  
6 Advisory Committee is that now we have expanded to, for the  
7 first time I think, community-based organizations that are  
8 really representative of communities across California. We  
9 have the Central Valley Asthma Collaborative, the Central  
10 Coast Alliance United for a Sustainable Economy, mothers  
11 out front, San Mateo Health.

12           So we really were trying to make sure that we  
13 were stay true to this idea that we want community-based  
14 organizations to be involved in advising us about how we  
15 distribute these state funds. That's it.

16           CHAIR HOCHSCHILD: Okay.

17           Commissioner McAllister.

18           COMMISSIONER MCALLISTER: Yeah, just one thing  
19 actually. A couple of weeks ago I spent most of the week  
20 in DC at the NASEO Energy Policy Outlook Conference, which  
21 is when all the states kind of come together and take  
22 advantage of being in DC to essentially talk about all the  
23 different issues that are going on. And can meet with  
24 stakeholders, Department of Energy and lots of DC-based  
25 stakeholders, really from all over.



1           And then also take advantage to take a day and  
2 walk around on Capitol Hill and talk to legislative staff  
3 and try to make things happen. In particular, that  
4 everybody comes together to make sure that the State Energy  
5 Program and the Weatherization Assistance Program are  
6 funded and really bend Congress's ear about how important  
7 these programs are for all the states.

8           And we get millions of dollars from both, the  
9 Weatherization Assistance Program funds goes over to the  
10 Department of Community Services and Development. We don't  
11 actually get that here. But we do get the State Energy  
12 Program funds and that serves a lot of purposes in the  
13 Building Code and Appliance Standards. So those resources  
14 are great. And I think NASEO does the nation a great  
15 service by making sure that Congress and all the staff  
16 knows how important these funds are.

17           Building Codes, just all the issues, you know,  
18 remarkably similar issues. I agree we're on the cutting  
19 edge of a lot of this stuff, but all the states are  
20 thinking about these various issues in different ways. So  
21 it's really helpful to come together.

22           And then this year they actually broke out an  
23 innovation summit. It's kind of been an idea for a number  
24 of years, but they kind of focused on innovation. And  
25 actually in future years I think it would be good to kind

1 of pull the EPIC staff actually into that and get them out  
2 there, because I didn't quite tune into that until I was  
3 actually there. And I was actually there and I was like  
4 oh, they're talking about R&D.

5 But I think there's sort of a budding interest  
6 across the states in focusing on R&D. And we would  
7 obviously be in a great position to help guide that  
8 conversation. So I want to bring that back to Commissioner  
9 Scott.

10 But yeah, I think that's the main event for me in  
11 the last few weeks. So thanks.

12 CHAIR HOCHSCHILD: Okay. Vice Chair Scott?

13 VICE CHAIR SCOTT: All righty, so I had an  
14 opportunity to go -- we're doing our EPIC Innovation Tour.  
15 And so taking a chance to go and look and see some of the  
16 EPIC projects that we have. And I'm going to read some of  
17 them to you just because they're a little bit technical,  
18 but they're all really, really interesting. We were up at  
19 UC Berkeley to see what they are working on there.

20 One of them is an open source platform for plug-  
21 in electric vehicle smart charging in California. What's  
22 exciting about that is we're really trying to put in place  
23 this platform that will allow the vehicles to charge at the  
24 times where it makes the most sense for the grid, right?

25 And most of this is stuff that the driver, it'll

1 just be ready to go when they're ready to drive it. But  
2 there's all this stuff that goes on in the background to  
3 help make sure that the vehicles are charging at  
4 appropriate times for the grid. So that was really  
5 interesting to look at and see the research and technology  
6 there.

7           We're looking at flexible load within buildings.  
8 And so this was a customer controlled, price mediated,  
9 automated demand response for commercial buildings. And it  
10 is actually kind of the same idea but for buildings. And  
11 so there are different loads that you can move and shift  
12 and change around in buildings and when they come on, why  
13 they come on, how long they turn on for and things like  
14 that. And so making all of that again automated in a way  
15 that the building works really well with the grid and when  
16 we need that kind of flexible demand as well. So that was  
17 an interesting piece of technology to look into.

18           We are also looking at Cal-Adapt and how to  
19 visualize climate risks. So the Cal-Adapt helps you to see  
20 where the different types of climate risks that we think we  
21 will see will happen around the state. And getting a lot  
22 more local information, because something that could  
23 potentially be taking place on the coast is very different  
24 than what might take place in one of our desert landscapes.  
25 And so we're really trying to put this together.

1           It's actually really an interesting platform. I  
2 should have brought the link for you guys to take a look at  
3 item, because you kind of have to see, at least for me I  
4 had to see it, to really visualize what's going on there.  
5 But they're trying to take that data and information and  
6 put it in layers where you can take a look at it. And use  
7 it in a useful way for local folk to make good policy  
8 decisions going forward. So that was very interesting to  
9 see.

10           We talked a little bit about some of the research  
11 that we have done for the Fourth Climate Assessment.  
12 Berkeley helped us do the regional piece of the Fourth  
13 Climate Assessment for that part of the state.

14           On the Fifth Climate Assessment, we're going to  
15 try to have some additional funding that comes into that so  
16 that we can do this. On the Fourth Climate Assessment this  
17 was all done voluntarily, which is great. But we ended up  
18 with different levels of quality in the work that we got  
19 back. So we're trying to get out ahead of that for the  
20 Fifth Climate Assessment and pay people to put that  
21 information together, so that we really have the  
22 interesting local information we need.

23           And then we had a chance to go look around in the  
24 lab. And there are two things that they have. One is an  
25 anemometer for indoor air. And it's just a much easier,

1 more simple way to measure what's going on in indoor air.

2 And also an integrating smart ceilings and  
3 communicating thermostats to provide energy efficient  
4 comfort, and so what was neat about that is right now, for  
5 example, if we all leave the room the lights will go out  
6 because it'll recognize that there's nobody in here. You  
7 can't really do that with ceiling fans and air flow.

8 And that's something that they're looking at as  
9 well. So when people are in the room and you have then you  
10 have the air flow and the ceiling fan running, you're  
11 making the room very comfortable. And then it recognizes  
12 that there's nobody in the room if folks have left, and it  
13 adjusts those systems accordingly, kind of similar to the  
14 way that they do the lights.

15 So that was just really kind of a nice sampling  
16 of some of the things that we've helped fund over at UC  
17 Berkeley. And I enjoyed the chance to look at that.

18 And then I have one other topic for you all. And  
19 this is for our EPIC program. And so as you all know EPIC  
20 is administered by the Energy Commission and the three  
21 investor owned utilities. The Energy Commission does about  
22 80 percent of the funds in the program and the three  
23 investor owned utilities collectively administer about 20  
24 percent.

25 And so in 2017, there was an independent third-

1 party evaluation of the EPIC Program. And that was  
2 directed by the CPUC to conduct that. And basically the  
3 evaluation recognized the strength of the Energy  
4 Commission's administration of our funds. And it  
5 specifically called out our alignment of research to state  
6 policy goals, the close engagement of stakeholders,  
7 transparent processes and our robust information sharing.  
8 So that was great to hear.

9           The evaluation though also noted that the EPIC  
10 program could be strengthened by creating a group to better  
11 coordinate the information sharing among the administrators  
12 research. And to identify areas that would benefit from a  
13 closer collaboration. So the CPUC and the EPIC  
14 administrators have recently established the Policy and  
15 Innovation and Coordinating Group, or the PICG. And that's  
16 going to help facilitate that coordination.

17           And the reason that I raise this with you is that  
18 the PICG contractor is starting to conduct interviews of  
19 senior policy officials and leadership at the IOUs and also  
20 at the Energy Commission and at the Public Utilities  
21 Commission. So if you hear from them or you see this PICG  
22 show up, please respond to them. I think they would really  
23 love to hear from you all about what your thoughts are in  
24 this space.

25           And one of the things that they're going to look

1 at are policy and innovation partnership areas. And so  
2 what they're wanting to know is where do we think we should  
3 coordinate on these policy and innovation partnership  
4 areas, or PIPAs.

5 And some of the things that we're thinking about  
6 here at the Energy Commission are we want the PIPAs to be  
7 things that are important policy-related research that  
8 require key contributions from more than one of the  
9 members, right? So otherwise it's not coordination if  
10 we're not all speaking together on this that are informed  
11 by multiple research projects, are specifics that we can  
12 kind of focus in on the topics that we pick. And we'll be  
13 able to have some metrics or things around that to  
14 understand if we're moving the needle.

15 And so that is just a really high-level  
16 discussion of it. I think it would be great if you want to  
17 know a little bit more to get briefed by Lori ten Hope, or  
18 Linda Spiegel or their team to kind of really hear what's  
19 going on. They're the ones who are steeped in this day-to-  
20 day. But basically you will hear from the PICG contractor  
21 to see kind of what you think some of the topics are that  
22 we and the investor owned utilities ought to be  
23 coordinating on together within our research program.

24 Those are my two updates.

25 CHAIR HOCHSCHILD: Fantastic.

1 Commissioner Douglas.

2 COMMISSIONER DOUGLAS: All right. I've got two  
3 brief updates and then if you don't mind I will step out,  
4 because I set up a lunch time commitment.

5 So last week, and the Chair will talk about this  
6 I know, I attended the California Lithium Recovery  
7 Initiative Symposium at Stanford. And it was very well  
8 attended. It was an exciting event. It's clear that this  
9 technology is moving forward. It's ready and I moderated a  
10 panel with some local voices from Imperial County. And  
11 this is certainly a county that is engaged and experienced  
12 with permitting and excited about the opportunities. And  
13 so that was a really good event.

14 Secondly, the Energy Commission put on our  
15 website the culmination of a series of discussions between  
16 the Department of Defense, Bureau of Ocean Energy  
17 Management and the Energy Commission Ocean Protection  
18 Council in Congressman Carbajal's office. And NOA was  
19 represented as well through folks from the Monterey  
20 Sanctuary.

21 But in those conversations we were looking to  
22 identify whether there were additional solutions sets or  
23 ideas that should be vetted with the public to get us past  
24 the issue of military activities, which are very intense  
25 and overlapping and complex on the Central Coast and the



1 potential for offshore wind.

2 As a result of those conversations we have put on  
3 our website a background short description and a map that  
4 will be used that identifies two areas that were not  
5 included in BOEM's original call primarily, because they're  
6 closer to shore. But the military has indicated our less  
7 of a challenge for the military in terms of operational  
8 conflicts.

9 And so the next steps are to collect public  
10 comment. We've got a number of events that we will be  
11 going to on the Central Coast. We'll be doing local  
12 outreach and tribal outreach. And the message to the  
13 public and to local officials and other state agencies is  
14 that we want people's comments. And in fact because the  
15 Bureau of Ocean Energy Management is organized thought a  
16 task force that does not itself collect and respond to  
17 public comments, the Energy Commission is taking the step  
18 of being the place where we are inviting comments.

19 So members of the public who wish to comment on  
20 this overall process, even though it will ultimately feed  
21 into a federal agency, have been asked and invited to  
22 submit comments to us. And we will collect those comments  
23 and we will work with BOEM to make sure that they have  
24 those comments. And we will be informed by them.

25 And so those are my two reports and a lot of work

1 to go on both those.

2 CHAIR HOCHSCHILD: Commissioner, did you want to  
3 update on the Military Summit or did we do that already? I  
4 can't remember, we had a meeting since we were there  
5 together?

6 COMMISSIONER DOUGLAS: I thought we had done  
7 that.

8 CHAIR HOCHSCHILD: Maybe we did. I don't know.

9 COMMISSIONER DOUGLAS: Because I just looked at  
10 our last business meeting --

11 CHAIR HOCHSCHILD: I can share a little bit. I  
12 don't remember. So it's -- or maybe the (indiscernible) --

13 (Overlapping colloquy)

14 COMMISSIONER DOUGLAS: I think I reported on it  
15 and you weren't here, correct. But I think you should  
16 report on it, because my report was fairly high level.  
17 Anyway, thank you.

18 CHAIR HOCHSCHILD: Yes.

19 COMMISSIONER DOUGLAS: Thank you.

20 COMMISSIONER MONAHAN: Commissioner Douglas, just  
21 one question. With the federal announcement that there's  
22 not going to be approvals on any offshore wind until  
23 election, how does that impact what we're doing here in  
24 California, if at all?

25 COMMISSIONER DOUGLAS: So that announcement was

1 regarding permit reviews or environmental reviews for  
2 applications on the East Coast. My understanding is that  
3 it came out of the Bureau of Ocean Energy Management. And  
4 it was driven by their sense of how long it would take them  
5 to review the project.

6 I think that as we get into this we are going to  
7 find that reviewing the environmental impacts of large  
8 projects in the ocean and the different things you have to  
9 look at, the connection to shore, the fishing impacts, the  
10 cumulative impacts, are not going to be simple.

11 And in fact to the extent that we in California  
12 have an opportunity to get ahead of that -- and that's what  
13 we've done. We've started the public dialogue. We've  
14 started the data collection. We started to understand what  
15 is ahead of us and what we need to -- where the gaps are in  
16 our knowledge and what we need to do. We will be better  
17 off.

18 I think there is nobody who would contradict me  
19 when I say that the federal process for these projects is  
20 long. It is long. And I know that there are some in the  
21 industry who have expressed some frustration with how long  
22 things are taking on the East Coast. And at the same time  
23 I think we also have to acknowledge that this is pretty new  
24 and for these kinds of reviews, for these kinds of projects  
25 in the US.

1           So I don't necessarily read anything beyond that  
2 into that, although you never know, of course.

3           CHAIR HOCHSCHILD: Okay, that's great. Thank  
4 you.

5           So yeah, let me just add on to Commissioner  
6 Douglas's comments about the Lithium Symposium. That was a  
7 home run. We had a like standing room only audience full  
8 house at Stanford. Really interesting, the heavyweights  
9 that are now coming in, there were some very significant  
10 investors from China as well as the United States who  
11 attended. We had all the electric vehicle manufacturers  
12 and battery storage folks as well. And now we have four  
13 serious companies that are actively engaged in lithium  
14 development in California.

15           I think we should think of this as the oil of the  
16 clean energy future. And if you look at, just the Super  
17 Bowl for example, we had three electric vehicle ads after  
18 hardly having any EV ads on TV at all. They're  
19 electrifying the Ford F-150, all this stuff.

20           So this trend that we're seeing is going to drive  
21 lithium production globally. We are sitting on what we  
22 believe to be the largest reserve of lithium in the world  
23 in California. So really getting the process right, the  
24 permits right, one of the things that -- you know I just  
25 want to say again Vice Chair Scott has been doing a

1 spectacular job in what is really the gold standard  
2 landmark program at the Energy Commission with all we were  
3 doing is EPIC and R&D. And as part of that we're now doing  
4 \$14 million of funding for the lithium space and to promote  
5 lithium production. And you're going to see demand take  
6 off.

7           The other thing that is worth noting is this, in  
8 addition to being relatively low cost to produce, because  
9 the lithium is in the brine. So when you get lithium in  
10 Australia you dig it up. It's in rock. You bust it up  
11 until it's 94 percent rock and 6 percent lithium. You put  
12 it on a ship and send it to China and it gets refined.

13           Our lithium is in the brine. It gets basically  
14 put in these vessels where there's -- they have a method  
15 where there's a bunch of these balls that actually collect  
16 the lithium and then take those balls out and they can  
17 extract lithium. And they have a technique for that and  
18 also funded by our R&D, which is a great success story.  
19 And it just left me feeling very excited about where this  
20 can go. And it's also by far the greenest way to produce  
21 lithium in the world for the way we were able to do it,  
22 just by good fortune having it in the brine.

23           There's one deposit of lithium that's been found  
24 in Death Valley, which is being developed by Rio Tinto.  
25 And so they've been operating a borax mine for 90 years.

1 They have 90 years of tailings. So they have all this mud,  
2 basically, and they found lithium there and they're able to  
3 produce about 5,000 tons a year. So the global lithium  
4 market is about 300,000 tons. We think we can do, in the  
5 Salton Sea, about 200,000 tons. So it's on an incredible  
6 scale, so this is going to be a continued focus.

7           And so you guys have heard this before, but I  
8 basically had five priorities as Chair. It's really  
9 transportation electrification; building decarb; this  
10 vision, what we're calling Lithium Valley really to do a  
11 Silicon Valley for Southern California; offshore wind and  
12 then encouraging the continuation of our R&D program. So  
13 this is really the biggest event on the lithium priority  
14 and I'm really, really great for the staff for it was just  
15 really well organized.

16           So some months ago, Vice Chair Scott had  
17 mentioned to me, "Hey, you know we actually now have 17  
18 electric vehicle manufacturers in the state," which I had  
19 not realized until she mentioned that to me. So it's been  
20 on my list to organize a tour of all these sites. I am now  
21 doing that. Commissioner Monahan and I, March 10th are  
22 going to do the first leg of that. The plan is we're going  
23 with Mary Nichols and Cliff Rechtschaffen to visit the Bay  
24 Area leg of this tour, but it'll be at least a three-to-  
25 four day thing. I think we'll do it in different

1 installments just to see up close where they're at.

2           We've funded several hundred million dollars of  
3 tax credits through the CAPETA (phonetic) program for the  
4 Energy Commission. We have a seat on that board. Ken  
5 Rider represents me on that and it's a really exciting  
6 progress. As you know, we went from electric vehicles  
7 being the number eight ranked export. Actually it turns  
8 out they weren't quite number one, they ended up being  
9 number two in 2019, but that's an incredible, incredible  
10 trajectory. And it's growing every day. So that's on the  
11 list.

12           Also, I had a sit down with the CAISO Board.  
13 Because of the nexus of Queen Electric Transportation and  
14 the grid, Commissioner Monahan joined me and we met with  
15 all five of the CAISO Board Members and Steve Berberich.  
16 And that was just a terrific dialogue.

17           I did want to share the news that Steve has  
18 announced he's going to be retiring this summer. It's a  
19 big loss for the state. He's been a tremendous partner and  
20 hopefully we'll get someone who can fill his shoes. But  
21 we've had great relations with CAISO and I'm sure that'll  
22 continue.

23           A couple of trips coming up, I'm doing an  
24 offshore wind trip. I'm going to Portugal and another  
25 conference in Germany on clean energy and climate policy.

1 I also met with the FBI yesterday about  
2 cybersecurity. I'm very, very interested that we maintain  
3 the very, very highest standards to protect data that we  
4 have here. I think staff has done a spectacular job of  
5 that. We have all of this dual-factor authentication in  
6 place and other things, but we want to stay on the cutting  
7 edge. So we're going to get more feedback and suggestions  
8 from them on how we can be as smart and proactive as  
9 possible on that front.

10 And the last thing I just want to highlight, I  
11 want to thank Darcy has joined, our Public Advisor Noemí  
12 Gallardo and our EEO Officer Carousel Gore and a few others  
13 on a little committee we've formed to do, we're doing a  
14 Diversity Day to celebrate the incredible diversity we have  
15 here at the Energy Commission. We'll be doing that, I  
16 think we said, in May.

17 When I took over as Chair I did this walk through  
18 and just tried to meet every single employee, personally.  
19 And my guess from asking people where they're from, I think  
20 we have people, I would guess, from around 40 countries  
21 working here at the Energy Commission. So we have a day  
22 that's going to involve cultural celebrations and food and  
23 so forth. And so thanks to everyone has -- that's really  
24 being quarter backed by our terrific Public Advisor Noemí  
25 Gallardo.



1           And yeah, I guess the last thing is this Military  
2   Confab was fantastic. So General Connolly, Head of the  
3   Marine Corps and Admiral Bolivar, the Commander of Navy  
4   Region Southwest, we spent a day and a half with those  
5   guys. And just gave an update on where we're going as a  
6   state and they actually had, I think, some suggestions for  
7   us as well on cybersecurity. And are very interested in  
8   particular, on the electric transportation stuff as well,  
9   so that's my update.

10           Let's move on to Item 14, Executive Director's  
11   Report.

12           MR. BOHAN: Thank you. I just want to note two  
13   items. In April, we'll be having an Earth Day celebration  
14   here at the building. And either that afternoon or the  
15   following day, we're also going to celebrate the Bring Your  
16   Children to Work Day, so a number of our staff have  
17   children and it should be fun.

18           CHAIR HOCHSCHILD: Which, by the way, I'm doing  
19   today. My daughter should be hear around -- she's off  
20   school this week, so I'm ahead of you. Thank you.

21           All right, let's move on to the Public Advisor's  
22   Report.

23           MS. AVALOS: The Public Advisor has no update  
24   today.

25           CHAIR HOCHSCHILD: Okay. Thank you.

1 Any public comment, yes we do have one, thanks.

2 Okay, Mr. Uhler.

3 MR. UHLER: I'm Steve Uhler, U-h-l-e-r. I've had  
4 a request in and actually the Vice Chair in November  
5 requested that the Public Advisor and perhaps the Chief  
6 Counsel answer my questions related to the requirement to  
7 meet the APA for rulemakings. That hasn't been fulfilled.  
8 And I've not received anything from the Executive Director  
9 pursuant to the Public Records Code about why it's not been  
10 fulfilled.

11 I had a chance to speak to the individuals who  
12 talked about the CBECC. The certification of the CBECC,  
13 they were unable to come up with the Title 20 code for the  
14 process that you're required to have or have pursuant a  
15 formal -- establish a formal process for certification of  
16 calculations under Public Resource 25402.1(a). So I have a  
17 real concern whether we're dealing with what Justice Scalia  
18 would refer to a mistaken expression or a lapse in wisdom.

19 You have some code under Title 20 for building  
20 standards. In '89 the Commission asked the OLA to delete  
21 that. It didn't get deleted. In '96, they asked again.  
22 It didn't get deleted. In 14, where you show the Title 20,  
23 you showed all of those sections of code under the 14001  
24 through 10.

25 In '17 you removed some, so it's kind of showing

97

1 that you're realizing that there's some clarity issues  
2 there, because there actually is instruction in the code.  
3 And I ask that you see that you finally delete them. It  
4 happened for the Tax Code under 2600, see that that's  
5 clarified.

6 I'm running into people who think that I can't  
7 explain what I'm looking for. And it may be because some  
8 folks have ventured off and decided that they can write a  
9 piece of software that represents a form, in effect, that  
10 is actually in violation of the APA. They can't tell me  
11 where these standards and how they are linked to Title 20  
12 that allows them to write them into software code. That  
13 then will prohibit somebody from building a house when they  
14 use that code, like your local ordinances and such. So I'm  
15 hoping to have that cleared up.

16 But I particularly want the Executive Director to  
17 pay attention to the rules behind the Bagley-Keene and the  
18 meeting -- or the public record laws, because I'm not  
19 getting anybody to reply on the docket to why I don't get  
20 my records request answered. Thank you.

21 CHAIR HOCHSCHILD: Thank you.

22 Let's move on to Chief Counsel's report.

23 MS. HOUCK: No report.

24 CHAIR HOCHSCHILD: Okay. So we're adjourned  
25 until 1:00 o'clock.

1 (Off the record at 12:00 p.m.)

2 (On the record at 1:04 p.m.)

3 CHAIR HOCHSCHILD: Okay. Welcome back. We'll  
4 reconvene. Thank you, everybody. And a very special warm  
5 welcome to some special guests for me, my wife Cynthia and  
6 my daughter Sonya who's off for school this week. So you  
7 guys are going to see a little democracy in action today.

8 Thank you, everybody. I just want to read a brief  
9 statement here. To begin, we have a significant number of  
10 individuals that wish to provide comment on Item 11, the  
11 SMUD Community Solar Program. Pursuant to Title 20,  
12 Section 1104, the presiding member may limit or preclude  
13 oral arguments as necessary to ensure the orderly conduct  
14 of business.

15 In order to ensure the orderly conduct of business  
16 this afternoon, we'll hear first from presentations from  
17 staff and the applicant, SMUD. And next we will hear from  
18 elected officials and agency representatives, then we will  
19 take public comment. And to ensure that everyone wishing  
20 to comment on Item Number 11 has an opportunity to speak,  
21 public comment on this item will be limited to one minute  
22 per person. If you share the comments of an individual who  
23 has already spoken, please do not repeat the comments,  
24 instead state you agree with the prior speaker and state  
25 the prior speaker's name you agree with.

1           And with that, let's get underway.

2           MR. BOHAN: Thank you. Commissioners, Chair, my  
3 name is Drew Bohan. For the record, I'm the executive  
4 director of the Energy Commission.

5           And the crowded room is testimony to the importance  
6 that folks attach to this issue and I think we're going to  
7 be in for a vigorous debate this afternoon.

8           What I want to do is walk through four -- four  
9 segments. The first is a brief history of what brought us  
10 here today. The second is a look at the SMUD proposal as  
11 it has changed from November when you first heard this item  
12 to today. The third is I want to just briefly tick through  
13 each of the six criteria we use to evaluate SMUD's  
14 application. And very clearly, we've done this before, but  
15 at least highlight for you how we arrived at the decisions  
16 we did, particular on one element that I think has been the  
17 most -- generated the most debate.

18           And then finally, my presentation will cover some  
19 of the opposing arguments that we've heard and why we've  
20 nevertheless come forward recommending approval. But I'll  
21 have -- at the very end, there's a couple that I won't have  
22 covered that I just want to raise to your attention.

23           So let's start with a brief history. In December  
24 of 2018, and the reason I'm presenting this today is I  
25 testified before the Building Standards Commission in favor

1 of their adoption of the 2019 building standards. And was  
2 pleased after that, there was also quite a number of people  
3 in that audience that they voted unanimously to approve our  
4 building standards. They of course became law January 1 of  
5 this year. And when we approved them, they got a lot of  
6 attention, there was a lot of press, there was a lot of  
7 discussion, and a lot of the focus was on one feature which  
8 was the solar requirement. For the first time in this  
9 country, a state adopted a requirement that all new homes  
10 have solar on them. And so we responded to a lot of that  
11 conversation at the time.

12 One of the options we provided at that time was of  
13 course the conventional solar on the roof approach but we  
14 also had the community solar option. This was discussed in  
15 workshops, we had a lot of input throughout the whole 2019  
16 standards period, and a portion of that conversation was  
17 about the community solar aspect. Fast forward from  
18 December of '18 to September of last year and we received  
19 our first application, and it's the one that was before you  
20 in November. So we did a little back and forth with SMUD  
21 when we received that application, brought it to you in  
22 November believing at that time as staff did that it met  
23 the requirements. And I know you know this but you then  
24 asked that we postpone it and take a little deeper look  
25 which we did. So that brings us back to today.

1           So I'm going to flip to the first slide here, see  
2 if I can do this right. Okay.

3           So this is a list of the changes that SMUD made  
4 after the November business meeting before submitting the  
5 application that is before you today. So I'm just going to  
6 go through each of them briefly.

7           The application you saw in November pledged a  
8 guaranteed savings of \$5 per kilowatt, SMUD doubled that to  
9 \$10 per kilowatt. Secondly, they now are only going to use  
10 resources within their own territory. One of the  
11 criticisms you heard in November was they were using  
12 resources from outside of their service territory and in  
13 particular, a facility in Fresno got some attention and  
14 folks felt -- some folks felt that that was not consistent  
15 with a definition of the word community. SMUD's changed  
16 that.

17           They're also in this new application only going to  
18 use smaller resources. So they will only use facilities  
19 that they build or participate in that are 20 megawatts or  
20 smaller. They're all going to use new resources. So only  
21 -- the only resources applicable to this program will be  
22 those that are built in the future with one exception or  
23 maybe a couple of exceptions but one of them is if you were  
24 to approve the proposal today and a couple of months from  
25 now they receive an application from a developer that has a

1 100-unit development that wants to participate in the  
2 program, they -- my understanding is, and I think that SMUD  
3 will speak to this more, they've got a facility being built  
4 right now, they expect it to come online later in the year.  
5 But if it isn't online by the time they got some  
6 applications, they'll use other resources to satisfy those.  
7 But their intent going forward is that they'll only use new  
8 resources to serve the load associated with folks that want  
9 to participate in the community solar program.

10           And finally, they've clarified that home buyers  
11 will have a choice. So if somebody were to walk into 100-  
12 unit subdivision of new homes being built, they can choose  
13 between community solar option or a rooftop option,  
14 depending on what the developer chooses to offer. So SMUD  
15 is allowing that and they've pledged to go a step further  
16 and work directly with builders to help facilitate that  
17 option and provide educational materials and so forth for  
18 would-be homeowners that are looking at what options they  
19 have.

20           So those are the changes. I now want to just turn  
21 to the, again, the criteria that we are bound by our  
22 regulations to follow in judging whether we think SMUD's  
23 met -- met our rules. And some of them are quite  
24 straightforward. Like the first one, essentially, they've  
25 got to get their community solar facility running before



1 buildings that would apply to be a part of it are ready to  
2 go so that you don't have building officials in the  
3 community needing to wait for the solar facility to be  
4 ready. So that's the first one.

5           Second one, also pretty straightforward. And that  
6 is that we have compliance software, we've had it for  
7 years, and we -- and folks that are regulated use it to  
8 calculate energy budgets for buildings. We require that  
9 that be done for each building in this situation. So,  
10 again, to stick with my hypothetical, a 100-unit  
11 development, each unit, there needs to be an assessment  
12 based on its square footage and so forth of what its energy  
13 performance would be and then that is the amount that is  
14 used to score for the community solar.

15           Third, you then have to take that energy number, so  
16 let's say it's 1,000 kilowatt hours per month for a given  
17 home, and then you have to dedicate that if you want -- if  
18 you want to participate in this program as SMUD is, to  
19 each, each of those buildings. And I'm going to come back  
20 to this one, but that's the basics. And it can't be a  
21 premium program so it has to be cost effective. And  
22 participants can't pay more for it than they would pay if  
23 they weren't in the program.

24           Fourth is a durability requirement. So SMUD is  
25 required to provide these benefits to folks who raise their

1 hands and say I want to be part of the community solar  
2 program for a period of 20 years.

3           Additionality is a fifth requirement, and that just  
4 basically says no double counting. So if SMUD -- obviously  
5 SMUD is participating in as obligations under the renewable  
6 portfolio standard, for example, other obligations. They  
7 can't count the resource they're utilizing for the  
8 community solar program to meet their obligations under RPS  
9 or other rules.

10           And then, finally, they just have to maintain  
11 transparent records. So, again, not much controversy with  
12 most of these.

13           Now I just want to turn to a focus on the third  
14 one, the dedicated energy savings, and just spend a couple  
15 of minutes drilling down on that because that was -- that  
16 was one of the things that we heard the most and the  
17 loudest at the last business meeting and you may hear  
18 comments on this again. So I wanted to just give it my  
19 best shot at being crystal clear about what the  
20 requirements are and why we believe that SMUD met them.

21           So the requirement -- this particular requirement  
22 is that once you've determined this given home, has an  
23 energy budget of 1,000 kilowatt hours a month, then you  
24 have to take that community solar facility you're building  
25 and match the resource of a hundred -- of 1,000 kilowatts

1 an hour to that building. We provide in the regs three  
2 ways to do that.

3 The first way to do it is to wire it directly to  
4 each building. So you can have a community solar facility,  
5 you can wire it to each home and then provide the needed  
6 electricity for that home to each of the homes. That's one  
7 method. The second -- and then the customer would receive  
8 an on bill credit with their -- with their utility.

9 The second way a community solar participant could  
10 do it is to have essentially a virtual situation. And  
11 that's what SMUD has elected to do. So instead of wiring  
12 directly to each home, SMUD is required to account for,  
13 again, 1,000 kilowatt hours per month for that particular  
14 home. And if there's 100 homes, then each of those homes  
15 has to have that specific amount dedicated. And again,  
16 it's going to appear on the customer's bill. Same as it  
17 would in the first situation.

18 The third way that SMUD can comply is to calculate  
19 that energy savings and then determine what the bill --  
20 corresponding bill savings would be and essentially cut a  
21 check to the homeowner. And I can conceive of that  
22 happening, SMUD could speak to what their situation is but  
23 if someone were to come to us and set something like this  
24 up, they may need to change their accounting system so that  
25 they can get their bills changed so that this can be built

1 into the bill. That may take some time, so they may say,  
2 hey, we want to just cut a check to begin with to each of  
3 the participants because it's logistically easier, it's  
4 cheaper, who knows. So we wanted to provide that third  
5 option. So that's the first requirement under this Item 3,  
6 Dedicated Energy Savings.

7           The second requirement is that the package has to  
8 be cost effective. This is -- we've been doing this for as  
9 long as we've been doing building standards. We require  
10 that all measures, if you put in insulation and it costs X  
11 dollars and it will last for X years, we require that in  
12 the end, you as a homeowner are cash positive at the end of  
13 that, it doesn't cost you more for the energy efficient  
14 measure when it's typically it's energy efficiency in the  
15 past than -- than the savings you'll yield by virtue of the  
16 efficiency you'll get from that measure.

17           This is conceptually -- it's a little trickier  
18 because we're talking about solar and not a buy down, but  
19 it's the exact same thing here. And so for that reason, we  
20 think SMUD's application very clearly meets the  
21 requirements and recommend you approve.

22           Now I want to just highlight some of the arguments  
23 we've heard and explain why we think they're -- they're not  
24 accurate. So you heard a lot last time that the money  
25 savings to the homeowner will be inferior in the SMUD

1 community solar situation than it will be in a mortgage  
2 situation. And that's true. And I want to show a slide,  
3 my last slide I'm going to show illustrates that. But I  
4 want to be really clear, that's not what our rules require.  
5 Our rules require that the energy savings be the same  
6 regardless of which option is selected.

7           So let me click to my last slide and it shows here  
8 pretty clearly the money savings on an annual basis in SMUD  
9 territory associated with the three options. So community  
10 solar is the easiest because it's straightforward. We use  
11 2.8 kilowatts as a system we modeled against and that's  
12 what this example is using. So \$10 times 2.8 kilowatts  
13 yields \$28 per year, the math is pretty straightforward.

14           The other ones we had to make some assumptions and  
15 some estimates. So for example under the mortgage  
16 situation, we estimate it would cost, on average, it's an  
17 about, seventy -- excuse me, the savings would be about  
18 \$78. We used \$8400 as the cost of the system. It can  
19 vary. Costs are going down, they could be more expensive  
20 depending on what -- what provider you go with, that's the  
21 number we picked and we used it throughout the standards  
22 development process.

23           We also used a 4.5 percent interest rate on that  
24 mortgage, fixed rate -- 4.5 percent fixed rate mortgage.  
25 You can get a better deal than that today. That's true.

1 At the time we did it, that was what we thought the rate  
2 was about. But if you get a -- if you get a variable  
3 mortgage and, you know, the rates go up to whatever they go  
4 up to, well, then you're going to be -- then that number is  
5 going to go down, that \$78 is going to go down. If you  
6 were able to get a great mortgage rate today, that number  
7 will go up a bit. So the idea is that gives you at least a  
8 range of it. And then lease, we talked to some local folks  
9 who provide leases and we came up with \$71 as again a rough  
10 estimate.

11 So the money, clearly, is higher in -- in the first  
12 two options than the latter. But the community solar  
13 option is just that, it's an option. And to some  
14 homeowners, it's going to be very attractive. It's -- it's  
15 set it and forget it. Right? You sign up, you're good to  
16 go. I'm going to get 28 bucks better than I'd get if I  
17 weren't in this program going forward. As again SMUD's  
18 rates may go up or they may go down, whatever they are, I'm  
19 going to be \$28 to the good relative to what I'd be paying  
20 if I wasn't in the program. I don't have to show you my  
21 credit score, I don't have to pay points, there's no other  
22 things like that associated with it.

23 I don't get the solar on my roof and for some  
24 homeowners, that's a big negative. Others, don't want it.  
25 So, again, different people have different approaches and

1 attitudes and so this provides options.

2 The other, too, you're going to need a larger  
3 mortgage, you're going to need to, you know, go through all  
4 the credit checks and all that business. So, again,  
5 different strokes for different folks. But that's how that  
6 works.

7 You heard some very, very large numbers last time  
8 about what the SMUD program would be, what a community  
9 solar participant in SMUD territory would be losing if they  
10 selected the community solar option versus a mortgage  
11 option. And we didn't find any evidence that those numbers  
12 are accurate, we think the ones we've got are pretty close.

13 So with that, I just want to go through a couple of  
14 the additional claims that we've heard that I wanted to  
15 talk about. And really the first is this, and again the  
16 notion was I just want to one more time say there seems to  
17 be a notion that the rules require that there be an equal  
18 money benefit and that's just not true, we wrote them -- we  
19 think the language is fairly clear on its face that it  
20 doesn't require that.

21 And finally it doesn't make logical sense. If you  
22 look at this chart, if we were to have said the community  
23 solar option at the bottom has to be the identical money  
24 benefit as other options, well, what would it be? Would be  
25 \$78 at a 4.5 percent mortgage rate with an \$8400 system?

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1 Would it be, you know, a 2 percent interest rate? I mean,  
2 there's so many variables that it doesn't seem logical to  
3 us that that would even -- that that approach would even  
4 make sense. So that's the -- that's the one that we did  
5 here.

6 And the other one I wanted to point out that wasn't  
7 covered in my description of the changes SMUD has made is  
8 this idea of a slippery slope, that if you approve this,  
9 SMUD territory rates are low but if you approve it, there's  
10 other territories where it's -- where it's higher and the  
11 delta is even greater between the savings potentially  
12 associated with the community option and other options.

13 And staff's position is, you know, we're evaluating  
14 the proposal before us, I believe we have a representative  
15 from the California Public Utilities Commission that's  
16 going to talk a little bit about the IOU territories and  
17 what steps would need to be taken for an IOU that wished to  
18 participate in the community solar program. But I think  
19 we'll -- we will leave it at that.

20 With that, we suggest you vote in favor of this  
21 item. Thank you.

22 CHAIR HOCHSCHILD: Thank you. Let's move on to the  
23 applicant.

24 MR. LINS: Okay. Good afternoon. Am I on here?  
25 Just need to be closer.



1           Good afternoon, Chair and Commissioners. My name  
2 is Steve Lins, I'm the director of Government Affairs at  
3 SMUD. And with me, I've got Marissa O'Connor, a SMUD  
4 counsel. Ed Hamzawi who is our director with Advance  
5 Energy Solutions, as well as the president of the SMUD  
6 board Rob Kerth, and another board member Brandon Rose who  
7 are here to speak on SMUD's behalf as well.

8           Like to thank staff for all the time they've taken  
9 with us to work on this, develop and refine the program,  
10 it's been quite a while to ensure that it's meeting the  
11 regulations, and also to address at least many of the  
12 concerns that the stakeholders had.

13           So a little bit about SMUD. SMUD is community  
14 owned not for profit utility. We've got 1.5 million people  
15 that we're serving. About 99 percent of those people live  
16 right here in the Sacramento County area. We have a seven-  
17 member board that is connected to that community. And as  
18 we plan for a zero carbon future, everything we do is  
19 focused on those customers and communities, their needs and  
20 interests in mind. So we're looking at all the customers  
21 and trying to optimize our system for them. SMUD is  
22 clearly committed to a clean energy future and we're  
23 already at about 50 percent carbon free.

24           So I'd like to take a moment here just to look at  
25 the bigger picture. SMUD's integrated resource plan was

1 approved by our board and the CEC. It provides for  
2 billions of dollars of investment to reach our IRP goal of  
3 net zero carbon by 2040.

4 I'd like to thank the CEC for your approval for  
5 what staff called an ambitious roadmap for lowering  
6 greenhouse gas emissions in the Sacramento region while  
7 maintaining low rates and reliability. And that last  
8 phrase is very significant. Electrification is the  
9 cornerstone of our strategy so we have to keep rates  
10 reasonable. We don't want to create a disincentive for  
11 electrification. So to reach our goals, we're investing in  
12 building electrification, transportation electrification  
13 while maximizing energy efficiency demand response and  
14 renewable energy both grid connected and small scale  
15 resources.

16 SMUD has been a leader in solar for decades. We  
17 had the first commercial solar PV plan in 1984, the first  
18 solar powered ED charging station in '92, and most recently  
19 first net zero energy community here right in midtown  
20 Sacramento featuring rooftop solar and batteries. And you  
21 can see from this slide, we have about 170 megawatts of  
22 community and utility scale solar today. We're estimating  
23 that that's going to go all the way up to 1550 megawatts by  
24 2040 and a 1,000 of that's going to be locally sited.

25 And on the solar side, rooftop solar side, this is

1 a good place to pause and get some perspective. You can  
2 see that we currently have 210 megawatts of rooftop solar  
3 in our service area. We're estimating that that's going to  
4 go up to over 600 by 2040. If you look at the project that  
5 we are resourcing Neighborhood SolarShares with Wildflower,  
6 it's 13 megawatts. Thirteen megawatts compared to an  
7 anticipated rooftop solar market of 600 megawatts. We're  
8 anticipating that that project is going to cover our needs  
9 for about three to four years. And during that three to  
10 four years, we will look at opportunities to build other 20  
11 megawatt and smaller projects.

12 With our IRP, we're going to need every option  
13 we've got to reach that goal. I mean, that's a big  
14 audacious goal. It's going to take rooftop, it's going to  
15 take community solar, it's going to take electrification.

16 But one thing I would like to really emphasize here  
17 is that even with Neighborhood SolarShares on a customer's  
18 house, additional rooftop solar and batteries can be added  
19 to the home. And this is something that there's really  
20 been some confusion about and misinterpretation about.  
21 Customers can add solar and storage to a Neighborhood  
22 SolarShares home on day one.

23 And I'm going to walk you through a slide that  
24 gives you several scenarios. And we've been working with  
25 your staff on the numbers on this. I don't have -- we're

1 not putting exact numbers. The point I'm trying to get  
2 across here is kind of orders of magnitude. If you see  
3 that first bar, that first bar there is the SolarShares  
4 allocation that's likely to come out of a standard mixed  
5 fuel home in the program. That's going to be around -- and  
6 these are just round numbers, I've been working with staff  
7 on this -- that's around 3 kW in my example.

8 In the second bar, you'll see kind of a yellow  
9 dotted line at the top. That's our anticipated load. And  
10 for SMUD, the anticipated load is either historical load or  
11 in this case it's new, so we use a formula, we use square  
12 footage and other factors to come up with an amount. But  
13 our formula comes up with an amount for this home, mixed  
14 fuel, 5 kW. So day one, mixed fuel to mixed fuel,  
15 customer, Neighborhood SolarShares customer can add 2 kW of  
16 rooftop solar with batteries and still get net energy  
17 metering treatment, day one.

18 Now if that home is an all-electric home, built to  
19 code all electric, our new anticipated load for that home  
20 will be 8 kW. That means if they have a new home built all  
21 electric, they now can add 5 kW of rooftop solar and  
22 batteries on top of their Neighborhood SolarShares and  
23 still get net energy metering treatment.

24 But that's not all. If -- if they then decide they  
25 want to add a couple of EVs and a pool, that will raise

1 that anticipated load by another 5 kW. That would be an  
2 anticipated load of 13 kW. So you have an all-electric  
3 home with a couple EVs and a pool, you can add 10 kW of  
4 rooftop solar on top of Neighborhood SolarShares and still  
5 get net energy metering treatment.

6 Now the fourth bar is just an example where the  
7 anticipated load is basically at the Neighborhood  
8 SolarShares allocation. In that case, you couldn't add  
9 rooftop and battery and get net energy metering treatment.  
10 But you could add as much as you want. You could put 10,  
11 20, whatever you want to put on the roof with batteries,  
12 you want to have some resilience, you can still do that,  
13 you're just not going to get net energy metering treatment.

14 So, I mean, the obvious point here is that in all  
15 scenarios, it's very easy to add rooftop solar and  
16 batteries and in most cases still get net energy metering  
17 treatment. And so there is absolutely no need for an opt-  
18 out. People have been asking for an opt-out. The reason  
19 for an opt-out is so they can add rooftop solar. They can  
20 already add rooftop solar, they can just opt in to rooftop  
21 solar on day one with Neighborhood SolarShares. There's no  
22 need for an opt-out.

23 So next slide just gets into a little bit into a  
24 lot of the efforts that SMUD's doing to advance solar  
25 adoption in Sacramento. We've got some workforce training

1 going with 200 disadvantaged youths. They're working on  
2 putting in solar trees in up to 11 locations throughout  
3 Sacramento. We've put in 178 rooftop solar installations  
4 at low income house to no cost to those customers with the  
5 help of grid alternates and Habit for Humanity. We've got  
6 the largest commercial SolarShares program in the country.

7 We're innovating, we've got some new software out  
8 that actually improves the connection of rooftop solar to  
9 our system. And finally, we've got a new storage shares  
10 program, we're working with Electrify America on that. And  
11 that helps address that peak energy command for EV charging  
12 and helps support the expansion of EV charging in the  
13 community.

14 So once again, the building standards require all  
15 new rise residential to have solar energy. It can be  
16 onsite or community solar. Either of those solar  
17 alternatives provides the same environmental benefits,  
18 reducing greenhouse gas emissions criteria pollutants. But  
19 Section 10115(a) gives homeowners and builders an  
20 additional choice, it's just an alternative path for  
21 compliance, it's only an option. And it might seem obvious  
22 to say this, but without this option, there's no choice,  
23 there's only rooftop. Both rooftop and community solar have  
24 unique benefits. At the end of the day, they both reduce  
25 carbon.

1 I'd like to take a moment here just to highlight  
2 some of the unique benefits of SMUD's Neighborhood  
3 SolarShares program. First, we're actually offering a  
4 choice. Second, our solar's lower cost and more efficient.  
5 And right here I would like to emphasize and this goes a  
6 little bit to what Drew was saying about the costs. Though  
7 in his chart he had the \$78 for mortgage, \$71 for a lease,  
8 and then \$28 for our program, our program accounts for all  
9 normal costs and does not require a subsidy from  
10 nonparticipating customers.

11 That incremental difference between our amount and  
12 the other two amounts comes from the rest of our customers.  
13 And as I mentioned, we've got to keep an eye on rates  
14 because if we're going to electrify, we need to make sure  
15 those rates are reasonable. So that's a huge benefit of  
16 our program.

17 There's no maintenance for customers. We take care  
18 of it, they don't have to worry about it. I've got 8 kW on  
19 my roof and let me tell you, it can be difficult at times,  
20 and it has been. There's -- we deliver the same number of  
21 kilowatt hours, rain or shine, every year for 20 years.  
22 With Neighborhood SolarShares, the project can be sited  
23 away from the building so you obviously can plant as many  
24 trees as you want. Those trees sequester carbon and reduce  
25 energy consumption through shading, which just gives you

1 more energy efficiency. And finally, there's lower up  
2 front cost with Neighborhood SolarShares.

3 So just a quick overview of the program, the basic  
4 structure's the same as it was last time. Contracts  
5 between us and the developers, some CC&Rs between the  
6 developers and the buyers. You've got charges on the  
7 customer's bills that are less than the credits, giving  
8 them their guaranteed net benefit. And SMUD's resources  
9 will deliver the same amount or more of solar resources as  
10 rooftop solar.

11 One thing I'd like to emphasize here is that those  
12 charges and credits will actually be based on the portfolio  
13 solar shape. So for now it'll be a blending of all those  
14 in the portfolio. The customer experience will actually be  
15 as if they have solar on the roof. So their charges will  
16 be higher in the summer and lower in the winter such like  
17 they had rooftop solar. And will virtually reduce the  
18 building's energy consumption.

19 You know, there's been a lot of noise and requests  
20 for features that aren't required by the regulations and  
21 we've actually accommodated many of those requests. But I  
22 want to make it clear that the Neighborhood SolarShares  
23 program meets all the requirements, I don't think that's a  
24 question. Our systems are available for inspection, we've  
25 got equivalent energy performance. On benefits and



1 durability, we've got guaranteed financial benefits that  
2 last for 20 years. And these benefits -- and there's some  
3 comments in the docket that talked about well, these aren't  
4 really based on, you know, actual energy projection. These  
5 benefits will be based on virtual energy reduction  
6 calculated using existing TOU -- TOD rates.

7           This isn't shown in the mock bill. We put a mock  
8 bill in the application just to show what the bill  
9 presentment is going to look like to the customer and most  
10 of our customers don't want to see that detail. And so  
11 we've talked to staff about this issue and we're happy to  
12 make that detail available on line if somebody wants to dig  
13 into it and, you know, look at all the calculations going  
14 on under the hood. But they will absolutely be linked to  
15 virtual energy reductions and using real TOD rates. And so  
16 just wanted to get that off the table.

17           Finally, I think Drew said the generation will be  
18 additional. We will be retiring reqs on behalf of each  
19 home, specifically for that home. And once we do that, we  
20 obviously can't go out and use those renewable energy  
21 credits to cover some other RPS obligation.

22           Finally, we're obviously going to keep the records  
23 that we need to ensure compliance.

24           So I think Drew went over some of these, but I  
25 would like to just kind of do a quick walk through. You

1 know, in the original proposal, we had no limit on resource  
2 size, now we're limiting it to 20 megawatts or less. In  
3 the old proposal, we had service resources outside and  
4 inside the territory, we're now limiting them to inside the  
5 service territory. We had a guaranteed net benefit of \$5  
6 per kW, we've now doubled that to \$10 per kW. We were  
7 using existing and new resources, now we've committed to  
8 new resources as of January 2020 with the caveat that Drew  
9 mentioned that, you know, if we have a gap to deal with, we  
10 will use some of our fit resources which are 5 megawatts or  
11 less.

12           And then we also have three additional commitments  
13 that we've made. First is that SMUD will collaborate with  
14 the builders and developers to provide a choice at the  
15 point of purchase. And you'll hear from the building  
16 industry about that today. We are committing to  
17 collaborate with the disadvantaged community  
18 representatives with respect to siting. And actually  
19 Wildflower is, you have two to three miles from both a  
20 CalEnviroScreen zone and a Promise Zone, it's close and  
21 we're happy to work with those communities and see if  
22 there's siding that works for -- for all of us.

23           Finally, VNEM that's come up several times. And we  
24 are committed to evaluating VNEfM. We're right in the  
25 middle of a net energy metering successor rate process.

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1 That's going to go through 2020 and we'll be taking a ret -  
2 - a rate recommendation to our board 2021.

3 Just real quick. SMUD is broad in diverse support,  
4 I'm sure you've seen the docket. We've got affordable  
5 housing, environmental advocates, builders, developers,  
6 associations, business community, legislators, and I'll  
7 talk about that a moment more in the next slide. Local and  
8 statewide labor, many who are here today. Local -- low  
9 income advocates, local government, and several publicly  
10 owned utilities.

11 And this is just a sampling of all of those support  
12 letters. And I'm just going to touch on a couple of them  
13 in each of the categories. In Affordable Housing  
14 Environmental Advocates, we've got NRDC, the Salvation  
15 Army, and the Sacramento Tree Foundation. And NRDC was  
16 opposed our first proposal but after we made several  
17 significant improvements, they're now supporting.

18 In the next category, we've got Sacramento Metro  
19 Chamber, the North State Building Industry Association, and  
20 the California Building Industry Association, and they're  
21 here to speak today.

22 In governing and labor, we've got the state  
23 association and the local IBEW 1245 supporting this, as  
24 well as, and this is really significant, 30 letter with  
25 support from 32 California state legislators, including two

1 chairs of the Senate and Assembly Energy Committee. That's  
2 over a quarter of the entire California state legislature  
3 supporting this project. That's pretty remarkable.

4 Finally, POUs, publicly owned utilities, we've got  
5 LADWP, Independent Energy Producers, and the Coalition for  
6 Community Solar Access. And once again, they're another  
7 party that was opposed to our first proposal. With our  
8 improvements, they've come back and are now supporting.

9 Just real quickly, once again we appreciate all the  
10 collaboration with staff, they've been great, you know,  
11 trying to work back and forth and find something that, you  
12 know, is an option that's going to work for all of us in  
13 reaching our, you know, clean energy goals. They've found,  
14 obviously, our first application met the requirements and  
15 they've said again today that this one does and they're  
16 recommending approval.

17 But just final, you know, high-level view here. I  
18 mean, we're focused on the big picture here. And for us,  
19 that's net zero by 2040. That's an audacious aggressive  
20 goal and we're going to need every tool in the toolbox to  
21 get there. I mean, we're going to need rooftop, we're  
22 going to need community solar, we're going to need  
23 electrification, we're going to need all this stuff.  
24 Neighborhood SolarShares is just one of many strategies  
25 that we have for reaching that goal. It meets all the

1 requirements, it's just another path or option for  
2 compliance. It creates a choice for builders and buyers.  
3 Without Neighborhood SolarShares, there's quite simply no  
4 other choice in rooftop and that's not what was intended in  
5 the regulations.

6           And finally, Neighborhood SolarShares advances  
7 solar along with an expanding rooftop solar market.  
8 Rooftop's here to stay. I just want to -- so with that, I  
9 think I'm going to finish off by turning over to Brandon  
10 Rose who's a director from the SMUD board of directors and  
11 he has a few comments to add.

12           MR. ROSE: All right. Thank you. Thank you, Chair  
13 and Commissioners. My name is Brandon Rose, and I'll  
14 brief, I know there's a lot of speakers who want to have  
15 their time.

16           I am the elected SMUD board member, I represent  
17 Ward 1, which is Fair Oaks, Orangevale, Citrus Heights, and  
18 Folsom. I've been elected since 2016. I'm the chair of  
19 the Energy Resources and Customer Service Committee. So we  
20 have things like the Integrated Resources Plan under my  
21 committee. I want to note my colleague and board president  
22 Rob Kerth is here with me today as well.

23           My background is I'm an air pollution specialist  
24 working on vehicle electrification work. And before that I  
25 actually was in the Renewable Energy Office at the Energy

1 Commission where I worked on new solar homes partnership  
2 pilot (indiscernible) programs on the general emerging  
3 renewables program. So I am extremely familiar with this  
4 subject material.

5 Also the immediate past present of ECOS,  
6 Environmental Council of Sacramento, which is an advocacy  
7 coalition nonprofit. I've done a lot of environmental  
8 advocacy work throughout the Sacramento Community over the  
9 years.

10 I'm also the former chair of the Sacramento County  
11 Treasury Oversight Committee that oversees the county  
12 treasury.

13 So I just wanted to say SMUD, as everyone knows,  
14 has been around for over 70 years now. It is a community  
15 owned, not for profit electricity provider. And I have to  
16 point this out, there are no shareholders at SMUD. Nobody  
17 at SMUD is working to -- working for Wall Street. It  
18 really is about focusing on the residents of Sacramento  
19 County and really doing what's right.

20 I also want to note that we are the proud  
21 recipients of the J.D. Power award with a top-ranked  
22 California utility 18 years in a row for residential and 10  
23 years in a row on commercial. So we definitely have a  
24 really high standard, high bar that we keep. Part of that  
25 sort of secret sauce is definitely our governance system

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1 and our governance policy, but I won't go into it, but it's  
2 definitely how our board operates. We set standards and we  
3 hire good smart people, implement them, and we monitor and  
4 make changes as we go along which is basically adept  
5 management.

6 Also wanted to note, SMUD is very fortunate that we  
7 are in Tier 1 fire area, so we do not have the public  
8 safety power shutoff issues. And I point that out because  
9 our application when you look and maybe consider it for  
10 future applications, you might have different criteria that  
11 you consider, and I think that's important to note.

12 So a little bit, IRP, this Commission approved our  
13 2040 IRP, it was a net zero plan. As Steve mentioned, it  
14 requires an enormous amount of renewables that we are  
15 actively building and planning for more. Also I would note  
16 had a large reduction in our thermal generation. It's  
17 basically anticipating doubling our load while reducing our  
18 capacity factors from about 60 percent to 15 percent on our  
19 power plants. So really significant carbon reductions in  
20 that plan.

21 It does, of course, include enormous amounts of  
22 money for transportation and building electrification.  
23 That really is the pathway, and this Commission's reports  
24 have also shown the pathway to decarbonization is through  
25 electrification. But that plan is not without risk to SMUD

1 as a utility. It's about 7, six and a half, almost \$7  
2 billion investment. It really is predicated on the use of  
3 low-cost electricity for people to make that transition.  
4 And without keeping those rates as low as possible, people  
5 won't be able to switch to heat pump hot water heaters and  
6 take those really concrete actions that are required.

7           Want to point out that the large scale solar, it is  
8 the most cost-effective, the solar power options. It's  
9 about, you know, you can have a debate, but around the  
10 quarter of the price rooftop solar. So it really helps us  
11 put the maximum number of dollars put into generation. As  
12 much -- from our perspective, very cost efficient, and also  
13 minimizes the cost to our consumers. And ultimately our  
14 consumers are, you know, if we save money, we simply don't  
15 have to raise our rates is how it works here at SMUD.

16           I do want to point out Neighborhood SolarShares,  
17 it's just an option. We've heard some builders will use  
18 it, other builders will not use it. It does give them the  
19 option. As you can see in our IRP plans is 400 megawatts  
20 of expected rooftop solar to be built over the next 20  
21 years. So still is enormous I want to say market available  
22 out there.

23           I personally as a board member, I will continue to  
24 monitor this program and see if it has any kind of, you  
25 know, undue adverse impacts on the industry. I personally



1 like, am a big proponent on solar. I would really need to  
2 find that -- that sort of balance between all the different  
3 types of solar that's out there.

4           There's a lot of things that we could talk about, a  
5 lot of the public comments, I read through the docket.  
6 Questions on land use, distribution issues, I'm not going  
7 to get into those. I do want to say the climate change is  
8 an all hands on deck situation and we recognize that all of  
9 the options needed to be on the table. Rooftop utility  
10 scale and all the other types of renewables and storage  
11 technology that are being developed.

12           The other issue is housing and homelessness, it is  
13 a critical issue. I'm going to finish up. This really  
14 allows home buyers and builders to have a lower cost option  
15 and we see just how critical it is and the work in the  
16 legislature, this is a top priority. So it is important to  
17 have options. And of course being able to, you know, have  
18 a commercial -- community solar system when maybe there's  
19 shading issues or other issues, it's important as well.

20           We have been overwhelmed by the broad support.  
21 Steve showed all the different organizations and just a  
22 broad coalition who supported this application. The board  
23 -- we received an enormous amount of feedback. I feel very  
24 confident that the staff has taken all that feedback and  
25 considered it and put it into our application. We do

1 delegate our program authority to the CEO and staff.

2 We do have hundreds of -- we do have hundreds of  
3 programs so it's really not so feasible for the board to  
4 look at every single program that we run. And I consider  
5 this one of many.

6 So my final thought, I do want to thank you. I do  
7 want to encourage you to look at this in the context of  
8 Title 24. It is very specific. You know, Title 24 and our  
9 energy efficiency standards are based on certain types of  
10 accounting that may not be self-evident to people who  
11 aren't doing it on a day to day basis.

12 And with that, I ask you for your support and we  
13 will look forward to any changes of this in the future.

14 CHAIR HOCHSCHILD: Thank you. All right. What  
15 we're going to do now at this time is have very brief  
16 remarks from Grant Mack at the Public Utilities Commission  
17 to be followed by Senator Wiener, to be followed by  
18 Assemblyman Kevin Kiley. And then we'll then go to public  
19 comment.

20 Floor is yours.

21 MR. MACK: Great. Good afternoon, Chair and  
22 Commissioners. I appreciate the opportunity to speak here  
23 this morning.

24 Before I begin, I do want to congratulate on  
25 approving the 2019 IEPR earlier this morning. Is very much

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1 a monumental task, congratulations Commissioner Scott for  
2 leading that effort.

3 My name is Grant Mack with the Public Utilities  
4 Commission as you mentioned, Chair. I'm largely here today  
5 to provide clarity regarding the community solar options  
6 with an IOU territory and answer any questions you may  
7 have.

8 Currently there were several community solar  
9 programs offered in IOU territory that were statutory  
10 enabled and established prior to the building energy  
11 efficiency standards solar requirement. Based on our  
12 internal analysis and conversations between the PUC, the  
13 IOUs, and the Energy Commission, we have found that the  
14 existing IOU offered programs don't seem to align perfectly  
15 with the building standards community solar compliance  
16 option. This likely means that the existing community  
17 solar programs would need to be modified or a new community  
18 solar program would need to be created.

19 Continuing along those lines, any major  
20 modifications to the existing community solar programs to  
21 align them with the building standards would be subject to  
22 CPUC review and approval. The same is also true for any  
23 new building standard compliant community solar program  
24 proposed by the electric IOUs or by stakeholders. It is  
25 highly likely that these reviews would occur at the formal

1 CPUC proceeding and these typically take around twenty --  
2 18 to 24 months, depending on the complexity of the issue,  
3 the scope of the proceeding, the number of parties, and  
4 various other factors.

5 Now, if a new building standard compliant solar  
6 community solar program is proposed and/or modifications  
7 are proposed to the existing community solar programs, it  
8 is unclear if the CPUC would be able to approve these  
9 proposals without statutory changes. I say this because  
10 the current programmatic parameters codified in statute  
11 prevent us from making serious modifications to the  
12 existing programs.

13 However, I do caveat this by saying that the CPUC's  
14 authority to approving new building standard compliant  
15 community solar program largely depends on the specific  
16 proposals brought forth by IOUs or the stakeholders.

17 Now in regards to community solar programs  
18 developed by CCAs, also known as community choice  
19 aggregators, there are currently no requirements for these  
20 programs to be reviewed or approved by the CPUC. These  
21 entities may design and create their own programs on their  
22 own volition.

23 Finally, I will note that there are no formal  
24 proposals before the CPUC to create a new community solar  
25 program or to modify the existing programs. We're also not

1 aware of any community solar programs currently under  
2 development by the IOUs or the CCAs. However, I am aware  
3 that there are active conversations between my team, the  
4 builders, the IOUs about this very topic, but I will leave  
5 it up to the IOU, CCA, and building representatives to  
6 elaborate on that point.

7 I hope my comments have provided clarity regarding  
8 community solar programs and IOU territory and I'll be here  
9 to answer any questions you may have.

10 CHAIR HOCHSCHILD: Great.

11 MR. MACK: Thank you.

12 CHAIR HOCHSCHILD: Thank you, Mr. Mack.

13 Senator Wiener, we'll go to you.

14 SENATOR WIENER: Thank you very much and thank you  
15 for having me today. Appreciate and thank you for your  
16 service to the people of California. It's always a  
17 pleasure to work with the Energy Commission. So thank you.

18 I regret to have to come today to oppose SMUD's  
19 proposal. And I say this regretfully because this is not  
20 about SMUD itself, I'm a fan of SMUD. SMUD broke away from  
21 PG&E a long time ago, something that we have been trying  
22 for many years to do in San Francisco, so we -- we tip our  
23 hat to SMUD and to people of this region for having the  
24 foresight to do what a lot of us should have done a long  
25 time ago.

1           So this is not a criticism of the agency overall,  
2 it's a criticism of this proposal and also unfortunately an  
3 approach by SMUD to rooftop solar that I just fundamentally  
4 disagree with.

5           This proposal will significantly undermine solar  
6 and storage in the SMUD territory, rooftop solar and  
7 storage in the SMUD territory and it will set a precedent  
8 and a blueprint for other utilities, particularly the IOUs  
9 to do the same. And mark my words, even though nothing is  
10 being proposed now, it will absolutely create that  
11 precedent and that framework and we will see it coming  
12 forward. Because we know that when it comes to PG&E and  
13 the other investor-owned utilities, and we see this in the  
14 fights playing in the Capitol, there is no attack on  
15 rooftop solar and storage that they will not engage in  
16 because they want it to go away and they view it as  
17 competition. And so a decision to accept this proposal  
18 today will undermine our effort to expand distributed  
19 energy resources in the state of California.

20           Looking at the context here, we know there is a  
21 long history of utilities viewing DERs as competition and  
22 trying to undermine them. The plates play out here at the  
23 Energy Commission, it plays out at the CPUC, it plays out  
24 in the legislature. I am disappointed that a publicly-  
25 owned utility would take the positions that SMUD has taken.

1 I expect that more from Wall Street-owned utilities, I  
2 don't expect that from publicly-owned utilities.

3 Last year, just looking at the context as you know,  
4 SMUD came forward and proposed a very significant fee, I  
5 think 45 or \$50 to be tacked on to solar customers' bill  
6 each month. That did not move forward and I'm appreciative  
7 of that, although I would not be surprised if it came back.  
8 That would have dramatically undermined the economic  
9 feasibility for people to put solar and storage up. And I  
10 have a bill right now, SB 953 to permanently ban those fees  
11 that target DERs to try to undermine them.

12 And I bring this up only because what is before you  
13 today, even though I know there have been a lot of  
14 protestations of this is not anti-solar, given the context,  
15 unfortunately, I believe this is anti-rooftop solar. SMUD  
16 then came forward, as you know, last year with a different  
17 version of what's before you today. I think the Commission  
18 correctly sent them back to the drawing board and now we  
19 have this revision.

20 This is in my view and from my perspective and  
21 effort to shift away from rooftop solar and towards  
22 utilities scale solar. And to be clear, I don't objective  
23 to utilities scale solar, I think it has an important role  
24 to play, so to DERs. And I don't think that we should  
25 establishing and expanding utility scale solar at the

1 expense of DERs and that's what this proposal is, it  
2 becomes a zero sum game instead of saying both and.

3 SMUD did and even worse, of course, for the -- if a  
4 developer chooses this option, then for 20 years,  
5 homeowners or apartment owners are either prohibited or  
6 significantly restricted from installing DERs on their  
7 property. And doing -- putting solar on without NEM,  
8 frankly, is not a real option for most people and it  
9 defeats the purpose economically. And so this is  
10 effectively a 20-year prohibition on putting solar storage  
11 on your building or on your home. That is not a good  
12 approach in my view.

13 Yesterday, SMUD published a piece in Utility Dive,  
14 which you may have seen, I'm sure a lot of people in the  
15 room saw and SMUD again professed its support for rooftop  
16 solar in the first half of the piece but in the second half  
17 of the piece promptly trashed rooftop solar, how it's  
18 dramatically more expensive, it's not economical, it's not  
19 reliable, it doesn't actually lead to energy independence.  
20 These are arguments I expect to see from a valid opponents  
21 of rooftop solar, not from a publicly-owned utility that  
22 says that it supports rooftop solar.

23 The existing rules that this Commission established  
24 provide exceptions for the rooftop solar requirement. If  
25 they're shading or for whatever reason, it doesn't make



1 sense, there are exits. I, as a proponent of solar, I  
2 don't want to put solar on rooftops where it doesn't make  
3 sense. And this Commission correctly created exceptions  
4 for that requirement.

5 Distributed energy generation is a key part of the  
6 future of a sustainable energy system of clean energy  
7 resiliency in California and I'm concerned that this  
8 proposal is a foot in the door to start deeply reversing  
9 that trend.

10 And I want to just conclude by saying this  
11 Commission has been such an avid supporter of DERs, and I  
12 want to commend you for that. This Commission sees the big  
13 picture and gets that. Unlike the California Public  
14 Utilities Commission which has been systematically  
15 undermining DERs. And I don't say that lightly, and I  
16 could give a lot of examples, including their current  
17 effort to undermine the SGIP program which I spent two  
18 years passing and the CPUC has been systematically  
19 undermining.

20 I would encourage the Energy Commission to maintain  
21 your role as a champion for DERs and not go down that other  
22 path and I ask that you reject this proposal.

23 Thank you for the time.

24 CHAIR HOCHSCHILD: Thank you, Senator.

25 Next we'll hear from Assemblyman Kevin Kiley, and

1 then we'll go to public comment.

2 ASSEMBLYMAN KILEY: Good afternoon. I'm Keven  
3 Kiley, I represent the Sixth Assembly District which  
4 includes part of SMUD's serviced area. And I have an  
5 abundance of respect for my colleague from San Francisco,  
6 but I think he's in a distinct minority on this issue when  
7 it comes to our legislature.

8 I am here speaking on behalf of a coalition of 30  
9 legislators, bipartisan, diverse, eclectic that are in  
10 support of SMUD's proposal. This might be the first issue  
11 that all 30 of us have ever agreed on is this proposal for  
12 SolarShares.

13 And why is that the case? Because it touches on  
14 two issues that are of tremendous importance to all --  
15 certainly to me, to all of us, and to the folks that I  
16 represent and that's clean energy and affordability. I  
17 mean, there is so much to be optimistic about when it comes  
18 to the future of energy. And yes, California is leading  
19 the way. But alongside this optimism, there's also a  
20 deepening concern about the affordability crisis that is  
21 gripping our state and pricing more and more people out of  
22 the California dream.

23 Surveys show that half of Californians have  
24 considered leaving our state. And of course, people do  
25 every single day. And this isn't just wealthy folks who

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1 want to pay lower income taxes or capital gains. This is  
2 the middle class, this is working people who just cannot  
3 get by here.

4 Now this SMUD proposal which is the result of  
5 painstaking work and engagement with a broad coalition of  
6 stakeholders shows that these two goals, clean energy and  
7 affordability need not be in conflict, they can go hand in  
8 hand. And my concern is that if the Commission rejects  
9 this proposal, it will reject that very premise and that  
10 will mean more people who are unable to make it in  
11 California, more people being priced out, more people  
12 having to leave the state they love. But more than that, I  
13 think it will actually serve to stall the momentum that is  
14 building in a broad bipartisan way for moving us towards  
15 the future of clean energy that we all want.

16 Thank you very much.

17 CHAIR HOCHSCHILD: Thank you, Assemblyman.

18 All right. At this time, we'll go to public  
19 comment. Again, we're going to do one minute per speaker.  
20 There are a lot of people wishing to speak today. We will  
21 stay as long as it takes to hear from everybody wishing to  
22 speak both in person and on the phone.

23 What I'm going to do is announce several speakers  
24 in order so people can line up. And again, if your point  
25 has already been made by a previous speaker, do not feel

1 obligated to repeat that. It's fine, just say your  
2 position, why you agree or disagree, and your name and  
3 organization.

4 So let's begin with Bob Raymer from CBIA to be  
5 followed by Ed Smeloff from Vote Solar, to be followed by  
6 Scott Tomashefski from NNCPA.

7 MR. RAYMER: Thank you, Mr. Chairman and  
8 Commissioners. I'm Bob Raymer speaking on behalf of CBIA  
9 in strong support of SMUD proposal.

10 As we look to the future, the state is moving  
11 towards zero carbon construction. And as you saw earlier  
12 this morning, local jurisdictions are already requiring  
13 builders to head in that direction in advance of state  
14 electrification mandates which we know are coming.

15 This carbon-free home is going to need roughly  
16 three to four times the amount of renewable energy that's  
17 currently required by today's state code. We can do this  
18 but we don't have enough space on most of our two and  
19 three-story single family dwellings and definitely on top  
20 of multifamily to accommodate all the solar that's needed.  
21 This means we're going to need a combination of both  
22 community solar and rooftop solar. We like both of these  
23 but we need both of these tools to go forward.

24 That's why the clarifications made by SMUD are more  
25 important. Homeowners buying community solar, can --

1 buying a home with community solar can go ahead and add  
2 solar on top of their roof from day one --

3 CHAIR HOCHSCHILD: Thank you. Thank you. Sorry --

4 MR. RAYMER: Thank you.

5 CHAIR HOCHSCHILD: -- we've got to -- Ed Smeloff  
6 from Vote Solar.

7 MR. SMELOFF: Good afternoon, Commissioners. Ed  
8 Smeloff with Vote Solar.

9 I'll cut to the chase and be brief. I'm here to  
10 encourage you to treat the SMUD program as a work in  
11 progress. And frankly also to think of your own  
12 regulations as how you're going to promote greenhouse gas  
13 reductions 24/7 in new home developments.

14 The SMUD program is the equivalent of a new RPS  
15 program for new homes. And while that is positive, it's  
16 going to result in simply deepening the debt curve. What  
17 we really need to have coming out of regulations, and I  
18 know your regulations went -- there was a lot of work that  
19 went into them, we need to have incentives for technologies  
20 to work in coordination. Solar, automated demand response,  
21 storage, electric vehicle charging, energy efficiency.

22 And so as you think going forward how to improve  
23 this program and SMUD as well, we really need to think  
24 about putting the neighborhood --

25 CHAIR HOCHSCHILD: Thank you.

1 MR. SMELOFF: -- in Neighborhood SolarShares.

2 Thank you.

3 CHAIR HOCHSCHILD: Thank you.

4 Let's go to Scott Tomashefski, to be followed by  
5 Daniel Barad, to be followed by Mo Kashmiri.

6 MR. TOMASHEFSKI: Good afternoon. We're here,  
7 NCPA, we're pleased to support SMUD's application.

8 I want to make it abundantly clear this afternoon  
9 that solar is a key part of our commitment to clean energy.  
10 Now we're currently looking to develop about 40 megawatts  
11 of solar energy within our member communities. To that  
12 end, we want to make sure that all of community members  
13 have the ability to invest in solar regardless of whether  
14 or not a person has the ability to place solar panels on a  
15 roof, whether that investment will be made for a utility  
16 project offering, or some other option, the building code  
17 appropriately recognizing that.

18 Our governing boards take this one step further  
19 making sure our utilities provide customers with unbiased  
20 information that will help customers select an option that  
21 best meets the needs of those customers. Our opinion, this  
22 really does exceed the requirements of building standards.

23 Thank you.

24 CHAIR HOCHSCHILD: Thank you.

25 Let's go to Daniel Barad of Sierra Club, to be

1 followed by Mo Kashmiri, to be followed by Hunter Stern.

2 MR. BARAD: Good afternoon, Daniel Barad on behalf  
3 of Sierra Club California.

4 I would like to urge the Commission to reject  
5 SMUD's proposal. Sierra Club California supports solar  
6 energy, but SMUD's SolarShare proposal will set a dangerous  
7 precedent in our state and undermine clean energy efforts  
8 that are underway with the solar mandate.

9 Community solar when properly defined is a  
10 necessary alternative when rooftop solar is not feasible.  
11 Unfortunately, SMUD's proposal is not a true community  
12 solar project due to its excessive project capsize, it's  
13 vagueness about location, and its failure to show how the  
14 program will result in local benefits.

15 Thank you.

16 CHAIR HOCHSCHILD: Thank you.

17 Let's go to Mo Kashmiri, to be followed by Hunter  
18 Stern.

19 MR. KASHMIRI: Good morning, Commissioners. My  
20 name is Mo Kashmiri. I'm a resident here in Sacramento.

21 I'm here because I'm ashamed of SMUD. We're going  
22 the wrong direction. We need every single place that can  
23 put rooftop solar to have it. We should not be putting  
24 misleading statements that put in poison pills, they're  
25 going to block solar for being on every roof possible.

1           We are already out of time to change this climate  
2 crisis. We should have been there yesterday. 2040 is too  
3 long. SMUD has five fossil fuel plants with no plans to  
4 shut them down. We need to -- it's both and, not an  
5 either/or. I strongly reject you -- urge you to reject  
6 this proposal complete with the fact that my eight year old  
7 is terrified about climate change. And I don't want to  
8 keep letting him down. Like this is on us, we don't have  
9 time left. We've got to make the hard choices. And  
10 blocking rooftop solar for doing -- for most of the  
11 consumers on this is not a path forward.

12           CHAIR HOCHSCHILD: Thank you.

13           MR. KASHMIRI: Thank you.

14           CHAIR HOCHSCHILD: Thank you.

15           Let's move on to Hunter Stern, followed by Andrew  
16 Kosydar of CBIA.

17           MR. STERN: Good afternoon, Commissioners. Hunter  
18 Stern, IBEW Local 1245. We represent the workers at SMUD,  
19 PG&E, and almost every other public utility in this  
20 northern part of California.

21           We strongly support this program. It's well-  
22 designed. It's focused on the community, which is a big  
23 change that SMUD made. And most importantly, it avoids the  
24 problems that the existing California solar initiative has  
25 had on low and middle income customers, and also on the



1 rates of PG&E and the other IOUs. There's been a huge,  
2 over \$3 billion cost shift resulting from the existing  
3 structure of rooftop solar.

4 The NEM needs to be changed. This avoids all of  
5 those problems. It doesn't put pressure on our wages, but  
6 more importantly, it doesn't saddle low income customers  
7 with costs that they don't deserve. We urge you to approve  
8 this, we think it's the right approach. And most  
9 importantly --

10 CHAIR HOCHSCHILD: Thank you. Thank you.

11 MR. STERN: -- it gives customers a choice if they  
12 want to have rooftop solar or not. Thank you.

13 CHAIR HOCHSCHILD: Thank you.

14 Let's move on to Andrew Kosydar, to be followed by  
15 Scott Murtishaw, to be followed by Steve Towle.

16 MR. KOSYDAR: Good afternoon, Chairman and  
17 Commissioners. My name is Andrew Kosydar, and today I'm  
18 speaking on behalf of Dave Sanson, President of DeNova  
19 Homes and the current Chairman of the California Building  
20 Industry Association.

21 Mr. Sanson and DeNova Homes are in support of  
22 SMUD's community solar proposal. When asked if builders of  
23 single family homes who choose to go with community solar  
24 would also be inclined to provide rooftop as a design  
25 option to potential home buyers, Dave's response is a big

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1 yes. However, for the near future, the answer is moot as  
2 DeNova with single family homes will only use rooftop solar  
3 for the standard compliance.

4 In Dave's words, we're in the business of selling  
5 homes and rooftop is a marketable item. If the state or  
6 local jurisdiction were to increase the amount of currently  
7 required in the code, we might be consider doing a blend of  
8 rooftop PV on community solar -- and community solar, but  
9 the decision will be driven by the amount of available  
10 space on the roof.

11 Multifamily product is a different story. And he  
12 doubts he'll have enough room on the roof to refer to the  
13 required amount of solar. And for these reasons, we  
14 respectfully ask that you approve this application.

15 Thank you.

16 CHAIR HOCHSCHILD: Thank you.

17 Let's move on to Scott Murtishaw, to be followed by  
18 Steve Towle, to be followed by Meghna Chowdhary.

19 MR. MURTISHAW: Hi. Good afternoon, Commissioners.  
20 Scott Murtishaw with CalSSA, just a couple of brief points.  
21 First I would say we appreciate all the efforts SMUD has  
22 made, the current proposal is much improved over the first  
23 version that they submitted.

24 We still have some concerns. For example, one of  
25 the foremost among those is the fact that for 20 years

1 future homeowners, people who might move into that home  
2 subsequently to the first buyer can never substitute their  
3 SolarShares obligation 100 percent with a rooftop solar  
4 alternative which seems a little questionable to us why  
5 that lockout is necessary and why you shouldn't be able to  
6 choose rooftop solar for 100 percent of your load.

7           And then the second is just to respond to the  
8 comments from Mr. Mack. We largely agree with his analysis  
9 that the current community solar programs probably are not  
10 Title 24 compliant, but we think that because those  
11 modifications are fairly minor compared to the existing  
12 programs, that --

13           CHAIR HOCHSCHILD: Thank you.

14           MR. MURTISHAW: -- those could be approved on a  
15 more expedited basis --

16           CHAIR HOCHSCHILD: Thank you. Thank you.

17           MR. MURTISHAW: -- and has suggestions.

18           CHAIR HOCHSCHILD: Thank you.

19           MR. MURTISHAW: Thank you.

20           CHAIR HOCHSCHILD: Let's move on to Steve Towle, to  
21 be followed by Meghna Chowdhary to be followed by Blair  
22 Swezey.

23           MR. TOWLE: Hello, I'm Steve Towle, I'm a current  
24 SMUD employee and I am in support of the SMUD program as  
25 what was previously stated.

1 Thank you.

2 CHAIR HOCHSCHILD: All right. Thank you.

3 Meghna Chowdhary, to be followed by Blair Swezey,  
4 to be followed by Alex McDonough.

5 MS. CHOWDHARY: Good afternoon, this is Meghna  
6 Chowdhary from SolarEdge Technologies.

7 With SMUD's proposal, we will be at a huge loss in  
8 terms of grid resiliency that modern waters bring from  
9 rooftop solar. We are able to perform voltage frequency  
10 controls, demand response grid services that we won't be  
11 able to do with community solars offsite, even a few miles  
12 away.

13 Lastly, with power outages due to fires, there's a  
14 growing need for onsite PV and battery assistance. We need  
15 enough rooftop solar to be able to recharge those batteries  
16 from PV and keep the basic services of keeping the lights  
17 on, refrigerators on, and charge the batteries.

18 Thank you.

19 CHAIR HOCHSCHILD: Thank you. Let's move on to  
20 Blair Swezey, to be followed by Alex McDonough, to be  
21 followed by Al Rich from NCR.

22 MR. SWEZEY: Good afternoon, Commissioners, I'm  
23 Blair Swezey with SunPower.

24 First let me say that we understand this has been a  
25 difficult process and we appreciate the attention that

1 you've given to the concerns of the various parties. We  
2 also appreciate that the nature of the offsite option and  
3 when it may be appropriate to be utilized was not well  
4 defined in the regulation and that the Commission is under  
5 immense pressure to approve this application today.

6           However, I'd be remiss if I didn't say that first  
7 and foremost we should be considering their interest of the  
8 new home occupants, the customers who are going to live in  
9 these homes. Our greatest concern about this application  
10 has been that the savings and benefits for the customer are  
11 not equivalent between the SolarShares offering and having  
12 a rooftop solar system.

13           Secondly under this program, these occupants  
14 through no free choice or decision of their own will be  
15 locked into paying for SMUD delivered SolarShares  
16 electricity for 20 years, irrespective of whether they  
17 later choose to install a solar and a storage system.

18           So our main concern here is that we are concerned  
19 about the precedent that approval of this program will  
20 establish for other --

21           CHAIR HOCHSCHILD: Thank you.

22           Let's move on to --

23           MR. SWEZEY: -- utilities. Thank you.

24           CHAIR HOCHSCHILD: -- Alex McDonough, to be  
25 followed by Al Rich, to be followed by Serena Moss.

1 MR. MCDONOUGH: Alex McDonough from Sunrun. Thank  
2 you for all your work on this.

3 Unfortunately, SMUD's application fails to answer  
4 critical questions about how it will -- how it will allow  
5 Sacramentans to enjoy the benefits of onsite solar and  
6 batteries that were envisioned in Title 24.

7 First, why does SMUD believe Title 24 requires them  
8 to lock customers into SolarShares for 20 years? The  
9 Commission has not taken this position. SMUD should answer  
10 why it won't give customers flexibility to switch from  
11 SolarShares to rooftop solar.

12 Second, SMUD says it will allow Solar customer --  
13 SolarShares customers to install solar only for new load or  
14 at an extremely reduced export rate. Does SMUD think that  
15 anyone will want solar and batteries if they're permitted  
16 to offsetting their own utility bill? Could anyone other  
17 wealthy people afford this?

18 And third, SMUD says that it will encourage  
19 developers to offer customers and onsite solar option. But  
20 how will SMUD ensure this will be a bona fide choice for a  
21 home buyer? Will SMUD just allow all developers to default  
22 customers --

23 CHAIR HOCHSCHILD: Thank you.

24 MR. MCDONOUGH: -- into SolarShares?

25 CHAIR HOCHSCHILD: Thank you.

1 MR. MCDONOUGH: Is there anything stopping them?

2 CHAIR HOCHSCHILD: We have to move on.

3 MR. MCDONOUGH: Thank you.

4 CHAIR HOCHSCHILD: Al Rich, to be followed by  
5 Serena Moss, to be followed by Mary Holte.

6 MR. RICH: Good afternoon, Commissioners. I'm Al  
7 Rich, president of ACR Solar in Carmichael.

8 SMUD is a leader in promoting rooftop solar and the  
9 solar industry has greatly appreciated this leadership.  
10 For new home buyers, rooftop solar is not a cost but a day  
11 one savings because the energy efficiency savings exceeds  
12 the slight increase in the mortgage. It's a perfect  
13 scenario and ideal for the homeowner.

14 Rooftop solar also sets up needed infrastructure  
15 for distributed battery and hydrogen storage that is so  
16 essential to providing grid power stability which is a huge  
17 benefit to SMUD and all utilities.

18 The rooftop solar mandate was put in place by the  
19 state of California as one of many much needed solutions to  
20 a looming menace of climate change and was to be an example  
21 to the rest of the country of what can be done to fight  
22 climate change. Let's not dilute this incredibly important  
23 opportunity.

24 Thank you.

25 CHAIR HOCHSCHILD: Thank you. Let's move on to

1 Serena Moss, to be followed by Mary Holte, to be followed  
2 by Ori Liwanag. Yeah.

3 MS. MOSS: Hello, my name is Serena Moss. I'm a  
4 SMUD employee and a member of IBEW 1245. And I would ask  
5 that you please support SMUD's proposal Item 11. Thank  
6 you.

7 CHAIR HOCHSCHILD: Thank you. Mary Holte.

8 MS. HOLTE: Hi, my name is Mary Holte with SMUD.  
9 And I support SMUD's SolarShares.

10 CHAIR HOCHSCHILD: Thank you. Let's move on to Ori  
11 Liwanag, I hope I'm pronouncing that right, to be followed  
12 by Michelle Smira, to be follow by Whitney Prout.

13 MR. LIWANAG: Hello, I'm a student at UC Riverside  
14 and an intern in environment California.

15 I'm here to urge the CEC and SMUD to do the hardest  
16 work possible to stave off the worst impacts of climate  
17 change and reject this proposal. To get 100 percent clean  
18 energy, we need our utilities to push. That means we need  
19 rooftop solar and community solar and we need it now.

20 I believe in what the experts are telling us and I  
21 believe that if we don't take the steps necessary now, my  
22 generation will be forced to take even bolder steps and  
23 more expensive steps in the future.

24 We hope you reject this proposal and let us tap  
25 into all that solar has to offer. Thank you.



1 CHAIR HOCHSCHILD: Thank you.

2 Let's go to Michelle Smira, to be followed by  
3 Whitney Prout, to be followed by Bryan Dove.

4 Is Michelle Smira here? No? Yeah. Okay.

5 MS. SMIRA: I was in the overflow.

6 CHAIR HOCHSCHILD: All right.

7 MS. SMIRA: Cheap seats. Good afternoon, Michelle  
8 Smira here today on behalf of K. Hovnian Homes.

9 We're here in strong support of SMUD's application.  
10 We are one of the state's leading homebuilders for first  
11 and last time buyers. We'd like to continue doing that.  
12 We worry that these costs added to it will prevent that in  
13 the future.

14 Thank you.

15 CHAIR HOCHSCHILD: Thank you.

16 Let's hear from Whitney Prout, to be followed by  
17 Bryan Dove, to be followed by Ann Amato.

18 MS. PROUT: Good afternoon, Whitney Prout, the  
19 California Apartment Association.

20 We're here to support SMUD's SolarShare proposal  
21 and we'd like to support the comments submitted by the  
22 California Building Industry Association. I'll be brief.

23 Without question, multifamily construction in this  
24 state represents some of California's most affordable  
25 housing in stock. And as we see, I'm in the front of the

1 newspaper. Every day we need more of it. We understand  
2 the state's goals for greenhouse gas reduction and we  
3 applaud the CEC for providing the community with a number  
4 of ways to comply.

5 But as we've heard, one size does not fit all. We  
6 believe the design option proposed here by SMUD balances  
7 the goal of reducing greenhouse gas emissions with the need  
8 to provide more affordable housing, and we'd urge you to  
9 approve the application.

10 Thank you.

11 CHAIR HOCHSCHILD: Thank you.

12 Let's go to Bryan Dove.

13 MR. DOVE: Hello, Bryan Dove with Mutual Housing  
14 California. We're a nonprofit multifamily affordable  
15 housing developer based here in Sacramento. We own and  
16 operate about 20 apartment communities and we're on track  
17 to develop -- to double that in the next five plus years.  
18 And we've been recognized internationally for our  
19 sustainable housing communities including mutual housing at  
20 Spring Lake which was one of the zero net energy apartment  
21 communities in the country.

22 So onsite solar at our communities in invest owed  
23 utility services have been feasible through a combination  
24 of virtual net metering and solar rebates and incentives.  
25 Since these aren't available in SMUD service area, we --

1 our ability to install onsite solar is not physically or  
2 financially feasible. So the SMUD's offsite alternative  
3 provides a viable option for us to continue developing  
4 these sustainable affordable communities.

5 So we appreciate your consideration of approving  
6 the SolarShares --

7 CHAIR HOCHSCHILD: Thank you.

8 MR. DOVE: -- option.

9 CHAIR HOCHSCHILD: Thank you.

10 Let's move on to Ann Amato, to be followed by David  
11 Rosenfeld, to be followed by Lou Mennel.

12 MS. AMATO: Hi. I'm Ann Amato. I wanted to say I  
13 support Senator Wiener's comments.

14 I'm a resident of Carmichael, California and I  
15 recently put heat pump HVAC system and water heater in my  
16 home and then wanting solar and it's totally cost  
17 prohibitive. And I really looked at this issue and no  
18 matter is said here today by SMUD's (indiscernible) trying  
19 to get out of the solar mandate and this will result in  
20 killing cost effective home solar.

21 And it's my understanding that the head of the SMUD  
22 board says he wants no rooftop solar. And I believe that  
23 SMUD sees solar as a lost revenue. And they are a public  
24 utility, they're desire to action will abandon their  
25 customers, their community, and the planet which we all

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1 know is in really big trouble. So please reject this  
2 proposal.

3 Thank you for your time.

4 CHAIR HOCHSCHILD: Thank you.

5 Let's move on to David Rosenfeld, to be followed by  
6 Lou Mennel, to be followed by Frank Harris.

7 MR. ROSENFELD: Thank you, Commissioners. My name  
8 is David Rosenfeld. I'm the Director of the Solar Rights  
9 Alliance, a nonprofit association with California solar  
10 users.

11 The headline that you saw SMUD give you a little  
12 bit that a customer with SolarShares can install solar.  
13 Totally misleading. As Senator Wiener said, I'm going to  
14 paraphrase him, solar without net metering is a prohibition  
15 on solar. And the fact that that's not called out as  
16 clearly as it needs to be is a real problem.

17 The country's leading -- number two, the country's  
18 leading expert on community solar, the institute for local  
19 self-reliance, they've sent you a comment has said SMUD's  
20 proposal is not community solar, precisely because it does  
21 not offer anywhere close to the kind of benefit to the  
22 consumer as rooftop solar does. And two, that it actually  
23 replaces solar on homes that are perfectly suited for  
24 rooftop solar. That's a problem. We should listen to  
25 them.

1           The bottom line is that solar shares does not come  
2 close to giving the consumer the kinds of benefits that  
3 your original as intended solar homes mandate gives, that  
4 rooftop solar gives. It is not an either/or but SMUD is  
5 making that and we should have a both/and. Thank you.

6           CHAIR HOCHSCHILD: Thank you.

7           Let's move on to Lou Mennel, to be followed by  
8 Frank Harris, to be followed by Christine Drapeau.

9           MR. MENNEL: Good afternoon, my name is Lou Mennel,  
10 I'm a business representative for Local 1245. I represent  
11 over 600 hard-working members at SMUD. I'm also a customer  
12 of SMUD.

13           I strongly support the SMUD SolarShares program as  
14 well as these -- the SMUD SolarShares will be built in SMUD  
15 territory by union members. These jobs are highly skilled  
16 and paid accordingly. These are in fact are not just jobs  
17 but rather careers with living wages and benefits. Ask for  
18 your support.

19           CHAIR HOCHSCHILD: Thank you.

20           Let's move on to Frank Harris. Frank Harris, to be  
21 followed by Christine Drapeau, to be followed by Thomas  
22 Paine.

23           MR. HARRIS: My Name is Frank Harris. I'm with the  
24 California Municipal Utilities Association. I appreciate  
25 the opportunity to speak in support of California's

1 Community Solar Program and of course in support of SMUD's  
2 community solar application.

3 As was said earlier, fundamental to the Energy  
4 Commission's 2020 standards is choice in establishing the  
5 eligibility of a community solar option the Energy  
6 Commission recognized that homeowners should have these  
7 options. Community solar program can provide a more  
8 efficient way to increase solar and maintain choice for  
9 homeowners for whom rooftop may not be the best way of  
10 introducing solar.

11 This choice also works well within the context of  
12 California's current housing crisis. And it speaks to the  
13 issue, it helps to address the issue of energy  
14 affordability. For these reasons, many others, providing  
15 home buyer's choice is critical. SMUD's community solar  
16 application actually exceeds the compliance requirements --

17 CHAIR HOCHSCHILD: Thank you. Sorry. Thank you.

18 MR. HARRIS: Thank you very much.

19 CHAIR HOCHSCHILD: Yeah. Let's go to Christine  
20 Drapeau, to be followed by Thomas Paine, to be followed by  
21 Leah Barros.

22 MS. DRAPAEU: Hi, Christine Drapaeu, I work for  
23 SMUD. This was in today's Sacramento News & Review. This  
24 is all about our housing crisis, so one of the things that  
25 I did just hear, so I do agree with SMUD for the SolarShare

1 program. But something I'm not hearing is the maintenance,  
2 continued maintenance that's employment. I work for SMUD,  
3 I'll be at SMUD for the next twenty some-odd years and I am  
4 a substation maintenance electrician. I will most likely  
5 be participating in the maintenance of these solar  
6 programs.

7 So please do remember, you know, solar panels work  
8 when they're clean, and I'm a lazy homeowner. I'm not  
9 coming home and washing my solar panels. I'm sorry, it's  
10 not going to work that way. So please do remember that.  
11 When you're thinking about having that flexibility for all  
12 homeowners, all price points, you know, let's not keep  
13 ourselves trapped in one spot.

14 CHAIR HOCHSCHILD: Thank you, unique argument.

15 Let's move on to Thomas Paine, to be followed by  
16 Leah Barros, to be followed by Gisla Dewey, if I'm  
17 pronouncing that right. Go ahead.

18 MR. PAINE: Good afternoon, my name is Tom Paine.  
19 I'm a Research Analyst with ConSol, an energy consulting  
20 company here in Sacramento.

21 We strongly support SMUD's community SolarShares  
22 program. Our recent analysis, we've seen a number of  
23 multifamily building designs that don't have enough space  
24 for the adequate code required to mount solar on them.  
25 Typically if this is the case, builder gets an exemption,

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1 reduces the size of the solar they use. With SMUD  
2 SolarShares, we can make that complete compliance without  
3 exemption and without compromising, therefore we strongly  
4 support this proposal.

5 CHAIR HOCHSCHILD: Thank you. Let's move on to  
6 Leah Barros, be followed by Gisla Dewey, to be followed by  
7 Pierre Delforge.

8 MS. BARROS: Good afternoon, Leah Barros here on  
9 behalf of the Independent Energy Producers Association in  
10 support of this measure.

11 SMUD has a proven track record of promoting solar  
12 and other clean energy resources to meet the needs of the  
13 customer. They do this in a cost effective portfolio of  
14 resources regardless of home ownership or economic status.  
15 They do this in a way that benefits all of SMUD's  
16 customers. SolarShares is an innovative program that will  
17 apply the new building standard consistent with California  
18 law in a manner that will lower the cost of compliance.  
19 This will be accomplished by utilizing the efficient  
20 application of solar to new construction in SMUD service  
21 territory in a way that, again, is cost effective and  
22 equitable.

23 As we all know, public support for climate change  
24 goals is ultimately dependent on affordability and equity.  
25 And SMUD's SolarShares program not only meets these



1 requirements but it also meets the new buildings standards  
2 requirement as well.

3 With that said, we urge the Commission to approve  
4 SMUD's SolarShares program. Thank you.

5 CHAIR HOCHSCHILD: Thank you. Gisla Dewey, to be  
6 followed by Pierre Delforge, to be followed by Alicia  
7 Priego.

8 Ms. Dewey here? No? Is that -- yeah, go ahead.

9 MS. DEWEY: Good afternoon. My name is Gisla  
10 Dewey. I'm a homeowner and a solar rooftop owner.

11 I oppose SMUD's proposal because it limits our  
12 influence on -- sorry -- our influence on making decisions  
13 and basically I oppose it. Thank you.

14 CHAIR HOCHSCHILD: Okay. Thank you.

15 Pierre Delforge from NRDC, followed by Alicia  
16 Priego.

17 MR. DELFORGE: Chair and Commissioners. Pierre  
18 Delforge, NRDC in support. We strongly support all form of  
19 solar, rooftop, community, and central (indiscernible)  
20 scale. All of these form of solar critical to allow us to  
21 meet our renewable goals and keep electric rates of 40  
22 below to support the electrification and decarbonization of  
23 other sectors like buildings, transportation, and industry.

24 The SMUD proposal is not perfect, it can be  
25 improved, but we support revisiting the rules in the

1 building code in the next code cycle and move forward with  
2 the current proposal as a first step and improve their step  
3 as we go rather than try to make it perfect from the  
4 beginning.

5 For these reasons, we support the approval.

6 CHAIR HOCHSCHILD: Thank you.

7 Let's move on to Alicia Priego, to be followed by  
8 Alex Denuzzo.

9 MS. PRIEGO: Good afternoon, Alicia Priego here on  
10 behalf of Arcadia, which is an energy service platform with  
11 customers in all 50 states.

12 One service that Arcadia offers is connecting  
13 customers with community solar projects. And with this  
14 nationwide experience, we have visibility into the best  
15 practices across the nation. And of the previously heard  
16 noted, you know, there's still work to do. This SMUD  
17 proposal is not the worst customer offering, but it's also  
18 not the best.

19 However, today's action is the first step in  
20 creating a vibrant market. And going forward, we would  
21 recommend encouraging applications from entities other than  
22 utilities so that customers benefit from competition with -  
23 - within the community solar market.

24 Thank you.

25 CHAIR HOCHSCHILD: Thank you.

1 Alex Denuzzo, to be followed by Corey Smith.

2 MR. DENUZZO: Hello, Commissioners, my name is Alex  
3 Denuzzo and I'm a 16-year-old high schooler. I live within  
4 SMUD service area. I come to you today as a representative  
5 of the youth whose futures you are currently gambling with.  
6 I'm here today within these -- here today within these  
7 chambers. You all will be deciding what the housing market  
8 will look like in the coming two decades.

9 In five, ten years when I'm looking for a home,  
10 will I have the option of rooftop solar? Will I be able to  
11 save hundreds of dollars a year? Or will I be locked into  
12 community solar forced to purchase from SMUD?

13 I for one want to grow up to a green sustainable  
14 housing market. More than that, I want to grow up to a  
15 green sustainable healthy planet.

16 I urge you today to reject SMUD's -- to support  
17 these goals and reject SMUD's proposal. Thank you.

18 CHAIR HOCHSCHILD: Thank you.

19 Let's move on to Corey Smith, to be followed by  
20 Crisand Giles.

21 MR. SMITH: Hello, my name is Corey Smith. I'm a  
22 lineman for SMUD, an IBEW 1245 member.

23 I agree with SMUD's proposal. And as a homeowner,  
24 too, and a SMUD ratepayer as well, I -- first of all, I've  
25 never heard of an \$8400 solar panel kit, that's really

1 cheap. If you talk to people in the community, 8400 bucks  
2 is a super cheap deal. And you put that money on top of a  
3 30-year note just makes no sense to me. As a homeowner, I  
4 would not like a solar panel on my house. I'd rather go  
5 through a SolarShares program.

6 Thank you.

7 CHAIR HOCHSCHILD: Thank you.

8 Crisand Giles, to be followed by Dr. Stephen  
9 Saffold -- Saffolo? Yeah.

10 MS. GILES: Hi, Crisand Giles. Thank you. I am in  
11 strong support of SMUD's application before you for  
12 consideration. I would also like to support the comments  
13 by CBIA this afternoon. We're pleased to see that SMUD has  
14 made it crystal clear that a homeowner receiving community  
15 solar from SMUD will be able to install one or more  
16 batteries in their garage.

17 We are also glad to see that SMUD has made it clear  
18 that the home buyer can add rooftop solar at any time,  
19 especially in the event that the homeowner wants to go all  
20 electric or buy electric vehicle at a future date.

21 Regarding the desire to have builders offer both  
22 community solar and rooftop solar as a design, please keep  
23 in mind that builders want to sale homes and rooftop solars  
24 are an amenity that's in high demand. Single family home  
25 buyers are still going to have rooftop solar in most of

1 their communities.

2 The builders that I represent are using this as an  
3 option in infill communities where you may want an amenity  
4 on your roof or you do not have enough placement or utility  
5 service accessibility in order to do rooftop solar.

6 CHAIR HOCHSCHILD: Thank you.

7 MS. GILES: It's an important part in an overall  
8 plan for --

9 CHAIR HOCHSCHILD: Thank you.

10 MS. GILES: -- infill development.

11 CHAIR HOCHSCHILD: Thank you.

12 Dr. Stephen Saffold, to be followed by Emily  
13 Fieberling of Environment California. Is Dr. Stephen  
14 Saffold here? No? Okay. While we're waiting is Emily  
15 Fieberling here? Yes, go ahead.

16 MS. FIEBERLING: Yeah, hello, my name's Emily  
17 Fieberling and I'm with Environment California, a state-  
18 based environmental organization that works for clean air,  
19 clean water, and protecting our beautiful places.

20 And sadly we'd like to ask you to not approve this  
21 proposal. To echo the 16 year old, I'm 23 and climate  
22 change is the focal issue of my life. The science is just  
23 too clear, we have to aggressively move towards 100 percent  
24 clean energy and 100 percent carbon-free economy. The SMUD  
25 proposal is presenting us with an either/or choice, rooftop

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1 or (indiscernible) and we just don't agree with that. We  
2 need both. And in order to stave off the worst impacts of  
3 climate change, we need all the tools in the toolbox.

4 And then, too, echo the remarks of the senator,  
5 this proposal invites other rollbacks that dim our chance  
6 for doing the hard work that needs to get done.

7 CHAIR HOCHSCHILD: Thank you.

8 Let's move on to Ben Davis, to be followed by Marty  
9 Crowdis.

10 MR. DAVIS: Good afternoon, I'm with the California  
11 Solar and Storage Association.

12 We remain opposed to SMUD's SolarShares proposal  
13 and I will narrow it down to one reason which is that  
14 SolarShares fails to meet three of the six criteria for an  
15 eligible community solar program. We have submitted our  
16 public comments detailing our position on this and for this  
17 reason alone, we request the Commission disapprove SMUD's  
18 SolarShares proposal today.

19 To, also, to the extent that there is ambiguity in  
20 the standards that is leading to confusion as a market --  
21 in the marketplace which I think there is, we strongly  
22 request the Commission take time now to eliminate that  
23 ambiguity before new programs are approved and introduced  
24 to the market.

25 From the industry point of view, it is far better

1 to set clear market signals and clarify the intent of the  
2 Commission now instead of waiting until project and  
3 programs that do not meet the spirit and intent of this  
4 program are up and running. Clarity and certainty are  
5 critical ingredients to an emerging market --

6 CHAIR HOCHSCHILD: Thank you. Thank you. Sorry.  
7 Let's move on to Marty Crowdis --

8 MR. DAVIS: Thank you.

9 CHAIR HOCHSCHILD: -- followed by Alex Kaffka.  
10 Is Marty Crowdis here or Alex Kaffka?

11 Yeah, Marty, go ahead.

12 MR. CROWDIS: Hi, my name is Mark Crowdis. I'm  
13 with Turtle & Hughes.

14 I suggest you reject the proposal simply based on  
15 economics. I'll point out a couple of things. One is  
16 energy storage helps you, SMUD, complete your mission.  
17 Right now energy storage paired with solar as maximum and  
18 as large as we can gets the ITC. So if you do this, you're  
19 blocking some amount of the money that can come from the  
20 federal government to SMUD and to the territory for storage  
21 to help you complete your mission. That's point number  
22 one.

23 Point number two is jobs. So I've financed resi  
24 projects, I've financed utility scale projects, the number  
25 of jobs of resi projects and what that does for the economy

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1 is hugely beneficial compared to what you do on a community  
2 scale solar.

3 So it's usually about five times as much labor goes  
4 into that than economic stimulus. I would suggest you  
5 allow as much solar as possible in roofs.

6 And then the final thing I'll point is heat load.  
7 You can reduce --

8 CHAIR HOCHSCHILD: Thank you.

9 MR. CROWDIS: -- heat load with a lot of solar on  
10 the roof.

11 CHAIR HOCHSCHILD: Thank you.

12 MR. CROWDIS: Thank you.

13 CHAIR HOCHSCHILD: Did Dr. Stephen Saffold  
14 reappear? No? Okay. Going once, going twice.

15 Alex Kaffka, to be followed by Alan Escarda.

16 MR. KAFFKA: Thank you. Alex Kaffka, Verdara  
17 Partners, we're an energy consultancy for large commercial  
18 landlords.

19 I oppose the SolarShares proposal as structured.  
20 And I would actually like to echo Scott Wiener's comments  
21 as well. California has really proven the model with the  
22 California solar initiative that it turns out government  
23 can really effectively stimulate widespread market adoption  
24 of socially beneficial technologies using market tools.

25 In response, entire industry has and will -- has

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1 created itself innovated and aligned behind that decision.  
2 SolarShares directly goes against that model by locking  
3 customers into SMUD's central generation program for 20  
4 years. It also eliminates market choice in Sacramento,  
5 deliberately hurts the industry and endangers the state's  
6 zero net energy goals.

7 I urge the Commission to have SMUD amend its  
8 proposal to allow customers to depart the SolarShares  
9 program using a simple and easy to file three-month --

10 CHAIR HOCHSCHILD: Thank you.

11 MR. KAFFKA: -- notice to depart.

12 CHAIR HOCHSCHILD: Thank you.

13 Let's go to Alan Escarda, to be followed by Tim  
14 McKeever, to be followed by Don Osborn.

15 MR. ESCARDA: Good afternoon. My name is Alan  
16 Escarda. I oppose SMUD's revised SolarShares proposal.

17 First I'd like to acknowledge Commission for  
18 showing leadership in supporting the new solar bill  
19 requirement. I think we need bold leadership now and in  
20 the future to combat the challenges of climate change.

21 First, I don't think implementation, SolarShares is  
22 going to prevent the construction or the selling any new  
23 home or apartment, the ban is just too great.

24 The other thing is I'm looking at your website and  
25 it says your mission and goals and I'm paraphrasing this.

1 You are to promote alternative energy to the maximum public  
2 benefit. Well I see the net result lower shares will  
3 prevent rooftop solar, preferably find rooftops that can  
4 have new solar not being built, while SMUD then is going to  
5 have a solar farm that could be used instead to replace  
6 their fossil fuel power plants.

7 CHAIR HOCHSCHILD: Thank you. Thank you.

8 Let's move on to Tim McKeever, followed by Don  
9 Osborn.

10 MR. MCKEEVER: Tim McKeever, I'm a project  
11 developer with Sunworks Solar Power. We install a lot of  
12 solar in the area.

13 Community solar was never intended to be utility  
14 owned and through the solar mandate, it was intended to be  
15 an exception where solar was not practical for those new  
16 construction properties. It should definitely be an option  
17 for those that don't have enough roof space or are shaded  
18 or what have you. But the spirit of the mandate was to  
19 build local solar, have homeowners reflect savings on their  
20 bills instead of having that savings go to the profit  
21 margin of the -- of the utility.

22 SMUD would just be a stepping stone to all the  
23 other utilities trying to circumvent that law and I support  
24 the rejection of this proposal.

25 CHAIR HOCHSCHILD: Thank you. Thank you.

1           Let's go to Don Osborn, to be followed by Tony  
2 Hamirano. (phonetic)

3           MR. OSBORN: Hi. Don Osborn, Spectrum Energy. I'm  
4 also the former manager of the SMUD solar programs.

5           First off, I'd like to point out that the instant  
6 local self-reliance, the nation's foremost promoter and  
7 advocate of community solar has this to say, quote,  
8 "SolarShares should not be mistaken for a community solar  
9 program."

10           The SolarShares is the opposite of customer choice,  
11 it'll be nearly impossible for many solar -- customers to  
12 go solar plus storage for 20 years. SMUD's plans will  
13 offer home buyers a point of purchase options problematic  
14 at best. If rooftop solar is just another option, then why  
15 bother with a mandate, just require an equivalent increase  
16 in the RPS and be done with it.

17           SMUD doesn't allow VNEM, unlike 80 percent of the  
18 state despite (indiscernible) by Sacramento Affordable  
19 Housing Community. This is a major equity issue. While  
20 the CEC cannot dictate rates to SMUD, you do not have to  
21 reward this bad behavior. Readjust -- please reject this  
22 for now.

23           CHAIR HOCHSCHILD: Thank you.

24           Let's move on to Tony Hamirano. I hope I'm  
25 pronouncing your name correctly, to be followed by Andrew

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1 Christensen.

2 MR. HAMIRANO: Good afternoon. Thank you. My name  
3 is Tony. I work for SMUD as a facilities engineer.

4 I support the SolarShares program because it's a  
5 benefit for our customers. It provides solar energy from  
6 solar rays connected to the grid giving the customer the  
7 option of green energy and savings and also by being with  
8 us, we provide continued maintenance support.

9 CHAIR HOCHSCHILD: Thank you. Let's move on to  
10 Andrew Christensen to be followed by Justin Hirschi.

11 MR. CHRISTENSEN: Andrew Christensen with Vivint  
12 Solar.

13 The purpose of my testimony is simply highlight the  
14 difference in value proposition between SMUD's SolarShare  
15 proposal and the benefit of onsite distributor generation.

16 While SMUD's increase to benefit of SolarShares to  
17 approximately \$10 kilowatt or 30 to \$40 annually, these  
18 benefits are still minimal compared to the benefit the  
19 rooftop solar can provide.

20 To compare, one of our primary products that we  
21 offer actually in SMUD's territory for new home builds is a  
22 zero percent escalator PPA. Under this with all the  
23 standard capacity factors, aggregation factors, and the 3  
24 percent utility escalation, we assume the levelized value  
25 is \$57 per kilowatt a year or \$228 annual, about five and

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1 half times greater than SMUD's SolarShares.

2 But the more conservative 2 percent utility rate  
3 escalation, we assume a levelized value of \$46 a kilowatt  
4 or \$184 annually. And this is important because the  
5 figures that are shown, these are lifetime savings, these  
6 escalate over time not just in the first year as the  
7 figures --

8 CHAIR HOCHSCHILD: Thank you.

9 MR. CHRISTENSEN: -- have shown. Thanks.

10 CHAIR HOCHSCHILD: Thank you.

11 Let's move on to Justin Hirschi, to be followed by  
12 Paul Sullivan, to be followed by Lee Miller.

13 MR. HIRSCHI: Hello. My name is Justin Hirschi. I  
14 was born and raised here in Sacramento County, Citrus  
15 Heights homeowner and SMUD customer. I've worked for SMUD  
16 for 11 years, I'm a lineman there.

17 I support SMUD SolarShares, I hope that you do too.  
18 I, too, would like a green planet and like renewable  
19 resources. I don't see how having solar panels on a roof  
20 or community owned or nearby in the community would  
21 adversely affect that. Those are both moving forward  
22 towards a greener planet.

23 And I hope you support SolarShares. Thank you.

24 CHAIR HOCHSCHILD: Thank you.

25 Let's move on to Paul Sullivan, to be followed by

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1 Lee Miller, to be followed by Kim Camatti.

2 MR. SULLIVAN: Paul Sullivan, 15-year solar  
3 industry veteran, early adopter, and SMUD customer.

4 Want to speak to two points that have to do with  
5 customer choice. Way back in 2005, I installed solar, put  
6 it on my original mortgage. It was basically even with  
7 that added cost on my monthly mortgage fee, I was 4X cash  
8 flow positive with that. So there's an added benefit,  
9 especially with the ability to deduct that interest cost  
10 from your taxes.

11 Second thing that hasn't been discussed yet today,  
12 there's been a recent study by Zillow about home value  
13 increase for solar between March 2018 and February 2019  
14 adds approximately 4.1 percent of value so that a median  
15 cost of a home here in Sacramento is 350,000. That adds  
16 another \$15,000 of value. So I oppose this in favor of  
17 customer choice.

18 Thank you.

19 CHAIR HOCHSCHILD: Thank you.

20 Let's move on to Lee Miller, to be followed by Kim  
21 Camatti, to be followed by Stacey Reineccius.

22 MS. MILLER: My name is Lee Miller. I'm a SMUD  
23 rooftop customer.

24 And thank you, Senator Wiener for your rejection of  
25 this SMUD plan. Nothing in the SMUD proposal ends up being

1 a true community solar program. It only targets new  
2 homeowners and multifamily dwellings. Community solar  
3 provides homes with too much shade and that are  
4 structurally not support -- cannot support panels access to  
5 energy.

6           There is no -- there is no sharing in this  
7 proposal, it still fails the community solar program test.  
8 What's the point of making solar a building standard if it  
9 negates rooftop solar efficiencies? Should we do the same  
10 for installation, efficient windows, and lightbulbs? Why  
11 is SMUD so dead set on keeping solar from being on -- being  
12 a standard on homes? If approve -- if approved, it becomes  
13 the standard for future community solar programs in  
14 California.

15           SMUD cannot be allowed to monopolize community  
16 solar development. New dwellings are perfectly suited --

17           CHAIR HOCHSCHILD: Thank you.

18           MS. MILLER: -- for solar and storage. Thank you.

19           CHAIR HOCHSCHILD: Let's move on to Kim Camatti, to  
20 be followed by Stacey. Go ahead.

21           MS. CAMATTI: Hi, Kim Camatti, Material Specialist,  
22 18 years with SMUD.

23           I just want to say first and foremost that SMUD  
24 field employees are proud IBEW 1245 represented employees.  
25 I know Wiener is gone but we stand with union brothers and

1 sisters from PG&E who are also here today standing with us.

2           The new SolarShares resources would be built by  
3 fellow union members, which is very important to  
4 represented employees. Highly skilled union workers  
5 building clean energy projects within SMUD service  
6 territory. And a SolarShare community will provide local  
7 clean power, providing local jobs, union jobs, benefitting  
8 our community.

9 And I ask that you approve SMUD's proposal.

10           Thank you.

11           CHAIR HOCHSCHILD: Thank you.

12           Let's hear from Stacey Reineccius, to be followed  
13 by Shawn O'Neal, (phonetic) to be followed by Ardie  
14 Zahedani.

15           MR. REINECCIUS: Good afternoon, Commissioners,  
16 nice to see you again.

17           I stand here to oppose the program as currently  
18 described. There has not been enough discussion about the  
19 actual impacts on multifamily development, properly done  
20 solar plus storage and electric vehicles, which are also  
21 impacted indirectly by the lack of solar capacity and  
22 storage onsite in this proposal.

23           In particular, building owners and developers stand  
24 to gain an additional equity from the value of the solar  
25 that's put on place while greater savings than are being



1 proposed can be achieved for tenants.

2 So until those issues really can be talked through  
3 about the value for multifamily especially, I would oppose  
4 this program as currently proposed. Thank you.

5 CHAIR HOCHSCHILD: Thank you.

6 Shawn O'Neal, to be followed by Ardie Zahadani, to  
7 be followed by Stephanie Robinson.

8 MS. O'NEAL: Good afternoon, Shawn O'Neal, 19-year  
9 employee with SMUD, Cable Locator. I echo the sentiments  
10 of my colleagues, Kim Camatti, Christine Drapeau. I  
11 believe it's important to support the SMUD SolarShares  
12 program. Thank you.

13 CHAIR HOCHSCHILD: Thank you.

14 Ardie Zahadani.

15 MR. ZAHADANI: Chair and members, Ardie Zahadani,  
16 partner with St. Anton Communities. We're one of the  
17 state's largest affordable housing builders.

18 Almost all multifamily residential rental  
19 throughout the state with extremely low, very low, and low-  
20 income tenants. We have 2,000 units under construction  
21 now. And I just want to give you a clear cut example in my  
22 remaining 40 seconds of why you must support the SMUD  
23 proposal.

24 Our projects rely on tax credits and bond  
25 financing. But there is also a gap of funding that's

1 necessary, that's very difficult to find. There's no room  
2 to apply \$800,000 to a million dollars to each project to  
3 have solar rooftop panels. The SMUD proposal works for us.  
4 We have shovel-ready projects that are ready to go that'll  
5 get shelved if you don't proceed with their plan.

6 I urge your support. And if you have any  
7 questions, I'll be in the audience. Thank you.

8 CHAIR HOCHSCHILD: Thank you.

9 Stephanie Robinson, to be followed by Lauren  
10 Randall.

11 MS. ROBINSON: Thank you. We've heard a lot of  
12 environmental concerns today, but no one has yet spoken for  
13 the trees. I'm here to do that. And I support this  
14 proposal.

15 New developments have no existing shade that would  
16 quality homes for an exemption. We need solar but it only  
17 provides the singular benefit of energy production. Trees  
18 provide our community with a wealth of benefits, including  
19 energy savings and carbon sequestration but go beyond that  
20 to touch on everything that makes our neighborhoods  
21 livable.

22 We are already losing plantable space to smaller  
23 lot sizes and infrastructure like fiber optic and 5G.  
24 Requiring solar panels on every rooftop will only add one  
25 more obstacle to tree planting. We do not have to choose

1 between trees or solar. We need a holistic multi-solution  
2 approach that allows neighborhoods to reap benefits of  
3 both.

4 The solar mandate will not be undermined by  
5 allowing community solar but the overall livability of this  
6 region will be threatened if we continue to interrupt  
7 plantable fees for trees.

8 Thank you.

9 CHAIR HOCHSCHILD: Thank you.

10 We'll move on to Lauren Randall, to be followed by  
11 Fernando Enriquez.

12 MS. RANDALL: Great. Good afternoon, all, I'm  
13 Lauren Randall with Sunrun. In addition to supporting my  
14 colleague Alex's comments I want to underscore Mr. Mack's  
15 comments from the CPUC. Unlike IOUs, CCAs could propose  
16 something similar to SolarShares without regulatory  
17 oversight within months. This is a dangerous proposition.  
18 I urge you to consider the precedent you're setting today  
19 and unintended consequences it could propel for now 25  
20 percent of the market.

21 Thank you.

22 CHAIR HOCHSCHILD: Thank you.

23 Fernando Enriquez.

24 MR. ENRIQUEZ: Hi. My name's Fernando Enriquez,  
25 I'm a 17-year IBEW member and I support the SMUD SolarShare

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1 program.

2 My wife works in a roofing company, she has her own  
3 company, tells me about all these nightmares about  
4 incompetent installations of solar panels on roofs and this  
5 would benefit the community a lot by reducing all that  
6 maintenance and also having a lot -- making everything a  
7 lot greener.

8 So I support this.

9 CHAIR HOCHSCHILD: Thank you.

10 Let's go to Rene Martinez, to be followed by Laurie  
11 Litman, to be followed by Rachel Patten.

12 Is Rene Martinez here? No? Laurie Litman.

13 MS. LITMAN: Hi. I'm Laurie Litman. I'm President  
14 of 350 Sacramento.

15 I support Senator Wiener's statement. We're in a  
16 climate emergency. California has been leading the way and  
17 the world looked up to us when we passed the solar homes  
18 mandate. Now this threatens to undermine that -- sorry, my  
19 voice goes out when I speak.

20 It threatens to undermine the solar homes mandate,  
21 undermine solar on rooftops, and that's not acceptable. We  
22 need -- we do need utility scales solar, homes like mine  
23 with shade don't allow solar but we also need solar on  
24 every rooftop that's available. We need it all. And  
25 again, we're in an emergency --

1 CHAIR HOCHSCHILD: Thank you.

2 MS. LITMAN: -- we need to do this now.

3 CHAIR HOCHSCHILD: Thank you.

4 Let's move on to Rachel Patten, to be followed by  
5 Lhondin Tyra.

6 MS. AVALOS: I'm Rosemary Avalos representing the  
7 Public Advisor's Office reading public comment for Rachel  
8 Patten.

9 "Rooftop solar requirements will lead to small or  
10 no trees being planted in new development and result in  
11 mature trees being cut down when they shade panels.

12 "A sustainable future depends on a holistic  
13 approach to climate solutions. Our strategies for  
14 addressing climate change must work successfully together  
15 for our community to receive the maximum benefits they  
16 provide us. Implementing progressive solar programs in a  
17 way the uplifts and promotes urban trees will increase the  
18 health of neighborhood -- our neighborhoods.

19 "SolarShare will achieve this dual goal in a way  
20 that rooftop solar will not. It will increase renewable  
21 energy, reduce costs to residence, and allow trees the  
22 space to continue cooling our neighborhoods and cleaning  
23 our air."

24 CHAIR HOCHSCHILD: Thank you.

25 Let's move on to Lhondin Tyra, to be followed by

1 David Wright, to be followed by Bret Barrow.

2 MS. TYRA: Hi, I'm Lhondin Tyra and I'm with IBEW  
3 1245 and I stand in support of SMUD's proposal.

4 CHAIR HOCHSCHILD: Thank you.

5 David Wright.

6 MR. WRIGHT: Good afternoon. I'm David Wright.  
7 I'm a retired environmental scientist. I want to read a  
8 little piece of an email from a SMUD board of directors.  
9 It says, "What developer is not going to choose the  
10 cheaper, easier option. There may be many reasons for a  
11 developer to offer rooftop solar but why should we not  
12 offer a cheaper, easier option?"

13 So I think this points out very clearly that what  
14 you are in danger of doing is gutting the solar and new  
15 homes residential mandate. I'm also concerned like other  
16 people about affordability. I don't have any financial  
17 stake in this game, but I know as a solar PV user, that  
18 it's cheaper to be a solar PV user. And you saw the  
19 numbers yourself, it's \$50 a year cheaper or more to be a  
20 solar PV user. So the affordability is on the side of the  
21 rooftop solar.

22 And in terms of multifamily, SMUD is denying VNEM  
23 so maybe that would help --

24 CHAIR HOCHSCHILD: Thank you. Thank you.

25 Let's go to Bret Barrow to be followed by Jasmine

1 Strickland, to be followed by Charlotte Stevens.

2 MR. BARROW: Mr. Chair and Commissioners, Brett  
3 Barrow with the California Chapter of National Electrical  
4 Contractors Association.

5 NECA has 16 regional chapters that represent over  
6 1200 electrical contractors throughout the state. Our  
7 members include both C10 electrical contractors as well as  
8 C46 licensed contractors who install both rooftop and  
9 utility scale solar energy systems. And on a megawatts  
10 basis we're the largest installers in the state.

11 NECA supports the SMUD SolarShares program that  
12 includes participation, utilities scale, solar projects,  
13 and provides more cost-effective benefits to homeowners.  
14 Ultimately the state's goal is to address demand and reduce  
15 greenhouse gas emissions. And -- and it's not about  
16 replacing utility grade with rooftop solar.

17 And lastly I wanted to say, the option -- the  
18 community solar option allows our contractors to provide  
19 well-paid living wage jobs and benefits and to continue to  
20 train and provide jobs for skilled works in these realms.  
21 For those reasons, we support this proposal.

22 CHAIR HOCHSCHILD: Thank you.

23 Let's go to Jasmine Strickland, to be followed by  
24 Charlotte Stevens, to be followed by Ray Tretheway. Is  
25 Jasmine here? If not -- no? Okay, Charlotte Stevens, to

1 be followed by Ray Tretheway.

2 MS. STEVENS: Good afternoon. My name is Charlotte  
3 Stevens. I am a member of IBEW 1245, a SMUD customer, and  
4 as well I'm an employee at PG&E.

5 I work in the call center at PG&E so I'm constantly  
6 speaking to customers that have -- are struggling paying  
7 their bill. The rates are high. A lot of them are low-  
8 income customers that are just struggling, having a hard  
9 time. So I stand in support of SMUD's proposal and with my  
10 brothers and sisters at SMUD. Thank you.

11 CHAIR HOCHSCHILD: Thank you.

12 Ray Tretheway to be followed by Jim Adams.

13 MR. TRETHERWAY: Good afternoon, Commissioners. Ray  
14 Tretheway. I'm representing Sacramento Tree Foundation in  
15 support of this project.

16 You may be surprised that I called on SMUD to  
17 support this project, I didn't call on me. We have a  
18 partnership for over 30 years planting 600,000 shade trees  
19 for their customers. It's so important to us because the  
20 direct health of a neighborhood is linked directly to how  
21 much tree can be in the neighborhood. The scientific  
22 evidence is overwhelming. Cardiovascular disease is  
23 decreased. A person's weight in health is better. A  
24 person's mental health is better.

25 And we believe that if we could have an option for



1 the consumer that they may well choose like most of all of  
2 us choose, leafy neighborhoods, leafy yards, and have an  
3 affordable cost-effective option. So we're very  
4 supportive. Thank you.

5 CHAIR HOCHSCHILD: Thank you.

6 Jim Adams, to be followed by Jane Lamborn, to be  
7 followed by Joe Dixon.

8 Jim Adams here? Going once, going twice.

9 Jane Lamborne.

10 MS. LAMBORN: Hello, my name is Jane Lamborn. I'm  
11 a resident of Wilton.

12 I support Senator Wiener's comments and I ask you  
13 to reject this proposal. I've been a resident of  
14 Sacramento and a customer of SMUD for over 35 years. I've  
15 lived at many locations within the county. I'm a retired  
16 state worker. I've been active with many community groups  
17 over the years and consistently when I talk to these  
18 people, they are very concerned with climate change, with  
19 the impact this is having, and they want to prevent it, and  
20 they see the need to do this sooner than we ever thought we  
21 would have to.

22 Along with this concern, they consistently say  
23 that -- you know what else they consistently say? Quote,  
24 "But what can I do? How can my small actions make a  
25 difference?" End quote. Rooftop solar gives them an

1 option that they can do. I put rooftop solar on my house  
2 four years ago, it's been a benefit to me. Other people  
3 want that benefit, they want to do it. This proposal  
4 hampers that option for them. I ask you to reject it.

5 CHAIR HOCHSCHILD: Thank you.

6 Let's move on to Joe Dixon to be followed by  
7 Jonathan Gemma.

8 MR. DIXON: Hello, and thank you for your time. My  
9 name's Joe Dixon. I'm a 15-year employee of SMUD, 15-year  
10 member of IBEW 1245.

11 I stand today with other SMUD employees, customers,  
12 and this awesome organization I work for in support of this  
13 SolarShares program.

14 Thank you.

15 CHAIR HOCHSCHILD: Thank you.

16 Jonathan Gemma, to be followed by Alex Abrego, to  
17 be followed by Paul Galor -- Geller.

18 MR. GEMMA: Good afternoon, name's Jonathan Gemma  
19 with Aztec Solar. We're an installer, developer who  
20 installs residential and commercial projects up and down  
21 the state including here in SMUD territory.

22 I thank you for the opportunity to voice our  
23 opposition of the proposal, and request that that you  
24 disapprove the application. The building efficiency  
25 standards or commission has approved such as the new home

1 solar mandate was intended to lower greenhouse gas  
2 emissions as well as create market driven environment for  
3 consumers, not developers, would have the choice in energy  
4 efficiency options that would include in their new home.

5 In anticipation of this new mandate, Aztec has  
6 spoken with numerous developers about onsite solar options,  
7 the proposal option, all those discussions have stalled and  
8 can potentially eliminate any choice a consumer may have.  
9 This decision is precedent setting. Not only effects the  
10 decision in SMUD territory but up and down --

11 CHAIR HOCHSCHILD: Thank you.

12 MR. GEMMA: -- the state.

13 CHAIR HOCHSCHILD: Thank you. Thank you.

14 MR. GEMMA: Thank you.

15 CHAIR HOCHSCHILD: Let's move on to Alex Abrego to  
16 be followed by Paul V. Geller.

17 MR. ABREGO: Good afternoon. My name is Alex  
18 Abrego and I support this proposal and I ask you to please  
19 approve it. Thank you.

20 CHAIR HOCHSCHILD: Thank you.

21 Paul V. Geller, to be followed by Harold Thomas.

22 MR. GALLEN: My name is Paul Gallen. (phonetic)  
23 I'm a retired IBEW 37 years. Excuse me, and I'm in favor  
24 of this proposition. Thank you.

25 CHAIR HOCHSCHILD: Thank you.

1 Harold Thomas to be followed by Mary Gallen, is  
2 Harold Thomas here? Going once, Mary Gallen?

3 All right, let's move on to Ken Rawles, to be  
4 followed by Megan Shumway, to be followed by Austin Avery.

5 MR. RAWLES: I'm Ken Rawles. I'm retired IBEW 1245  
6 37 years.

7 I live in Santa Rosa, but I just want to say that I  
8 hope we someday have the same kind of an option. As a  
9 senior, I'm 77 years old and I don't know that it would be  
10 benefit me to pay for rooftop installations, but it would  
11 benefit for me to take the other option. And I do fully  
12 support this.

13 Thank you.

14 CHAIR HOCHSCHILD: Thank you.

15 Let's go to Megan Shumway, to be followed by Austin  
16 Avery, to be followed by Jean Cunningham.

17 MS. SHUMWAY: I'm Megan Shumway and I'm with the  
18 Climate Coalition and Solar Rights. I'm a solar panel  
19 consumer.

20 People have said a lot of things today, but one  
21 thing they have not said is they seem to be having trouble  
22 with the definition of community solar. Community solar  
23 should be for the units and the owners of those units to  
24 manage to manage like an individual homeowner would manage  
25 their rooftop solar. And it should not be part of a

1 utilities purview. An application for a community solar  
2 project should be and by the builders of that particular  
3 community and taken over by the homeowners in that  
4 community or the building owner.

5 I don't think that you should support SMUD's  
6 proposal because they need --

7 CHAIR HOCHSCHILD: Thank you.

8 MS. SHUMWAY: -- to pay attention to their own --

9 CHAIR HOCHSCHILD: Thank you. Thank you.

10 Austin Avery, to be followed by Jean Cunningham, to  
11 be followed by Telia Ford.

12 MR. AVERY: Good afternoon, Commissioners. My name  
13 is Austin Avery with Turlock Irrigation District.

14 TID is proud to be here expressing our support for  
15 SMUD's Neighborhood SolarShares program, and we urge the  
16 board to adopt SMUD's application at today's meeting.

17 With policy directives calling for our state to see  
18 massive emission reductions over the next 25 years, the  
19 crucial component to success rests with the idea of  
20 innovation. SMUD's Neighborhood SolarShare program puts  
21 the principle of innovation into practice with their  
22 investment into solar generation. The structural design of  
23 SMUD's programs not only adheres to state regulatory  
24 directives, but it also ensures costs are borne equitably  
25 among SMUD's ratepayers.

1 TID's own investments in renewable future are  
2 closely aligned with our colleagues at SMUD and as such are  
3 proud to express support for their Neighborhood SolarShares  
4 program.

5 Thank you.

6 CHAIR HOCHSCHILD: Thank you.

7 Let's go to Jean Cunningham, to be followed by  
8 Telia Ford, to be followed by Juan Carlos Montero.

9 MS. AVALOS: I'm Rosemary Avalos representing the  
10 Public Advisor's Office providing public comment on behalf  
11 of Jean Cunningham.

12 "I would like to register my support for SMUD  
13 SolarShare program. Two things Sacramento and the United  
14 States and the world desperately need are shifts to  
15 renewable energy to curb greenhouse gas emissions, and more  
16 forests to diminish CO<sub>2</sub>.

17 "These are not mutually exclusive goals. A plan to  
18 boost solar availability and new construction is essential  
19 moving forward but there needs to be a plan which will save  
20 existing trees and promote the expansion of Sacramento's  
21 urban forest. Trees are the lifeblood of a community in so  
22 many ways. They provide shade, livable communities,  
23 habitat for wildlife, and most importantly a beautiful and  
24 natural way to sequester CO<sub>2</sub>. SMUD SolarShare can achieve  
25 these -- both these goals. I respectfully ask for your

1 support."

2 CHAIR HOCHSCHILD: Thank you.

3 Let's go now to Telia Ford, to be followed by Juan  
4 Carlos Montero.

5 MS. FORD: Hello, my name is Telia Ford. I'm a  
6 SMUD employee as well as a SMUD customer, and I support the  
7 SMUD SolarShares program. Thank you.

8 CHAIR HOCHSCHILD: Thank you.

9 Juan Carlos Montero to be followed by Emily Edmond.

10 MR. MONTANO: Hello, my name is Juan Carlos  
11 Montano. I'm a SMUD employee and union IBEW member for  
12 three years now. I've also been a SMUD customer for the  
13 last seven years.

14 And as an employee and customer of SMUD, I believe  
15 SMUD is committed to solar energy and the reduction of  
16 greenhouse gases, and this is just one step where SMUD will  
17 be able to get closer to zero percent greenhouse gases.

18 And I support SMUD SolarShares. Thank you.

19 CHAIR HOCHSCHILD: Thank you.

20 Emily Edmond to be followed by Troy Hearne.

21 MS. AVALOS: Rosemary Avalos, representing Public  
22 Advisor's Office reading public comment for Emily Edmond.

23 "I strongly support the SolarShare program.  
24 SolarShare panels and trees are both important. Trees not  
25 only provide ecological benefits, they also provide

1 emotional economic benefits to those neighborhoods who are  
2 lucky enough to have an abundance. And every neighborhood  
3 should have enough trees. Thank you."

4 CHAIR HOCHSCHILD: Thank you.

5 Troy Hearn, to be followed by DeVaughn Cross, to be  
6 followed by Fred Ross.

7 MR. HEARNE: Hi. My name is Troy Hearn. I'm a  
8 17-year SMUD employee, 17-year IBEW 1245 member and I am  
9 here to support SMUD SolarShares program.

10 CHAIR HOCHSCHILD: Thank you.

11 DeVaughn Cross.

12 MR. CROSS: My name is DeVaughn Cross. I'm a 17-  
13 year member of SMUD, and I'm here to represent 1245.

14 Something about SMUD is and their statement when  
15 they say that they are community owned and they put  
16 community first, I see it firsthand. I've sat in a lot of  
17 meetings where the decisions that they make are truly about  
18 the ratepayers and the community.

19 So saying that, I think you guys should approve the  
20 Neighborhood SolarShares program. Thank you.

21 CHAIR HOCHSCHILD: Thank you.

22 Let's go to Fred Ross to be followed by Victoria  
23 Vasquez.

24 MR. ROSS: Good afternoon. Fred Ross, staff for  
25 IBEW 1245. I'm proud to stand with our sisters and



1 brothers from SMUD in support of this proposal. Thank you.

2 CHAIR HOCHSCHILD: Thank you.

3 Victoria Vasquez, to be followed by Ruth Bailey, to  
4 be followed by Mike Monagan.

5 MS. AVALOS: Rosemary Avalos representing Public  
6 Advisor's Office, providing public comment for Victoria  
7 Vasquez.

8 "As an environmental community organizer in  
9 Sacramento, I have taken many calls from owners of new  
10 homes with limited greenspace whom request trees. They are  
11 frustrated to find out they cannot plant trees without  
12 impacting their solar panels. Trees increase shade in the  
13 summer and warmth in the winter.

14 "I am ready to support SMUD's SolarShare program so  
15 that solar energy can be harvested without impairing trees  
16 use as our natural climate solution. Trees provide many  
17 public health benefits both physical and social. I hope  
18 you will make the right decision in forwarding Sacramento's  
19 legacy as the city of trees."

20 CHAIR HOCHSCHILD: Okay. Thanks everyone for their  
21 patience. We're getting close. We're getting close, just  
22 a few more here.

23 Ruth Bailey, to be followed by Mike Monagan, to be  
24 followed by Steve Uhler.

25 MS. BAILEY: Hello, my name is Ruth Bailey. I'm

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1 here in support of my fellow IBEW Local 1245 sisters and  
2 brothers. I am a 30-year employee of PG&E. I'm retired 9  
3 years.

4 I am here to support them for the workers. That's  
5 been a lot of your time and energy supporting this  
6 initiative and I do support it and I hope that you can pass  
7 it.

8 Thank you.

9 CHAIR HOCHSCHILD: Thank you.

10 Mike Monagan.

11 MR. MONAGAN: Mr. Chair Members, Mike Monagan on  
12 behalf of the California State Association of Electrical  
13 Workers and the Coalition of California Utility Employees  
14 which are the (indiscernible) groups for the all the IBEW  
15 locals in California, including the brothers and sisters of  
16 1245, the 550 IBEW members who work for SMUD.

17 It's important to note that these members, skilled  
18 and trained, are the ones that actually install and  
19 maintain these systems efficiently and safely. They put in  
20 a lot of time in the apprenticeship programs. It's a big  
21 commitment by the employers and the members themselves and  
22 the results are pretty self-evident. We urge your support.

23 CHAIR HOCHSCHILD: Thank you.

24 Let's go to Steve Uhler, to be followed by  
25 Bernadette Del Chiaro.

1 MR. UHLER: Steve Uhler, now for something  
2 completely different. The tax issue. The calculations  
3 that will go on to the 60-plus dollar charge, county  
4 exempts up to \$45 for utility charges. City has taxes on  
5 those. I've asked for the calculations for those.

6 Fortunately, no matter how you vote here, they  
7 still have to make the CBECC program operate with this. So  
8 I'm looking forward, I have a public records request in for  
9 both with SMUD. Perhaps President Kerth will see that  
10 that's fulfilled for those calculations. I was given no  
11 calculations. It's docketed.

12 And also you should pay attention to the SMUD  
13 executives talking about the methods of how they bake the  
14 SolarShares into the rates.

15 Thank you.

16 CHAIR HOCHSCHILD: Thank you.

17 While Bernadette's coming up, just anyone -- the  
18 names I've already called but they weren't here: Mary  
19 Young, Harold Thomas, Jim Adams, Rene Martinez, and Stephen  
20 Saffold. If any of them are here, please come to the line.

21 Bernadette? No, Bernadette should come now, if you  
22 want. And other person, get in line.

23 MR. DEL CHIARO: Good afternoon, Bernadette Del  
24 Chiaro, California Solar and Storage Association.

25 The proponents are trying to define this as a solar

1 versus solar decision which I would imagine would be a hard  
2 choice for any and most environmentalists to make. This is  
3 not solar versus solar. This is smart buildings of the  
4 future versus the dumb buildings of the past.

5 The Energy Commission hoped for innovative  
6 community solar projects to come out of the alternative  
7 compliance option. All you're getting today is a very  
8 commonplace utility scale project the likes of which the  
9 RPS will already support and bring to the floor.

10 If SMUD was offering to build a couple of extra  
11 turbines out in Solano County and attribute those electrons  
12 to a home in compliance with building code, would you be  
13 okay with that? This is a historic vote. Everybody,  
14 almost everybody that's come before you to support SMUD has  
15 done it at the rejection of the same old, same old  
16 arguments against rooftop solar. It's bad for trees, it's  
17 too expensive, it's only for the rich, it's bad for  
18 workers. These are false attributes --

19 CHAIR HOCHSCHILD: Thank you.

20 MS. DEL CHIARO: -- to solar, and I ask you to  
21 reject them. Thank you.

22 CHAIR HOCHSCHILD: Thank you.

23 Rene Martinez to be followed by Stephen Saffold.

24 MR. MARTINEZ: Good morning, Cruz Martinez, IBEW  
25 1245 staff, also a proud 15-year Sacramento County

1 resident.

2 I strongly support SMUD SolarShare program. My  
3 personal story, I just purchased my home last year in  
4 Natomas. My option was rooftop solar. I did not want it.  
5 I was forced to get it. It was either \$15,000 added to my  
6 mortgage or a 20-year lease at \$55 a month.

7 So if it was my option, I would not have gotten it.  
8 So definitely I ask for you approve the SMUD proposal.  
9 Thank you.

10 CHAIR HOCHSCHILD: Thank you.

11 Is Stephen Saffold in the audience? No?

12 Jim Adams? No?

13 Harold Thomas? And Mary Gallen. No?

14 Okay. Then we have next is, and our final speaker  
15 in the room today is Rick Umoff.

16 MR. UMOFF: Hi. Rick Umoff here with the Solar  
17 Energy Industries Association.

18 Just wanted to quickly say we saw a lot of  
19 improvement in SMUD's revised application which we  
20 appreciate. We still remained rather concerned about the  
21 actionability issue. And we heard from SMUD that that's a  
22 result of the code and the way the code's written and the  
23 durability requirement. But we do think that's something  
24 that needs to be looked out is the customers being able to  
25 move in and out of the SolarShares program so they don't

1 get locked into that program.

2 Thank you.

3 CHAIR HOCHSCHILD: Thank you.

4 Okay. Let's go to the phones. Rex Hime, to be  
5 followed by Shiva Patel, to be followed by Richard Skaff.

6 MR. HIME: Am I -- am I on?

7 CHAIR HOCHSCHILD: You're on. Go ahead, sir.

8 MR. HIME: Mr. Chairman and Commissioners. I'm  
9 Rex W. Hime representing the California Business Properties  
10 Association and the Building Owners and Managers  
11 Association of California, and we strongly urge you to  
12 approve the SMUD program.

13 We do have a substantial interest in the  
14 development of mixed-use occupancies. Mixed-use  
15 occupancies are buildings where the first floor, it's  
16 commercial office space, two or three stories above it are  
17 residential units. If there are there stories or less of  
18 residential units, each of these residential units must  
19 comply with the CEC's new mandate for renewable energy  
20 component.

21 Many cases especially in the (indiscernible)  
22 project, builder would be dealing with tight locking  
23 constraints, bulky HVAC would have to go up on the roof,  
24 along with other roof obstructions.

25 And buildings, roof area will also be required to

1 have (indiscernible) walls, fire safety, and other fire  
2 safety clearance requirement. Bottom line is in this case,  
3 there will be minimal area remaining on the roof to allow  
4 for the installation of solar EV panels, especially  
5 considering that there are only two or three apartment  
6 units located directly under the same area of roof.

7 Each commonly occurring constraints --

8 CHAIR HOCHSCHILD: Thank you, Mr. Hime. Sorry --

9 MR. HIME: -- over the building --

10 CHAIR HOCHSCHILD: Sorry. Let's move on to Shiva  
11 Patel to be followed by Richard Skaff.

12 Shiva?

13 MR. PATEL: Hi, my name is Shiva --

14 CHAIR HOCHSCHILD: Shiva, sorry, go ahead.

15 MR. PATEL: -- Patel for Center of Biodiversity.

16 CHAIR HOCHSCHILD: Go ahead.

17 MR. PATEL: And on behalf of our 100,000 California  
18 members, we urge to Commission to reject SMUD's SolarShare  
19 -- Shares application as it will set a dangerous precedent  
20 of other California utilities and does not do enough in  
21 lowering environmental (indiscernible) to the community.

22 We also agree with the comments from  
23 (indiscernible) California, Center for the American  
24 (indiscernible) and Polarize Compliance.

25 Thank you.

1 CHAIR HOCHSCHILD: Thank you.

2 Richard Skaff to be followed by Michael Malinowski.

3 MR. SKAFF: Good afternoon, Mr. Chairman and  
4 Commissioners. There's a huge feedback problem, so I hope  
5 that can be fixed.

6 I am calling today to oppose the SMUD program.  
7 First, I want to ask the Commissioner -- whether the  
8 Commissioners would consider the unintended consequences of  
9 the SMUD revised SolarShares program. I believe that,  
10 based on what I've read, that it will result in fewer homes  
11 having localized solar which in the case when people with  
12 disabilities and seniors who depend on consistent  
13 electricity, those folks will be threatened with power when  
14 power outages occur because they will not be served with  
15 power by the -- the proposed SMUD solution.

16 Where if they had batteries in their home --

17 CHAIR HOCHSCHILD: Thank you, sir, I'm sorry.

18 MR. SKAFF: -- and for in their home that can --

19 CHAIR HOCHSCHILD: I'm sorry, you're out of time.

20 Let's go to Michael Malinowski, to be followed by  
21 James Adams.

22 Is Michael Malinowski still on the line? Sir, are  
23 you there? Mr. Malinowski? Going once, going twice.

24 Okay, let's move on to James Adams.

25 MR. ADAMS: For all the arguments that you've heard



1 today, I urge you to oppose SMUD's proposal.

2 CHAIR HOCHSCHILD: Thank you.

3 Let's go on to Esmeralda Plascencia.

4 MS. PLASCENCIA: Good afternoon, Commissioner. My  
5 name is Esmeralda Plascencia. I am a Sunrise Sacramento  
6 member.

7 As an environmental advocate, I have volunteered  
8 with Sac Tree Foundation. I am here to ask you to shut  
9 down your fossil fuel plants and transition to 100 percent  
10 renewable energy. I am support of rooftop solar power  
11 because I believe any person or business should be able to  
12 choose and easily transition into solar energy. SMUD has  
13 stepped in as a leader of reusable energy. I hope they can  
14 fulfill that reputation.

15 In addition to the concern about tree planting,  
16 (indiscernible) trees can still be planted and provide  
17 shade. We need to put an end to the solar inequalities  
18 distributed among our community. Please act as to this  
19 issue as quickly as possible.

20 Thank you for listening.

21 CHAIR HOCHSCHILD: Thank you.

22 Leslie Bryan is our final public comment.

23 MS. BRYAN: Good afternoon. My name's Leslie Bryan  
24 with the Redding Electric Utility, and we appreciate the  
25 opportunity to follow up on comments that we submitted to

1 the commission on January 23rd.

2           Once again we'd just like to urge you to approve  
3 SMUD's application for their Neighborhood SolarShares  
4 program. We consider SMUD's program to be a model that  
5 other utilities including ours can draw upon to provide  
6 affordable clean electricity in their own territory.

7           Thank you.

8           CHAIR HOCHSCHILD: Thank you.

9           Is there anyone else in the room wishing to make a  
10 comment who has not yet made a comment or anyone else on  
11 the phone?

12           Thank you. Let's just pause there. Everybody give  
13 yourselves a round of applause for getting through a long  
14 afternoon.

15           I want to say we heard a lot of really heartfelt  
16 commentary on all sides raising a lot of issues and there  
17 are, I think, a lot of common themes about what we're  
18 trying to get to as a state.

19           Before we turn to Commissioner discussion, I wanted  
20 just to give staff the opportunity to respond. If there  
21 are any points of information you'd like to clarify based  
22 on questions raised during public comments, or points that  
23 you want to respond to, Bill, Matt, Drew. If not, we can  
24 move to Commissioner discussion. Was there anything? Go  
25 ahead.

1           MR. PENNINGTON: So this is Bill Pennington,  
2 Energy Commission staff.

3           I just wanted to speak to comments kind of related  
4 to the requirements of the standards. So there were  
5 comments made by CalSSA's attorneys that called out  
6 arguments about why SMUD's proposal does not meet three of  
7 the requirements. And staff looked carefully at those  
8 comments and discussed them with counsel and we don't  
9 believe that those arguments really understand what the  
10 standards were doing. And I think Drew's presentation this  
11 morning, or at 1 o'clock was a good explanation of that and  
12 clarification of that.

13           The only other kind of comment in the record  
14 related to the stands requirements that I see as being  
15 incorrect is SMUD's findings that -- that the durability  
16 requirements do not allow and opt-out choice during the 20-  
17 year time period.

18           And in reality staff, does not believe that's the case.  
19 And basically if someone wanted to install a rooftop system  
20 that was compliant with the standards midstream of the 20-  
21 year time period, that would be a completely satisfactory  
22 outcome for accomplishing the intended standards. And we  
23 don't see any reason why that would be blocked by the  
24 standards.

25           We also think it would be maybe a little difficult

1 administratively to do but we really don't think it's  
2 overwhelmingly difficult to do. So staff can be completely  
3 prepared to work with SMUD to, and with our attorneys, to  
4 clarify how that could happen if SMUD chose to pursue that.

5 Another thing we should say is that there's been  
6 comments, recommendations that we consider changes to the  
7 standards requirements to try to clarify those in the next  
8 upcoming building code cycle and staff is prepared to do  
9 that. And we think there's been good information pointed  
10 out about what people are misunderstanding and what could  
11 be improved. So we would to do that.

12 So that kind of puts -- if we decide to change the  
13 standards, that kind of puts a time limit on how long this  
14 approval, if you're going to approve this, would last and  
15 be in effect. If changes were made in the standards, then  
16 we would -- we would need to have any applicant that had  
17 been approved under the 2019 standards to come back and  
18 demonstrate they meet the requirements of whatever gets  
19 changed in the 2022 standards.

20 CHAIR HOCHSCHILD: Thank you. Let's go to  
21 Commissioner McAllister.

22 COMMISSIONER MCALLISTER: Okay. Well, thanks  
23 everybody for coming. Certainly a lot of viewpoints. You  
24 know, this is an issue with many, many sides not just --  
25 not just two. So, you know, there's sort of pro and con

1 how everything shakes out.

2 But there are a lot of viewpoints about this issue  
3 and it's relatively complex. So I want to just, you know,  
4 the fact that many voices on all sides of this topic are  
5 here and motivated to speak with how important it is and  
6 how vital this topic is. And that's actually gratifying.  
7 I mean, that's exactly what our process is supposed to  
8 embrace.

9 I want Drew, Building Standards Office staff.  
10 Bill, the Efficiency Division Management for sure. SMUD  
11 for, you know, bringing the original proposal, rolling up  
12 your sleeves, making some changes. And all the  
13 stakeholders who have sort of pointed out all the, you  
14 know, different issues and, you know, warts and all, right.  
15 So I think that's exactly the process that I think helps us  
16 get to a better outcome. So thanks to all the stakeholders.

17 I know a minute is not very long and thanks for  
18 trying to condense your thoughts and keeping on that time.  
19 Thanks to the Chair for holding people's feet to the fire  
20 on that.

21 So the -- I just have some comments, you know,  
22 having really, having gone through several cycles now since  
23 I came to the Commission. You know, the building standards  
24 update process is an incredibly robust, incredibly labor  
25 intensive, incredibly staff time intensive, and highly

1 technical endeavor. And Drew sort of described it at a  
2 high level but I think he captured it well. He did a lot  
3 of things.

4           The 2019 building standards were developed in a  
5 robust and multi-year process. CEC staff and everyone  
6 involved in massive lifting to get that done and get it  
7 across the finish line at the Building Standards Office.  
8 And, I'm sorry, at the Building Standards Commission. And,  
9 you know, the record behind the regulation is clear, it's  
10 robust, it's well supported. And the regulations  
11 themselves, the words have not changed since we adopted it  
12 in 2017. It's been here the whole time and we talked about  
13 every word along the way. They need to be implemented.

14           On community solar, the intent was actually  
15 explicitly not to proscribe a lot of details. We wanted  
16 the marketplace to figure out how to get this done. We  
17 wanted to see some innovation. We didn't feel that there  
18 was an ability to proscribe all these details. So, you  
19 know, to allow and encourage these issues to be sorted out  
20 via the process that we're going through right now.

21           There was intentionally. In the docket of the  
22 transcripts of those discussions, actually if you look at  
23 them now, they make an excellent read and they bolstered my  
24 confidence that we're on this solid ground here today.

25           I wanted to call out a couple of things that were

1 said along the way. We had a lot of comments, obviously,  
2 lots of content there, but I wanted to just raise a point  
3 that Ed Smeloff made and Bernadette Del Chiaro towards the  
4 end. You know, there is a vision of what our buildings are  
5 going to do. There's a clean and reliable grid and it's  
6 expressed through the building code. Energy efficient is  
7 and has always been top of the heap. Demand response, load  
8 flexibility, all these things that are part, fundamentally  
9 part of decarbonization are right there in the building  
10 code and will only get more there in the building code.

11           Solar is a piece of that as well, it's part of  
12 decarbonization puzzle. But I just -- I don't want it to,  
13 it's not a black and white thing, it's not a either or  
14 thing. It's really -- there are lots of paths to get the  
15 decarbonization. And I think we, we sort of miss the point  
16 if we take sides to sternly, I think, on one particular  
17 issue like this, that's part of a larger whole.

18           So, you know, these regs obviously have not been  
19 without controversy. Housing costs are a huge concern.  
20 There have been and there are currently legislative  
21 proposals to direct or limit the extent of the solar  
22 requirement or otherwise seek to reduce the cost of housing  
23 in different ways. So we're going to be with this issue.  
24 There are a lot of opinions and the legislature is going to  
25 keep weighing in on this. So issue of ongoing relevant and

1 I think we'd be wise to be sensitive to those efforts.

2 The letter we received from Senator -- Dr. Pan and  
3 31 other of his colleagues, you know, resonates. So a  
4 message I think that how important this is. Senator  
5 Wiener's presence here also, it's obviously an issue of  
6 continuing relevance.

7 I just want to point out, you know, this is not --  
8 there are exemptions and there are alternative compliance  
9 pathways, right. This is not an exemption, this is  
10 alternative compliance pathway. So exemptions are you  
11 don't have to do it because you're shaded, or because your  
12 roofline or because, you know, some reason where -- or you  
13 have really cheap power, you know, like with Trinity PUD.  
14 You know, we granted them exception, the cause in pencil.  
15 That's not what we're doing here today. It's true  
16 compliance with a code and it's right there in the plain  
17 language of the regs.

18 So now, you know, we're considering the first  
19 application, and, you know, staff argues I think  
20 persuasively that it does satisfy the criteria that are  
21 laid out in the regs. It is additional solar, saves the  
22 homeowner money from day one, right out of the gate.

23 And I want to kind of, you know, there were years  
24 of conversation about community solar through  
25 (indiscernible) bill that now, you know, became law in sort



1 of a different form that it started out. But this is a  
2 rate that's being offered to homeowners, to buyers of new  
3 housing that's actually cheaper than the standard nonsolar  
4 tariff. So that's actually, that's a milestone. I think  
5 we have to appreciate that that's an important milestone  
6 and reflects that there are multiple ways to achieve solar  
7 homes cost effectively. And that flexibility is a hallmark  
8 of good regulation. I think we, you know, again the  
9 intentionality was there as we managed this conversation.  
10 You know, the process, listens to the breadth of  
11 stakeholder opinion.

12           So SMUD made this point and I'm not sure it kind of  
13 got repeated, but I wanted to just highlight that -- that  
14 this idea that net metering is completely off the table,  
15 doesn't -- is not the case and I appreciated the  
16 explanation there. You know, 2.8 kilowatts is not a very  
17 big solar system. And so most people's consumption, I  
18 think Mr. Raymer made that point that we really need -- it  
19 is both and it's not either/or. Because in order to cover  
20 the load and fully electrify, if that's what your project  
21 is, or fully decarbonize, you're going to need more solar  
22 than just that minimum community solar.

23           And whatever the headroom is above that up to your  
24 net metering cap, which is much higher, is going to be --  
25 it's going to be able to access net metering. So I think

1 that -- just to be clear. So staff described that as well  
2 as SMUD.

3 Also I wanted to, kind of checking my box of things  
4 I wanted to point that weren't really said through the  
5 course of the comments. But other versions of community  
6 solar, we would welcome those applications. You know, it  
7 doesn't have to be a utility that brings it. I could be a  
8 developer, it can be, you know, some of the models that  
9 people, people have brought up during their comments. I  
10 think, you know, I personally, and I imagine some of my  
11 colleagues, would love to see those applications that  
12 actually do, you know, a smaller scale, more localized,  
13 different kind of business ownership model, different kind  
14 of compensation model. I think if those could check the  
15 boxes and the regs or if we see fit to revisit those boxes  
16 going forward, then we'd love to be able to, you know,  
17 allow those flowers to bloom as well.

18 A couple of items, I think, of ongoing discussion.  
19 Bill brought one of these midstream opt-out. Just -- I  
20 agree with what Bill said and I think, you know, if five  
21 years from now a whole bunch of folks who are buying these  
22 now new homes that come in, you know, the buyer of the  
23 then-existing home that's got this community solar  
24 commitment. If there are 1,000 people knocking on SMUD's  
25 door saying, hey, I want to opt out of my community solar

1 and get PV, I'd hope that you, you know, look at some  
2 flexibility there and see if there's a way to work with  
3 that.

4           Again, it's a program design, it's not -- it's not  
5 our authority to tell you to do that, but I think just as a  
6 consumer, as a consumer responsiveness point, that would be  
7 good. You know, as long as that PV is committed for at  
8 least a remainder of the 20 years, it would meet our  
9 durability requirement.

10           And, you know, frankly I feel like part of what  
11 we're doing here is running traps for SMUD and I just  
12 wanted to like encourage the public process at SMUD to be a  
13 little more robust before you kind of bring it to us.  
14 Because I feel like there's a -- there's a dynamic here  
15 that's not altogether sort of positive in the  
16 dissatisfaction with SMUD that we heard, you know, have  
17 those conversations out in the public -- in a public forum  
18 to run those traps before you weigh in.

19           So, you know, so I would encourage SMUD or that  
20 SMUD open more dialog to anticipate smooth out any  
21 frictions going forward with its community solar program  
22 implementation. I think those details really matter,  
23 implementation really matters and being responsive to the  
24 marketplace in a substantive way matters.

25           So I appreciate our second issue is really one of

1 precedent and all I want to say there is that it's not  
2 really our role to make decision that speculate about what  
3 may or may not happen out in another agency or in the  
4 marketplace. I mean, I think we try to, you know, keep our  
5 ear to the ground, but I appreciate Grant Mack being here  
6 from the PUC to give us a little orientation there. But I  
7 think we have the ability to pay attention to how things  
8 evolve going forward. If there are big distortions in the  
9 marketplace, if there are these, you know, unintended  
10 consequences, we'll know about them, you'll tell us about  
11 them. And we're already in the conversation with about the  
12 2022 code, that's already happening. And if there are  
13 things that, you know, the vagueness of the 2019 code in  
14 this respect, you know, if there's an ability to get some  
15 consensus and tighten things up or be more specific about  
16 certain aspects, that can be part of that conversation if  
17 it looks like that would be advantageous.

18           So I'm getting -- I'm getting close to the end so  
19 thanks for bearing with me. So I'd like to wrap up my  
20 comments really on a positive note. And I'm actually  
21 incredibly optimistic about where we're going. The  
22 challenges are huge. I mean, the representative, the  
23 16-year-old, you know, representative of our youth today, I  
24 really am sympathetic. I've got a 13 year old and a 16  
25 year old. I mean, you know, we're not -- we're not leaving

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1 the best future for them if we don't get our act together.

2 And so we, but yet we're in California, we have a  
3 lot of tools. I think it's really a sense of mission. And  
4 all of us in this room, even though we're fighting about  
5 this particular issue, we're on the same team. So, you  
6 know, this process continues after today. You know, this  
7 is a moment in a continuum, right. It's a snapshot, but  
8 really the long-term commitment that we all have is what we  
9 need to keep our eyes on.

10 The 2022 code cycle, as I said, is already underway  
11 and, you know, we'll have the evidence and if needed the  
12 discussion can consider updates and changes. The code  
13 update process can capture that.

14 I'm going to suggest that we, every year or so or  
15 ever so often, whenever necessary really, we can have an  
16 informational item on a business meeting or we can update  
17 on how it's going, how implementation is. Maybe SMUD can  
18 come in and talk about the numbers. Other stakeholders can  
19 come in, be good to get a handle on the low-income, the  
20 multifamily, how things are moving along with respect to  
21 this as a piece of the overall building standards project.

22 I do believe with all that said and sort of trying  
23 to put this in context, I believe that history will look  
24 back on what we've done in its sum total and we'll see some  
25 wisdom in how we've approached this.

1           You know, more broadly, building decarbonization  
2 is a huge topic, it's a huge project for the state,  
3 certainly for the CEC. And it's bigger than today's  
4 discussion I would argue. And, you know, we have AB 3232  
5 to decarbonize our buildings. We've got Title 24, 2022,  
6 we've got SB 100. We've got all of these efforts that are  
7 all, you know, tied up together, they're all related.

8           You know, we have -- we have huge needs for  
9 multifamily housing for housing construction across the  
10 state. You know, this is but one piece of that. And  
11 responding to the climate crisis and really focusing on  
12 decarbonization is going to be policy in California for --  
13 from here on out. That's not going to change. So multiple  
14 paths can get us there and our project is to decide which  
15 paths are the best ones.

16           So finally I just wanted to remember that -- I want  
17 to remind everyone and remember myself that we make the  
18 most progress when we all try to row in the same direction.  
19 We need to be able to talk to each other. Sometimes we  
20 have to agree to disagree. Maybe there's some of that  
21 might happen today. I do worry about polarization. You  
22 know, that's sort of the theme of our time. It's  
23 unfortunate. And we need to try to do our best to maintain  
24 some middle ground. And, you know, tomorrow we could face  
25 an issue around which we really need to be on the same

1 team. The federal government could come calling to  
2 undermine our authority to do something important.

3 And so, I think, you know, we need to make the  
4 effort to understand one other, keep lines of communication  
5 open, tend the fields of California's diverse clean energy  
6 landscape and so that all its many flowers can continue to  
7 bloom. So that's the context that I see this conversation  
8 in. I think we're doing something important really  
9 regardless of what we do today. I support this item. I  
10 think that's it -- it reflects a lot of work and committed  
11 to making (indiscernible) from my perch at the Energy  
12 Commission.

13 But I want to just thank you all again for being  
14 here and for your roles in moving California towards the  
15 clean energy future that we all want for ourselves, and our  
16 kids, and grandkids.

17 So thank you.

18 CHAIR HOCHSCHILD: Thank you. Other Commissioner  
19 comments? Commissioner Douglas.

20 COMMISSIONER DOUGLAS: So I appreciate Commissioner  
21 McAllister's comments and his leadership in getting this  
22 package across the finish line.

23 This was very big deal for the Commission when we  
24 adopted the standards with the solar requirement and it's  
25 now in effect. It's really only been in effect in 2020,

1 for a few weeks. And I remember clearly as well that the  
2 community solar aspect was deliberately designed as a  
3 compliance pathway, not an exception. And so for example  
4 we have exceptions for when it's too shady, for example,  
5 and you can't put solar in the building. But there are a  
6 couple of reasons why I thought at the time and still think  
7 it's important to have alternative compliance pathways.

8           You know, one is that it allows builders to avoid  
9 using an exception. So instead of utilizing an exception,  
10 they can use this pathway and they can actually comply.

11           And secondly, at the time that we adopted the  
12 standard, and you know, even today, I'm not utterly  
13 confident, I've heard some speakers in the room say, you  
14 know, I'm not utterly confident that everyone would chose  
15 the house with a panel on the roof. I think most people  
16 would, I think many people would. I think the builders  
17 have said it's an amenity that customers are looking for.  
18 Nevertheless providing some flexibility as we forward into  
19 this mandate so that there can be responsiveness to the  
20 market if it is true that it is a much better deal for  
21 consumers to have a panel on the roof in general, then  
22 those are the houses that'll sell. And the builders know  
23 that.

24           And one of the things that I like about some of the  
25 changes that SMUD made was the commitment to work with



1 builders to find ways to allow the point of purchase  
2 option. I think where -- where it works, people are  
3 generally going to want the solar and that's what we're  
4 going to overwhelmingly see.

5 But we are move -- this is a transition, this  
6 requirement actually hasn't been in effect all that long,  
7 and it's a big change. It's a welcome change. It's a  
8 change that we've worked very, very hard at the Energy  
9 Commission to foster.

10 So I'm the attorney commissioner so I'm the one who  
11 also looks at these things sometimes from the really boring  
12 okay what exactly did we write perspective and how exactly  
13 are we applying it and are we applying it the way we wrote  
14 it. Because if we're not applying it the we wrote it, then  
15 we can't do that. And so I have gone back and looked  
16 carefully at the language and carefully at the requirements  
17 that we set out. And we didn't say that if somebody comes  
18 forward with the application that meets these criteria, we  
19 may approve it. We said that if it meets the criteria, we  
20 shall approve it.

21 So at one level, I'm really looking at it at the  
22 pretty mechanical aspect of okay does this application meet  
23 the criteria. And I'm also hearing very much from speakers  
24 in the room that there are things that are not either very  
25 good at all or perfect of whatever it may be in terms of

1 some of the program design. That's something, and  
2 Commissioner McAllister said this maybe in slightly  
3 different way, but that's something we would encourage you.  
4 You know, we're not, at the Energy Commission as a state  
5 policy and regulatory body, designing these programs.

6           You know, we are fundamentally saying, does it meet  
7 the criteria that we set out? Yes or no. Is there a  
8 better way to do it? That's a community conversation and a  
9 conversation with SMUD. And it's one that we hope SMUD  
10 will continue to have with the community.

11           I heard a lot of suggestion that the Energy  
12 Commission could consider clarifying some aspects of what  
13 we set in the standards. I heard and welcomed the  
14 commitment by staff to do that. That's not something we do  
15 today. You know, I mean, we can of course think about it  
16 today. But there's a lengthy and exhaustive public process  
17 to do that. And I think everyone here should hear the  
18 commitment from us to engage in that.

19           At the time that this set of standards was adopted,  
20 you know, the concept of what was -- what is community  
21 solar was, I think, evolving and it still is evolving and  
22 it still is something that is a robust policy discussion.  
23 We set a marker in a place and adopted the standards and so  
24 that's where we are today. It doesn't have to stay there.  
25 And so I do think there's a worthwhile conversation and we

1 have heard a lot that will allow us to continue to improve  
2 and continue to develop in terms of how we see the policy  
3 around that set of issues.

4 And then of course when we adopt it, it'll be in  
5 effect and I'll be the attorney commissioner saying well,  
6 what exactly did we write? Because that's what we --  
7 that's what we need to do.

8 So I -- I want to say, maybe I should have started  
9 with this, I really -- I really appreciate the passion  
10 around this issue from all of the speakers and the  
11 commitment to action on climate change. The state of  
12 California is determined to make a difference and we're  
13 going to -- we're going to continue to exercise our  
14 leadership. Everybody sitting here on this dais is here  
15 because we think is the most exciting opportunity we have  
16 to make a difference ourselves on climate change and  
17 through the Energy Commission and through the state of  
18 California and working in partnership with all of you. And  
19 that's what -- that's our ongoing commitment here and going  
20 forward.

21 So -- so those are my comments for now.

22 CHAIR HOCHSCHILD: Thank you.

23 Vice Chair Scott?

24 VICE CHAIR SCOTT: Sure. I also want to say thank  
25 you to everyone who came out to provide comment to us

1 today. It's really important. It's excellent, I think, to  
2 hear the dedication and the passion and the commitment of  
3 all of the folks around the room. And also to everyone who  
4 submitted detailed written comments to us on the docket.  
5 It's very much appreciated.

6 I want to thank our Efficiency Division staff and  
7 also SMUD for working together to bring a revised, and in  
8 my opinion, much approved proposal to us for consideration  
9 today. You've heard this and so I won't echo too much of  
10 what you've already heard. But, you know, to meet our  
11 clean energy and our climate goals and to do it in the most  
12 cost-effective ways, we need every option available to us.  
13 I think rooftop solar, community solar, every carbon-free  
14 resource that we can muster.

15 And what we're doing with the building standards, I  
16 think in the proposal that's before you today with rooftop  
17 solar and community solar, it is still at the forefront. I  
18 think this is something that's bold, it's cutting edge.  
19 It's something that we haven't seen folks do before. And I  
20 do want to echo what both Commissioner Douglas and  
21 McAllister said about the difference between the compliant,  
22 sorry, between the compliance mechanism and an exception.  
23 And I think again that goal of adding our community solar  
24 compliance mechanism into the building code was to create  
25 more options. And I think that's what we're doing here.

1 I'm persuaded that with the changes made and the  
2 additional commitments, the clarifications that were added,  
3 that this does meet the requirements of what we said in our  
4 building standards.

5 I also want to recognize that this round, this  
6 first round may not be perfect but I don't think we should  
7 let perfect -- the perfect be the enemy of the good. I do  
8 think that we want to closely monitor the implementation of  
9 the program so I want to echo Commissioner McAllister's  
10 call for potential informational items or other ways for us  
11 to really check in and hear how it goes.

12 I'm mindful of what we heard about the cautions  
13 about a precedent and how is this being implemented, what  
14 comes out of it. And our point here is really to  
15 decarbonize, right? Decarbonize in the most affordable  
16 and reliable way and we need to make sure that that's  
17 what's happening. So I appreciate the checkpoints that we  
18 have discussed.

19 And I also want to just say thank you, Commissioner  
20 McAllister to you for your leadership and your dedication  
21 in this space. It's really, you're fantastic.

22 CHAIR HOCHSCHILD: Thank you.

23 Commissioner Monahan.

24 COMMISSIONER MONAHAN: Yes, well, I want to start  
25 also by saying thanks to everybody for providing public

1 testimony, especially folks that have never done this  
2 before. It's scary and, you know, you were brave to come  
3 here and give your testimonies. So thanks to the 16-year-  
4 old, thanks to the folks from IBEW and the SMUD folks, and  
5 thanks to the residents. I mean, it's really hard and we  
6 appreciate that you were brave enough to come and provide  
7 your testimony.

8 I am really heartened by the changes that were made  
9 between the last business meeting when we discussed this  
10 and this proposal. So I thank the staff and the SMUD folks  
11 for revising the proposal and coming with us with a  
12 proposal that I think better meets the spirit of community  
13 solar. And I think it behooves us on the Commission to  
14 think more as we do our revisions in 2022 what are we  
15 learning in terms of the definition of community solar and  
16 how can we integrate that into our regulations so that  
17 going forward, folks will have a better sense of what would  
18 be approvable.

19 I mean, the criteria as Drew laid out very well is  
20 pretty basic and simple. And from my perspective, this  
21 proposal does meet the criteria. And I would say it's on  
22 us as the Commission to really refine that criteria as we  
23 get more information so we get more specific about what --  
24 what is community solar, how do we provide resilience  
25 benefits.

1           And I'm particularly interested in better  
2 understanding the implications for multifamily dwellings.  
3 I think we heard a lot of information about how single-  
4 family homes, there's already an economic incentive.  
5 They're going to make more money and when they resell the  
6 house -- we have a lot of evidence that that will likely be  
7 solar, will be a significant amount of rooftop solar on  
8 individual homes. I'm not convinced when we're talking  
9 about multifamily dwellings that that is going to be the  
10 case.

11           And I think we heard from affordable housing  
12 advocates that it will slow down the process and perhaps  
13 prevent multifamily dwellings from being built if we have  
14 this solar requirement. And at the same time, those are  
15 the very residents that we want to help. Because it's the  
16 renters of apartment buildings who pay utility bills who  
17 are going to benefit. Those residents are most vulnerable  
18 to price fights and to, you know, shutoffs due to not being  
19 able to pay their bills. So how do we make sure that we  
20 move forward in a way that brings all Californians along  
21 and especially our most vulnerable.

22           So I think as we look at further analysis, that's a  
23 piece that we should really evaluate is, is there an impact  
24 on affordable homes? What does this mean in terms of  
25 lower-income residents being able to benefit? And are

1 there additional programs that we need around financing to  
2 ensure that those benefits are spread to all communities.

3 So thank you to all the staff who worked so hard.  
4 Thanks to Commissioner McAllister who has worked so hard on  
5 this. And I think we do have a much better proposal and  
6 I'm looking forward to supporting it.

7 CHAIR HOCHSCHILD: Great. Thank you.

8 Well, let me just say, you know, our mission as an  
9 agency is to build a clean energy future, to get to a get  
10 to 100 percent clean energy grid, fully decarbonize and  
11 really lead the way.

12 I'm incredibly proud, by the way, of what's  
13 happened over the course of the last year. So SB 100 went  
14 into effect exactly a year ago and during that time, you  
15 know, we had New York, Wisconsin, Connecticut, Nevada, you  
16 know, New Mexico, all the other states. We have now 30  
17 percent of the population of the United States living a  
18 state that's committed to get to 100 percent clean energy  
19 future. And this is a part of that.

20 I will say that, you know, I think a fair criticism  
21 of the Energy Commission, a fair criticism of me, is that  
22 we have not fully flushed out what does the community solar  
23 actually need. And I think that, you know, was in part  
24 because we were focused a lot on the rooftop initiative.  
25 But it was very much part of the intention that it would



1 always be this option.

2           And the whole policy to me was adopted with the  
3 sort of common sense off-ramps. If your house is shaded,  
4 what's north facing. You know, if it's not cost effective  
5 in the case of Trinity, you get an exemption, but that  
6 there would be this alternative compliance. That was built  
7 into the policy.

8           I do regard this proposal from SMUD we're voting on  
9 today, which I will be voting in favor of, as significantly  
10 improved from what we heard a few months ago. The  
11 principal critiques that I heard there wasn't a commitment,  
12 that the project would be new. Now that commitment's been  
13 made. The value proposition was criticized being too low,  
14 that has been doubled. There wasn't a commitment that all  
15 the projects for these community solar project would be  
16 local, in SMUD territory, that commitment's been made. Or  
17 that the projects would be below 20 megawatts. And that  
18 commitment's been made.

19           The reality of where we are in the market today is  
20 we last May we hit a million solar roofs. We're adding  
21 about 12,000 solar roofs a month all of last year. That  
22 number's increased to 20,000 a month now with the solar  
23 mandate. So even under the worst case scenario, it's still  
24 a very significant net increase in solar roofs going into  
25 the market in California.

1 I will say, with respect to SMUD, I do share  
2 Commissioner McAllister's concern, it wasn't a public  
3 hearing that you held to get this kind of feedback. I felt  
4 honestly the Energy Commission kind of became the hearing  
5 room for SMUD and that is unfortunate. I actually think  
6 many of the changes that were made, you know, that could  
7 have been vetted and done, you know, in a SMUD process  
8 prior to coming to the Energy Commission.

9 But with that said, I really do want to compliment  
10 SMUD on the progress. I do regard it as a subsequently  
11 significantly improved proposal. I will say that, you  
12 know, one request I'd like to make staff in concert with  
13 Commissioner McAllister that we get a market report in a  
14 year and really focus on what developments are actually  
15 happening. We need to stay very tuned to this.

16 What we are voting on today is for this code cycle.  
17 Okay. I don't want to have anyone be under the  
18 misimpression that this is all set in stone for all of  
19 eternity. This is a process that can be tweaked as needed.  
20 And, you know, the bottom line is we have a White House  
21 right now that is in retreat on the issue of climate.  
22 Right? We know that, we see that. We're doing crazy  
23 things as a country, withdrawing from Paris agreement.  
24 Really the only country in the world that's done that  
25 trying to revive coal power at a time when, you know,

1 everyone else is trying to move off of coal. You know,  
2 even undoing policies like mom and apple pie policies, like  
3 EnergyStar program. Okay, that's the world we're in right  
4 now.

5           And so California does have to step up and lead  
6 boldly at everything you do. And really the principal goal  
7 to me is to make the whole system successful and that means  
8 rooftop, that means community scale, that means utility  
9 scale. It means how the pieces fit together in energy  
10 storage. It means intelligent charging protocols for EVs.  
11 This whole system because we are a model for the world.

12           And we need to remember that our state has an  
13 incredible power of being this megaphone and an incubator.  
14 The modern solar energy globally was born in our state. Ed  
15 Smeloff was here who's instrumentally in that the first  
16 utility scale solar projects in the world were done here in  
17 SMUD territory. The first utility scale wind projects in  
18 the world. The electric vehicle industry born in  
19 California. Every single automaker in the world now, every  
20 major automaker that's developing electric option, that is  
21 because of Tesla, right? California come -- so the very  
22 first energy efficiency codes that standards globally were  
23 born here.

24           And this is a legacy I think we all feel the weight  
25 of. We have to keep pushing the envelope and keep being

1 that beacon and that bright light. And keep our eyes on  
2 how do we keep the whole system successful.

3 So I am going to vote in support of this. I want  
4 to thank Commissioner McAllister for all your hard work and  
5 that of your staff.

6 And with that, I welcome a motion on the item.

7 COMMISSIONER MCALLISTER: All right. Well I guess  
8 I'm making the motion. All right, I'll move Item 11.

9 CHAIR HOCHSCHILD: Okay. Is there a second?

10 VICE CHAIR SCOTT: Second.

11 CHAIR HOCHSCHILD: Second by Vice Chair Scott.

12 All in favor say aye.

13 (Ayes.)

14 CHAIR HOCHSCHILD: All right. That motion passes.

15 We're adjourned. Thank you.

16 (The Business Meeting adjourned at 3:51 p.m.)

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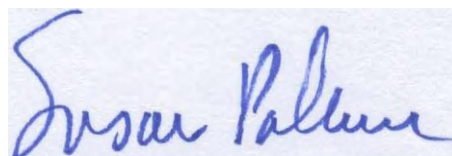
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I DO HEREBY CERTIFY THAT THE TESTIMONY IN THE FOREGOING HEARING WAS TAKEN AT THE TIME AND PLACE THEREIN STATED; THAT THE TESTIMONY OF SAID WITNESSES WERE REPORTED BY ME, A CERTIFIED ELECTRONIC COURT REPORTER AND A DISINTERESTED PERSON, AND WAS UNDER MY SUPERVISION THEREAFTER TRANSCRIBED INTO TYPEWRITING.

AND I FURTHER CERTIFY THAT I AM NOT OF COUNSEL OR ATTORNEY FOR EITHER OR ANY OF THE PARTIES TO SAID HEARING NOR IN ANY WAY INTERESTED IN THE OUTCOME OF THE CAUSE NAMED IN SAID CAPTION.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND THIS 4TH DAY OF MARCH, 2020.



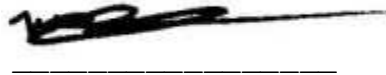
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IN WITNESS WHEREOF, I have hereunto set my hand this 4th day of March, 2020.



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Myra Severtson  
Certified Transcriber  
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