

## DOCKETED

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CALIFORNIA INDEPENDENT SYSTEMS OPERATOR  
MEETING

In the Matter of: )  
 )  
Aliso Canyon Action Plan for Local )  
Energy Reliability in Summer 2016 )  
Joint Agency, Integrated Energy )  
Policy Report Workshop )  
\_\_\_\_\_ )

WARNER CENTER MARRIOTT WOODLAND HILLS  
GRAND BALLROOM  
21850 OXNARD STREET  
WOODLAND HILLS, CALIFORNIA

FRIDAY, APRIL 8, 2016

1:00 P.M.

Reported by:  
Martha Nelson

APPEARANCES

WORKSHOP LEADERS

Chair Robert B. Weisenmiller, California Energy Commission  
Commissioner Andrew McAllister, California Energy Commission  
President Michael Picker, California Public Utilities  
Commission  
Commissioner Michel Florio, California Public Utilities  
Commission  
Commissioner Catherine Sandoval, California Public Utilities  
Commission  
Commissioner Carla Peterman, California Public Utilities  
Commission  
Commissioner Liane M. Randolph, California Public Utilities  
Commission  
Cliff Rechtschaffen, Office of Governor Brown  
Marcie Edwards, Los Angeles Department of Water and Power  
Tom Doughty, California Independent System Operator  
Ken Harris, Department of Oil, Gas & Geothermal Resources  
Mohsen Nazemi, South Coast Air Quality Management District  
Saul Gomez, California Natural Resources Agency  
Michael Gibbs, California Air Resources Board  
Dan Bout, California Office of Emergency Services

STAFF

Heather Raitt, California Energy Commission  
Le-Quyen Nguyen, California Energy Commission

APPEARANCESSTAFF PRESENTERS

Rob Oglesby, California Energy Commission

Catherine Elder, Aspen Environmental Group

Mark Rothleder, California Independent Systems Operator

Ed Randolph, California Public Utilities Commission

Michael Webster, Los Angeles Department of Water and Power

ELECTED OFFICIALS

Senator Fran Pavley

Councilman Mitchel Englander, Los Angeles City Council

Congressman Brad Sherman

FEDERAL, REGIONAL AND LOCAL REPRESENTATIVES

Deepak Ramlatchan, Federal Energy Regulatory Commission

Patricia Hoffman, U.S. Department of Energy

Jim Robb, Western Electricity Coordinating Council

Jeff Reeb, Los Angeles County

Paula Cracium, Porter Ranch Neighborhood Council

UTILITIES REPRESENTATIVES

Bret Lane, Southern California Gas Company

Stuart Hemphill, Southern California Edison

Fred Fletcher, Southern California Public Power Authority

Emily Shults, San Diego Gas & Electric

Tony Foster, Long Beach Gas & Oil

APPEARANCES

KEY STAKEHOLDER REPRESENTATIVES

Alex Morris, California Energy Storage Alliance

Gary Toebben, Los Angeles Area Chamber of Commerce

Tim O'Connor, Environmental Defense Fund

Michael Shaw, California Manufacturers & Technology  
Association

PUBLIC COMMENT

Tom Williams, Citizens Coalition for a Safe Community

Alan Weiner, 350.org

Richard Matthews, Save Porter Ranch

Alexandra Nagy, Food and Water Watch

Paul Hunt

Gina Goodhill-Rosen, Solar City

Lorraine Lundquist

Helen Atti

Jason Hector

R. L. Miller, Climate Hawks Vote

Guillermo Lucuona

Matt Pakucko, Save Porter Ranch

Susan Gorman-Change

Jackie Petrola

Mark Reed

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P R O C E E D I N G S

1:00 P.M.

WOODLAND HILLS, CALIFORNIA, FRIDAY, APRIL 8, 2016

(The meeting commenced at 1:04 p.m.)

MS. RAITT: Welcome to today's Joint Agency Workshop on the Aliso Canyon Action Plan For Local Reliability In Summer 2016. I'm Heather Raitt from the California Energy Commission.

This workshop is being jointly conducted by the California Public Utilities Commission, the California Independent System Operator, the Los Angeles Department of Water and Power, and then Energy Commission. This workshop is part of the Energy Commission's 2016 Integrated Energy Policy Report Update proceeding.

I'll quickly go over some housekeeping items. Restrooms are available straight out the doors, down the curved hallway. Coffee is available further down the hallway, as is the Marriott lobby and restaurant. For those who parked in the parking garage, you may want to refer to information in the agenda about purchasing a \$7.00 exit pass from the valet cashier.

Today's meeting is being broadcast through the WebEx conferencing system, and is also being live streamed. So parties should be aware that you're being recorded. The

1 audio and live stream recordings will be available on the  
2 Energy Commission's website early next week, and the written  
3 transcript will be available within a month.

4           We do have a very full agenda and long day, so I'd  
5 like to remind our speakers to please keep to your allotted  
6 time. And I'll be periodically reminding people of our time  
7 constraints.

8           For those in the audience who would like to make  
9 comments, there will be an opportunity to do so at the end  
10 of the day. For those in the room, please sign up with our  
11 Public Adviser, and she's out in the front of -- in the  
12 lobby.

13           For WebEx participants, you can use the chat  
14 function to tell our WebEx coordinator that you'd like to  
15 make a comment during the public comment period, and we'll  
16 either relay your comment or open your line at the  
17 appropriate time.

18           For phone-in-only participant's, we'll open your  
19 lines after hearing from in-person and WebEx participants.

20           During the public comment period each person will  
21 be limited to one to two three minutes, and the length will  
22 depend on the number of people who want to comment to  
23 accommodate as many as possible.

24           We also welcome written comments, and those are  
25 due on April 22nd. The meeting agenda and public notice

1 provide information about how to do so.

2           Materials for this meeting are available on the  
3 Energy Commission's website. The link to the website is at  
4 the top of the agenda, and hardcopies are available at the  
5 entrance.

6           And with that, I'll turn it over to Chair  
7 Weisenmiller from the Energy Commission, and President  
8 Picker from the California Public Utilities Commission.  
9 Thank you.

10           CHAIRMAN WEISENMILLER: Thank you, Heather. I'd  
11 like to thank everyone for their participation today. As  
12 Heather noted, we've got a lot of material to cover today.

13           And basically, the way we're going to approach is  
14 that for the panels, the speakers -- the dais will ask --  
15 can ask questions. But for the public, at this stage there  
16 will not be the opportunity. There will be opportunity for  
17 public comment, and certainly written comment.

18           Now in terms of what we're looking at today is the  
19 basic question of, first, what is the problem, and we'll  
20 start off the analysis. And then what are the actions we  
21 have come up with to help mitigate that problem. We do not  
22 eliminate the risk, but we will reduce the risk. Certainly,  
23 we want to encourage parties to give us additional ideas on  
24 what we can do, again, to help mitigate the risks there.

25           This workshop today, the real focus is on

1 reliability. And indeed, what we're looking at is based  
2 upon the scoping material we sent out to the workshop, as  
3 we're looking at this summer. Ultimately we will be back  
4 here looking at reliability issues for the winter. We  
5 expect to be back here next year looking at, basically, the  
6 issues of how to reduce our long-term reliance on Aliso  
7 Canyon, and presumably to make sure that things will be  
8 reliable next year also. And then over time we will turn  
9 our attention more to some of the longer-term questions on  
10 gas.

11           Obviously, this focus on reliability flows from  
12 the Governor's order to the Energy Commission, the PUC in  
13 collaboration with the ISO, to basically do a plan then then  
14 deal with reliability issues this summer. As I said, there  
15 is certainly a much broader administration activity. Cliff  
16 Rechtschaffen will talk about that later and put this in  
17 context. But just for context for today, this focus is  
18 really on reliability.

19           In terms of -- we have -- one of the reasons why  
20 we are, to some extent, trying to shorten somewhat this  
21 process is that we have a very broad dais. We have  
22 participation from a lot of different agencies. And the  
23 good news of pulling everyone together, it gives a chance  
24 for everyone to communicate with us, and we're here to  
25 listen to that. But it's also an efficient way for all the

1 agencies to give their presentation on both the issues and  
2 the action plan.

3 Now in terms of that, I'm going to walk through  
4 some of the participants on the dais. And then I'll turn it  
5 over to President Picker.

6 So on my left is Michael Picker who is the  
7 President of the PUC.

8 On my right is Marcie Edwards. She's the General  
9 Manager of the Los Angeles Department of Water and Power.

10 Okay, now in terms of -- in terms -- I'm also  
11 joined by my fellow Commissioner Andrew McAllister on my  
12 right. And Commissioner Douglas, who is very interested in  
13 this topic, has certainly been briefed by Staff and will  
14 read the transcript, is not able to be here today. But her  
15 Adviser Le-Quyen is here.

16 Le-Quyen, you want to put your -- over there.  
17 Yes. Yes.

18 So Le-Quyen is back there. So again, anyone who  
19 wants to communicate with Commissioner Douglas, again, she's  
20 here to listen or talk to you about that.

21 We are also joined by all the PUC Commissioners.  
22 At this point on the dais we have Michael Florio, Carla  
23 Peterman, and Liane Randolph. And I believe Commissioner  
24 Sandoval is coming.

25 I also welcome the Governor's Office Senior

1 Adviser on Energy.

2           Cliff, put -- yes, please. Okay.

3           And the Independent System Operator is represented  
4 by Tom Doughty.

5           Tom?

6           Again, certainly Steve Berberich has been very  
7 involved in this issue, but also cannot be here today.

8           In terms of Department of Oil, Gas and Geothermal  
9 Resources, represented by Ken Harris.

10          Ken?

11          And Michael Gibbs is here to represent the  
12 California Air Resources Board.

13          We're also joined by Saul Gomez from the  
14 California Natural Resources Agency.

15          And Dan Bout from the California Governor's Office  
16 of Emergency Services is here.

17          And we are waiting for the representative from the  
18 South Coast.

19          So, Michael?

20          PRESIDENT PICKER: Thank you. I'm just going to  
21 ask for a housekeeping issue.

22          Could we bring the spots down and bring the house  
23 lights up?

24          You are all in deep, dark shadow to us. And the  
25 lights in our face are actually a little painful. That

1 helps with the spots, but then I think maybe the house -- I  
2 can't believe the spots actually make us look more  
3 attractive. That's not possible. Okay.

4 I'm going to talk about some of the things  
5 initially that aren't really on the agenda today, but which  
6 are occupying a lot of our time and attention, as well.

7 And first, I should point to the work that the --  
8 that the Department of Conservation Division of Oil, Gas and  
9 Geothermal Research [sic] is doing to actually guarantee the  
10 integrity of the gas field and the remaining wells that are  
11 there, and that -- that work will continue. They have  
12 established a set of new regulations for gas storage wells.  
13 And these wells will be subject to these new standards after  
14 they've been tested. I won't go into the details. I think  
15 they've been -- they're available elsewhere, but also on  
16 the -- on the Office of Emergency Services website on the  
17 Aliso Canyon page.

18 I also want to point out that we are in the midst  
19 of an investigation of the causes of the leak at the well.  
20 This is what we formally call a root cause analysis. And  
21 it's -- it's work that we are sharing and analysis that we  
22 will share with the Division of Oil, Gas and Geothermal  
23 Resources.

24 Out of that we may make determinations that could  
25 result in formal enforcement actions. But because we don't

1 have that -- that root analysis available to us, it's too  
2 early to say what the outcome will be there.

3           We are also tracking costs. We've been tracking  
4 costs since the very beginning in the identification of the  
5 leak. But we actually opened a specific kind of a formal  
6 accounting vehicle, that we call a memo account, in a  
7 proceeding that was headed up by Commissioner Randolph. So  
8 we can continue to carry on all these activities outside of  
9 the issues that we're going to discuss here today.

10           And I'll point out that we've already been very  
11 busy on some of the issues that we think are imbedded here  
12 in some of the solutions that we think are important, at  
13 least for this summer, although many of those same actions  
14 can be useful come winter. So we'll discuss them in light  
15 of our concerns about summer electric reliability. A and  
16 we'll return later with some modeling and predictions for  
17 fall and winter. And then revisit them, and other tools  
18 that we may develop between now and then.

19           I'll just point out that Commissioner Sandoval,  
20 who is not yet here, took efforts to free up money in our --  
21 in our Energy Savings and Assistance Program that could be  
22 targeted towards providing reduction of use of electricity  
23 this summer, and then this fall.

24           And then Commissioner Florio has helped to move  
25 some of the money in his Demand Response Programs that can

1 be accessible fairly quickly.

2           And then I'll also point out that our staff has  
3 already ordered Southern California Gas to put money into an  
4 expanded Flex Your Power Program to help us get support from  
5 community in reducing electricity on those key peak days  
6 this summer, and then to extend into gas issues this -- this  
7 winter and fall.

8           So we've been working.

9           Even though this is our formal report, and we will  
10 hear from you as panelists and from the community later  
11 today with ideas that may be included in the final plan,  
12 we -- we're treating the plan as a living document and we've  
13 already started work.

14           So with that, I will -- I will finish my comments  
15 and then turn it back to the Chair.

16           CHAIRMAN WEISENMILLER: Yeah. I just want to  
17 recognize, first of all, that we now have the representative  
18 of South Coast here, Mohsen.

19           And also, we have in the audience at this point  
20 Senator Pavley.

21           Senator?

22           And we also have representatives of both Senator  
23 Feinstein and Senator Boxer.

24           Please? Yes.

25           So again, certainly, thank you for your

1 participation here.

2           So with that, Cliff?

3           MR. RECTHSCHAFFEN: Thanks very much, Chair  
4 Weisenmiller.

5           Thanks everybody for joining us today, and folks  
6 listening in on the webcast.

7           It goes without saying that the leak at Aliso  
8 Canyon has had very far-reaching impacts, some very serious  
9 impacts on local residences, local residences and  
10 businesses, and people are still feeling those impacts.  
11 It's resulted in significant increases of methane, a potent  
12 greenhouse gas pollutant when we're fighting urgently to  
13 deal with climate change, and very serious impacts on our  
14 energy system in Southern California, which is what we're  
15 here to talk about today.

16           And from the very start, this incident has  
17 commanded the highest attention of Governor Brown and his  
18 administration. I think you see -- you see the multiple  
19 agencies here that have been involved in the effort, and  
20 they're -- that has been the case from the get-go. The  
21 Governor issued an emergency proclamation in early January,  
22 reaffirming that this was a situation that demanded our  
23 urgent attention and cooperation.

24           And it has been a comprehensive response. You've  
25 already heard from President Picker some of the responses

1 that we've been undertaking. The energy reliability piece  
2 is a very important part of that, but it is only one part of  
3 the response.

4           Some of the elements include the following.

5           Safety remains a paramount concern. We cannot  
6 have another leak at the facility; that is not negotiable.  
7 And as President Picker said, the -- their -- the facility  
8 is undergoing a comprehensive review of every well under the  
9 supervision of DOGGR, and all 114 wells will go through that  
10 review. And these are based on standards that have been  
11 carefully developed by the Department in consultation with  
12 our National Energy Labs.

13           DOGGR has also developed and issued emergency  
14 regulations that govern all natural gas storage facilities  
15 throughout the state already in effect, including Aliso. And  
16 those have important requirements, including the minimum and  
17 maximum gas pressure at which facilities can operate at,  
18 other early detection provisions, other safety measures. At  
19 the same time, on an urgent basis, DOGGR has been developing  
20 permanent regulations, new permanent regulations for natural  
21 gas storage facilities, and those may include new safety  
22 standards and more modern well construction standards.

23           As President Picker indicated, there's an ongoing  
24 investigation at the Public Utilities Commission. There are  
25 actually two investigations. Two different divisions of the

1 PUC are trying to investigate the causes of the accident.  
2 There are -- there is an ongoing enforcement action against  
3 SoCalGas. And the state is part of that, along with the  
4 city attorney and the county, and that may result in  
5 penalties, mitigation measures, independent of whatever  
6 enforcement action the PUC elects to take.

7           The Air Resources Board has developed and released  
8 a Draft Mitigation Plan to try to mitigate the climate  
9 impacts of the leak. As I said, those are quite  
10 significant. The Air Board has also developed new  
11 regulations for oil and gas facilities that include natural  
12 gas storage facilities. And those have been revamped and  
13 revised in light of the accident.

14           So, as I said, it's been a comprehensive response.  
15 This energy reliability exercise and action plan is part of  
16 the response. The Governor directed state agencies to come  
17 together and ensure that there were no impacts on natural --  
18 on gas and electricity service in light of Aliso. In  
19 response to that the agencies formed a team to study the --  
20 the situation, wrote to the Governor and said we will study  
21 the situation and develop an action plan and report back to  
22 you in early April.

23           So today we're here to listen to and discuss the  
24 results of that effort. The -- the plan you're going to  
25 hear about is based on a comprehensive analysis that was

1 done by our three state energy agencies in very close  
2 collaboration with the Los Angeles Department of Water and  
3 Power. And the analysis looks at how gas is used by  
4 Southern California Gas in great deal, on an hour-by-hour  
5 basis, to get an understanding of what happens throughout  
6 the year. And it utilizes the most comprehensive -- the  
7 most up-to-date state-of-the-art modeling in the -- in the  
8 field.

9           The product generated as a result of this analysis  
10 is twofold. One, there's an action plan that describes and  
11 summarize the risks for the summer, as well as a series of  
12 18 mitigation measures that can be taken to minimize the  
13 risk, reduce the risk. There's also a detailed technical  
14 assessment document that goes into more background about  
15 underlying the conclusions. Those are all available -- both  
16 available on the -- on the -- at the CEC's website.

17           As Chair Weisenmiller indicated, our focus here is  
18 the -- is the summer. We're continuing to evaluate  
19 potential risks for the winter. That will be subject to an  
20 additional workshop and public process. Beyond that, the  
21 Governor directed the agencies to evaluate. Once the cause  
22 of the investigation has been -- the cause of the leak has  
23 been determined and the investigative reports are concluded,  
24 the Governor directed the agencies to assess the long-term  
25 viability of all natural gas storage facilities in the

1 state, including Aliso Canyon. And that will be done six  
2 months after the conclusion of the investigation. There  
3 will be another public process under the supervision of the  
4 CEC to evaluate that.

5           You've heard from Chair Weisenmiller already the  
6 bottom line message here. Because of the critical role that  
7 Aliso Canyon plays in our energy system, the current  
8 situation in which it's operating at a reduced capacity  
9 poses significant risks for energy reliability this summer.  
10 We are doing everything possible and will continue to do  
11 everything possible to minimize and mitigate that risk, but  
12 we can't eliminate that risk.

13           It will take the unprecedented and continued  
14 cooperation, unprecedented and continued cooperation here of  
15 all of our agencies here, local and state energy agencies,  
16 local utilities to try to address the risk. And the public  
17 will need to play an important role. And you will be  
18 hearing a lot about that over the next several months, about  
19 steps the public can take to reduce energy use, conserve  
20 energy.

21           It's a very challenging situation. It's not  
22 unprecedented. Just a few years ago we were faced with the  
23 loss of the San Onofre Nuclear Power Plant, a major power  
24 plant in the heart of this region, unexpectedly. And our  
25 energy agencies worked very, very well together to meet that

1 challenge and avoid disruptions to electricity. And we  
2 bring the same urgency to this important task.

3           So with that, I'll stop. We really -- I want to  
4 emphasize that we are -- we've built in a lot of time for  
5 public comment and feedback. And we look forward to that  
6 for the rest of today's presentation.

7           CHAIRMAN WEISENMILLER: Thank you.

8           Let's move to the Staff Presentation.

9           MR. OGLESBY: Thank you, Chair Weisenmiller. My  
10 name -- and Panel Members. My name is Robb Oglesby. I'm  
11 the Executive Director of the California Energy Commission.  
12 And I am -- and it's my pleasure to provide the -- to  
13 introduce the panel and lead out the first panel of this  
14 workshop.

15           COMMISSIONER PETERMAN: Can you just pull your  
16 microphone closer please?

17           MR. OGLESBY: All right. We'll see if this is  
18 better.

19           COMMISSIONER PETERMAN: Yes. Thank you.

20           MR. OGLESBY: Joining me on the panel, to my left  
21 is Katie Elder. She works for Aspen Consulting and has been  
22 a valuable resource to all the members of this panel in  
23 doing the analysis you will hear about.

24           To her left is Mark Rothleder who is with CalISO,  
25 Independent Systems Operator.

1           To his left is Ed Randolph from the Public  
2 Utilities Commission.

3           And to his left is Mike Webster from LADWP.

4           Let me start with the presentation being  
5 projected. And go to the next slide please.

6           So as you heard in the introductory comments, the  
7 Division of Oil, Gas and Geothermal Resources has been  
8 overseeing the operations of the Aliso site with the eye  
9 towards making sure no other wells at Aliso Canyon would  
10 cause another leak. Safety has been the first concern. And  
11 no gas is currently being injected into the site. And, in  
12 fact, there will be no gas injected into the site until  
13 after all 114 wells have been inspected and have passed  
14 comprehensive tests or have been isolated or plugged. There  
15 are six tests in the battery of tests that are being  
16 administered. And DOGGR has a website where they're able to  
17 provide ongoing information about the progress being made  
18 through the inspections at the site.

19           There was particular concern about injecting  
20 additional gas because we want to ensure that -- that the  
21 pressure does not increase. And we have to ensure that  
22 integrity is maintained in the reservoir.

23           What we don't know is when the safety review will  
24 be completed, if or how many wells will be cleared to  
25 operate, and at the end of the day, the ultimate production

1 capacity of the wells.

2           The Division of Oil, Gas and Geothermal Resources  
3 issued emergency regulations, as Cliff referred to, and is  
4 pursuing the finalization of permanent regulations which not  
5 only will control the way gas is handled at the Aliso Canyon  
6 storage facility, but throughout the state.

7           Next slide please.

8           Now even before the leak was stopped there was a  
9 recognition that the system -- that both the power system  
10 and the gas system would have to be operated differently,  
11 without the reliance on -- on the Aliso storage facility.  
12 And in compliance with the Governor's proclamation,  
13 reliability studies were performed and are being performed  
14 by the Public Utilities Commission, the Energy Commission,  
15 the California Independent System Operator, and LADWP. They  
16 relied on support from Southern California Gas, ran a series  
17 of sophisticated models, and prepared the Technical  
18 Assessment Report and Draft Mitigation Action Plan, which  
19 was released just a couple days ago on April 5th. That  
20 analysis focused on the summer of 2016.

21           We still have challenges ahead that relate to the  
22 use and operation of the system for the winter. And as we  
23 mentioned, we'll do additional workshops and analysis with  
24 workshops in July or August of this year.

25           And finally, the long-term viability of natural

1 gas will be the subject of an additional report led by the  
2 Energy Commission which will be due in 2017.

3 Now let me turn it over to Ed Randolph.

4 MR. RANDOLPH: Thank you, Rob.

5 Can you hear me okay?

6 So as -- next slide please.

7 As a point of -- starting out with a little bit of  
8 background on where we stand today, and the 15 billion cubic  
9 feet, approximately, of gas that's in Aliso Canyon.

10 When the leak first started there was, as Rob has  
11 mentioned, a moratorium on new injections. And initially  
12 the Gas Company, SoCalGas, was drawing gas out of the field  
13 as rapidly as they could to help reduce the pressure on the  
14 field. And in late December, early January, as they started  
15 getting down to lower volumes of gas, we did an analysis on  
16 what the lowest level of -- of gas in the field is  
17 acceptable for reliability purposes within the L.A. Basin,  
18 to make sure that there is some gas in the field to provide  
19 reliability services in both the winter and the summer.

20 And that led to an order from the PUC on SoCalGas  
21 to stop withdrawing gas, except as needed for reliability  
22 purposes once they got to 15 billion cubic feet of -- of  
23 gas, of working gas in the field.

24 For a little bit of context, if the -- if the  
25 field was fully -- was full, it would be 87 billion cubic

1 feet. So 15 billion cubic feet is a pretty small portion of  
2 the total capacity of the field.

3           How we got to the calculation of the 15 billion  
4 cubic feet of gas in the field was to look at how much gas  
5 was needed to provide reliability services on a peak winter  
6 day, which that math is looking at the total pipeline  
7 capacity, the -- well, total demand on the peak day, total  
8 pipeline capacity, what the other storage fields in the  
9 region can provide. And Aliso still is needed to provide an  
10 additional .6, a little over .6 billion cubic feet on a  
11 given day.

12           In order to provide that .6 billion cubic feet on  
13 a given day, SoCalGas needs at least 5 billion cubic feet in  
14 the field. And that's due to the -- the pressure. The gas  
15 does not come out of the -- it's not pumped out of the  
16 field, it comes out under its own pressure. As the amount  
17 of gas in the field is lowered, the pressure decreases, you  
18 can pull less out. So we didn't want them to go below five  
19 at any given point, otherwise you couldn't withdraw the gas  
20 out.

21           So how did we get to the 15?

22           Well, we looked at historic patterns over the last  
23 few years of how much gas was pulled out over the course of  
24 the winter for reliability purposes, and that was  
25 approximately 5 billion cubic feet. And then we looked at

1 how much gas was historically pulled out over the summer,  
2 and that was approximately 5 billion cubic feet. So to make  
3 sure that there is enough gas in the field by the end of  
4 this summer to provide reliability services, we knew we  
5 needed at least that 15 billion cubic feet in the field at  
6 the beginning of the winter.

7           Fortunately, the winter was much warmer than --  
8 than normal. And so consequently there was no gas needed to  
9 be pulled out of the field in the wintertime. So there's a  
10 little bit more gas in the field going into summer than we  
11 would have originally anticipated. However, it should be  
12 noted that there's a number of uncertainties that operate  
13 around the field, even with a little bit more gas in there.

14           As I've said, as you draw down the gas the ability  
15 to withdraw gas, the pressure decreases the ability to  
16 withdraw, it goes down. The field is never operated at that  
17 lowest level, under the 5 billion cubic feet. So we  
18 actually don't know the exact withdrawal capability at that  
19 point.

20           And additionally, as wells as shut down or capped  
21 as they work on the inspection process, that will also  
22 change the withdrawal capacity. So there needs to be a  
23 little bit more -- there's a little bit more uncertainty  
24 around that.

25           Next slide please.

1           The next slide helps put Aliso Canyon in context  
2 from its geographic importance. The -- the key things on  
3 this slide are the blue oval line with the little dent in  
4 it. It represents the -- the Aliso Canyon service delivery  
5 area. So that would be the area that is most impacted by  
6 the loss of Aliso Canyon.

7           It's worth noting, for electrical purposes it  
8 actually goes further out than that. The electric system  
9 doesn't operate on the exact same geographic boundary there,  
10 so there could be impacts on the overall electrical system  
11 that go further out that Mark can address later on in his  
12 comments.

13           Within the slide the orange area is LADWP. The  
14 rest of the map is, for purposes of the obligation to  
15 provide reliable -- reliability services, that is controlled  
16 by the California Independent System Operator. The map shows  
17 a number of the major power plants within the -- within the  
18 basin that are impacted by this. As we'll discuss later on,  
19 the power plants, you know, the gas to the power plants is  
20 obviously critical. The closer the power plant is to the  
21 field the more reliant it may be on the field on certain  
22 peak days or certain high demand, electric demand days,  
23 depending upon how they're dispatched.

24           Yeah, I think that's it that I have on that slide.  
25 I'll hand it over to Mark -- or to Katie. Sorry.

1 MS. ELDER: Thanks, Ed.

2 Have I got this close enough?

3 So as we started to look in December and January  
4 and begin to worry about -- as we were pulling the gas out  
5 of the field as quickly as possible the question was what do  
6 we need to get through winter? And that's what Ed talked  
7 about.

8 We also looked at the system, sort of the way that  
9 a lot of people did. You saw this pop up in the trade press  
10 and other -- other places, where people performed kind of a  
11 basis, simple supply-demand balance analysis, and that's  
12 what we're showing you here.

13 SoCalGas has pipeline capacity coming into its  
14 system. Recall that most gas that serves Californians comes  
15 from out of the state. So as we bring gas into the So Cal  
16 system they can accept about 3.8 billion cubic feet per day.

17 That compares to a winter kind of peak demand of about 5  
18 BCF per day. The difference between those numbers is made  
19 up with gas from storage. Even without Aliso Canyon they  
20 can still pull 1.7 BCF out of storage. And so you add the  
21 1.7 to the 3.8, you subtract that from -- from peak demand,  
22 a 5, and you see a reserve margin of approximately .5 BCF  
23 and you think we're fine.

24 What we're going to tell you is -- is that we've  
25 gone on to analyze farther than that because that's not

1 quite the wide analysis that we need to understand this  
2 problem. To understand the problem we face here without  
3 Aliso Canyon, we have to look at how Aliso actually gets  
4 used during the gas day. So it's not just a total, do we  
5 have enough supply over the whole day to meet demand over  
6 the whole day, we have to worry about what happens between  
7 hour zero and hour 24.

8           It also turns out to be the case that the 3.8 BCF  
9 that So Cal owns that it -- where it can receive capacity  
10 from upstream, interstate and pipelines, as well as the PG&E  
11 system and California production, that that pipeline  
12 capacity very rarely gets used. And in fact, on a great  
13 number of days it may not actually be available due to  
14 outages on the system, either for maintenance purposes or  
15 because a compressor went down and so now we can't move 3.8  
16 BCF through the pipe. Maybe we can only move 3.4 or 3.6 or  
17 3. It turns out to be that if you look at So Cal's  
18 operational data, which is posted publicly on its envoy  
19 electronic bulletin board, it turns out to be the case that  
20 their actual experience in terms of receipts of gas into  
21 their system is much more like 3 BCF, as opposed to the 3.8  
22 BCF.

23           It also turns out to be the case that these other  
24 storage fields, Honor Rancho, La Goleta, Playa del Rey,  
25 while in theory they have 1.7 BCF of pipeline capacity, of

1 withdrawal capacity available every day, various outages  
2 conspire, if you will, to mean that we really can only count  
3 on about 1 BCF each and every day. So our total supply that  
4 we thought maybe was 5.5 -- or our total capacity to  
5 delivery supply of 5.5 may be something that's much more on  
6 the order of only 4 BCF per day.

7           Now even this slide talks about winter, and we're  
8 here today to talk about summer. And one of the reasons  
9 that this talks about winter is emblematic of the fact or  
10 illustrative of the fact that we started this analysis in  
11 the winter, and our first concern then was winter, if you  
12 want to replace it with a number that's more akin to summer  
13 peak demand that number is in Table 4 of the action plan.  
14 And that number would be 3.2 BCF per day. So I you assume  
15 no storage available used in the summer you get to a roughly  
16 similar kind of reserve margin number calculation.

17           We also discovered that while as a long-term self-  
18 described admitted gas geek, that I would have told you that  
19 we used Aliso Canyon in the winter. And we might use it in  
20 September or late August into early October where the  
21 SoCalGas system has higher demand, owing to higher air  
22 conditioning load and the use by -- of -- by electric  
23 generators of natural gas.

24           It turns out to be the case that, in fact,  
25 SoCalGas uses Aliso Canyon most days of the year. Staff

1 pulled out some numbers, again from the operational data,  
2 and you can see that over a three-year period SoCalGas, in  
3 fact, used Aliso Canyon almost 134 days during the winter  
4 season.

5           And in the gas business we usually -- we just talk  
6 about two seasons, and they refer to how we use storage. So  
7 the summer season is when we're injecting into storage. The  
8 winter season is when we're withdrawing from storage. Summer  
9 is April 1 through October 31. Winter is November 1 through  
10 March 31.

11           So it turns out that SoCalGas, in fact, used Aliso  
12 very -- a very great amount of the time during -- during  
13 those two seasons.

14           The working capacity in the field, by way of  
15 background, is 86 BCF. It can withdraw 1.8 BCF when  
16 everything is working. Their injection capability is about  
17 .4 BCF.

18           Now another aspect that you won't normally think  
19 about, about the system, is that the way that gas moves from  
20 those receipt points into the load center, the L.A.  
21 Metropolitan load center, is limited by the amount of  
22 pipeline capacity and the velocity that -- at which gas  
23 moves. Gas moves pretty slowly. So sometimes we'll talk  
24 about it moving at maybe 30 miles per hour. That's on a  
25 good day, on high pressure, large diameter interstate

1 pipeline. On a local transmission system that's operating  
2 at lower pressures it might move at 20 of 25 miles per hour.

3 That means that if we end up with a mismatch  
4 between supply and demand in a given hour and we don't have  
5 any other way to add gas into the system, we end up with  
6 line pressures dropping. We're going to talk more about  
7 that later.

8 So we used -- SoCalGas used Aliso Canyon to do two  
9 things. One is help manage large changes in demand hour to  
10 hour. The other way that they used it or a way that they  
11 constantly used it was to make up differences between gas  
12 scheduled into the system or gas -- actual gas flows. In  
13 other words, customers aren't -- aren't required -- we have  
14 this very flexible gas system and we used it to our best  
15 advantage to give people lots of flexibility about how much  
16 gas they actually schedule into the system versus what they  
17 use. And Aliso Canyon was used to make up those  
18 differences.

19 So as we started the technical assessment the team  
20 consists -- next slide. Sorry about that.

21 The technical assessment group consisted of the  
22 ISO, really led by the ISO. The PUC participated, the  
23 Energy Commission, LADWP, and SoCalGas. And what we did in  
24 the high -- in the more detailed hour-by-hour assessment  
25 that we performed we used something that's called a

1 hydraulic model. And this kind of hydraulic model is an  
2 industry-standard model. Everybody in the gas business  
3 uses.

4           The model that SoCalGas uses, PG&E uses, a number  
5 of large utilities use, it's called the Stoner Model. It's  
6 been around since the 1950s or '60s. And it allows  
7 one -- it uses the -- the differential equations for  
8 compressible fluids, and it allows you to look at how --  
9 what is going on at each valve, each compressor station,  
10 every metering station at every point along your system and  
11 figure out what the operating pressures are. This kind of  
12 model basically simulates the gas flows during the gas day  
13 so that you can see on a continuous basis over the course of  
14 the day whether or not you've enough gas in the pipe at  
15 every single moment to meet demand.

16           Now this model is also used as another example  
17 when we want to know if we can serve new load. So if  
18 somebody went to build, for example, a new power plant and  
19 they want to fuel it with natural gas, they would call up  
20 their gas utility and say can you serve me, and they would  
21 run this kind of model to determine if that was feasible.  
22 It would also be used if they -- if you were looking at a  
23 pipeline expansion of some sort, you'd use a similar kind of  
24 model to do this analysis.

25           Back when folks were looking at bringing LNG to

1 California and wanting to know if the SoCalGas system could  
2 accept a given amount of LNG on a given day, this model  
3 would have been used to do those calculations. So it's used  
4 for commercial purposes, as well -- it's as well used  
5 between the operators and the system planners to figure out  
6 if the system is really doing what they think it's going to  
7 do. And they constantly calibrate and update the model and  
8 go back and forth to make sure that they're seeing the model  
9 what's really going on in the system. It's very similar to  
10 -- there's similar kinds of modeling that gets done on the  
11 electric side.

12           Now the last point that I need to make refers to  
13 the fact that this kind of modeling is often done for third  
14 parties. The Gas Company does a modeling, or the gas  
15 utility in whatever case it is would do the modeling and  
16 provide the results to people. That's permissible under  
17 Public Utilities Code section 1822 which governs use of  
18 proprietary models so that if a power uses a proprietary  
19 model they're required to either provide it to people to  
20 allow them to use it or perform the modeling for that person  
21 and hand them the results.

22           And so what we've done here is very consistent  
23 with what's been done previously. SoCalGas has provided  
24 this in other proceedings before the Public Utilities  
25 Commission, including its -- its Receipt Point Expansion

1 Study. And so lots of people are familiar with the guts of  
2 what we've done here.

3 MR. ROTHLEDER: Thank you, Katie.

4 Next slide please.

5 My name is Mark Rothleder. I'm Vice President at  
6 the California Independent System Operator. What I'm going  
7 to describe to you is kind of the results of the analysis  
8 and the assessment. But before I do so I want to make sure  
9 we're oriented about where the electric system plays in  
10 terms of use of the gas system.

11 The electric system is operated by what's called  
12 balancing areas. LADWP and California ISO are the two large  
13 balancing areas in California, L.A. covering the Los  
14 Angeles -- City of Los Angeles, the California ISO covering  
15 about 70 to 80 percent of the balance of California.

16 The responsibility of a -- of a balancing area is,  
17 by name, to balance system demand with supply, electric  
18 supply. That's the primary responsibility. There's other  
19 responsibilities that are required as part of reliability  
20 criteria. We must maintain sufficient operating reserves.  
21 Operating reserves are intended to be extra capacity,  
22 generation capacity that we can turn online quickly in case  
23 we lose a large resource. Usually we are meeting criteria  
24 that says if you use the single largest resource in your  
25 system, are you able to ramp up other resources sufficiently

1 within ten minutes or so to meet reliability criteria?

2           The third responsibility of a balancing area is  
3 also transmission reliability. And you have to remember  
4 that these balancing areas are actually interconnected.  
5 There's about 38 balancing areas across the west, and  
6 they're all interconnected. So if any one balancing area  
7 has a problem it can cascade to other balancing areas. So  
8 there's a responsibility to ensure that there's not a  
9 cascading effect that can cause larger outages throughout  
10 the west.

11           In order to do that we have to maintain  
12 transmission reliability, and that means there's wires  
13 coming into the load centers. Obviously the L.A. Basin is a  
14 large load center. Orange County is a large load center.  
15 San Diego is a large load center. And what balances the  
16 flows of the electrons on those lines is effectively  
17 generation in those areas that kind of push back against  
18 that flow.

19           So if you have an outage of one of those  
20 transmission lines the natural thing is that the flow will  
21 transfer to parallel transmission lines. And if they  
22 overload we have a responsibility to having resources in the  
23 area that will start to ramp up to ensure that they are not  
24 overloaded to the point where they basically have to be  
25 turned off or you have to open up those lines. Because if

1 you have to start opening up sequential lines to maintain  
2 the flow and not damage the lines, that's when you can start  
3 getting into cascading effects, so that's why you need  
4 generation. And in this case you have gas-fired generation  
5 in the local area that is intended to ramp up and designed  
6 by integrated planning to be there to ramp up to maintain  
7 reliability.

8           So that -- that kind of sets the stage of the  
9 balancing area and the electric responsibility. And it kind  
10 of illustrates the fact that the use of gas-fired resources  
11 at this point is very important, especially during the  
12 summer when the electrical is high when the temperatures are  
13 high. This is -- this is the peak season of the electric  
14 system.

15           If we have high loads we obviously have to run a  
16 certain amount of generation in the area of have it  
17 available for reliable operation of the grid. Another  
18 component into that is also renewable resources, variable  
19 resources. Now we -- we are relying more on variable  
20 resources to reduce our reliance and effects on greenhouse  
21 gases. But there's times where, obviously, as the sun goes  
22 down the production of the large amount of solar starts to  
23 reduce, we have to have something backfill still to meet the  
24 demand, the electric demand at that time. So there's two  
25 things going on. There's meeting the high demands in the

1 summer, but also balancing the system as a result of other  
2 variabilities, load and supply variabilities.

3           So the reliance on the gas to feed these gas-fired  
4 resources is what we tried to analyze in this assessment,  
5 starting about three months ago. Because this -- the gas  
6 side of the analysis is -- is very intensive, these models  
7 are very intensive models, they take a long time to run,  
8 they take a long time to set up, we focused our efforts to  
9 focus on four typical days. The days were: September 16th,  
10 2014 when there was a LADWP peak load; July 30th, 2015, and  
11 we chose this day because it was an illustration of when we  
12 had a large or high ramping to meet the changing demand  
13 during the day; September 9, 2015 was a typical day, it was  
14 a high peak day for LADWP in 2015, but it also was a large  
15 difference between what was scheduled expected to be needed  
16 a day ahead and what was actually used in the real-time time  
17 frame.

18           And I think it's an important point to also  
19 indicate here, there's a short-term planning going on. So  
20 everybody's getting their resources set up, their committing  
21 resources. Sometimes these resources take 12, 24 hours to  
22 start. So a day ahead, one day before the operating day on  
23 the electric system we're setting up based on our forecasted  
24 plan, the forecasted load, the demand. And with all  
25 forecasts, you can miss the forecast. And it's -- and best

1 efforts, you still have an approximate error of about three,  
2 and potentially at peak roughly five percent error rate of  
3 forecast that can occur.

4           So while the electric system is doing its  
5 planning, similarly the gas system at that same time is also  
6 planning how many molecules to put in the pipeline. And so  
7 there's this kind of parallel planning effort for planning  
8 for the next day.

9           I point this out because September 9th was a day  
10 in which the -- the plan was expected to have a certain  
11 amount of electric demand and we ended up having higher  
12 electric demand, demanding more gas during the day than was  
13 planned the day before.

14           And then lastly, we have a December 15th, 2015,  
15 which was adventurous because it was a winter -- a high  
16 winter takeout day on the gas system.

17           We focused our efforts around these. We -- we  
18 asked the Gas Company to perform their analysis. They did  
19 so with the expectation that effectively all other  
20 equipment, pipeline capacity, was available. And also their  
21 other non-Aliso Canyon storage facilities were available,  
22 Honor Rancho, La Goleta. Playa del Rey was actually held  
23 off for, basically, gas reserves. So it was held back. But  
24 the Honor Rancho and La Goleta were used to, basically, in  
25 the simulations, provide gas in that simulation.

1           We assumed for this analysis that Aliso Canyon was  
2 not available. And you obviously question, well, what do  
3 you do with that 15 billion cubic feet that's there? And  
4 obviously that is one of the strong mitigation measures of  
5 how we use that gas. But we wanted to assess if for -- as  
6 explained, there's uncertainties around on any given day  
7 that gas is going to be available, how much gas we could  
8 withdraw. We wanted to at least get the corner assessment,  
9 what if that gas -- what if the field was not available on  
10 the given day that we needed it? So it was assumed in the  
11 analysis, Aliso was not available.

12           We also assumed that we had to -- so these  
13 analyses, the gas analyses are running -- the key metric  
14 that they're trying to assess is can they maintain the gas  
15 pressures in the system that are required within the minimum  
16 and maximum operating levels. If you have too much gas in  
17 the system you can get over pressurized, that's a safety  
18 issue. If you have too little gas you basically could  
19 collapse the gas system, and then you'd have no gas service.  
20 The Gas Company's primary objective is to maintain gas  
21 reliability to their core gas companies. Okay.

22           The electric generators are what are considered  
23 non-core customers. And if the Gas Company as -- in an  
24 operational time frame, if the Gas Company gets into a  
25 situation where they're not able to maintain these

1 pressures, they will basically call what's called a flow  
2 order or an operational flow order to try to mitigate it.  
3 But if they can't mitigate it through those -- those  
4 mechanisms, they will curtail gas. Okay. And I they use  
5 the term gas curtailment, and I'll use that throughout kind  
6 of the rest of this discussion, gas curtailment does not  
7 mean electric lights go out. What it does mean, though, is  
8 if there's a gas curtailment, the first customers that are  
9 curtailed in that -- in that process, as a result of  
10 regulatory structure, is the electric generators.

11           Now the question is: If you start backing down  
12 the electric generators because the gas is curtailed to  
13 those generators, we have to then assess, how much can we  
14 back those generators down and get additional electric  
15 supply from other sources?

16           And this is where you start getting into the real-  
17 time. That -- those options on the electric side, if we run  
18 out of options to be able to move electric supply outside of  
19 those gas-fired resources, we then get to the point where we  
20 could be impacting reliability to those other 38 balancing  
21 authorities in the west. And then we have a responsibility  
22 to maintain electric reliability. That means preventing  
23 cascading outages from occurring.

24           It's at that point, if we've used all our tools at  
25 that point, and this is the last thing we want to do, you do

1 not want to interrupt customers, but if we have to, to  
2 maintain electric reliability for the rest of the  
3 interconnection and the other 38 balancing areas, we will  
4 have to take measures, including reducing electric demand on  
5 the system to maintain electric reliability.

6           So what our analysis did was assessed, first off,  
7 from these four days, the gas system analysis, the first  
8 thing we did was assess can the gas system maintain gas  
9 pressures within the required thresholds? Two of the days,  
10 the first two, September 16th, 2014 and July 30th, 2015,  
11 there was no problems. There was no problems in the  
12 simulations. They were able to maintain gas pressures  
13 throughout the day in the simulation. One of the reasons  
14 they were able to do that is because there was a good match  
15 between the scheduled gas, the molecules that were scheduled  
16 a day ahead coming into the pipeline, there was a good match  
17 between those -- that, as well as the actual gas demand.

18           September 9th, 2015 and December 15, 2015,  
19 however, indicated through the simulations that that would  
20 be a problem. They would not be able to maintain their  
21 operating gas pressures in the system in the simulation.  
22 Now these simulations are perfect knowledge. You know in  
23 advance that you have -- what the whole day is going to look  
24 like. In an operational time frame you don't know what's  
25 coming down in the future hours. So if they start to see

1 their operational gas pressures deplete early in the morning  
2 and they still know they have a large load ahead, they know  
3 that they have to take actions. And it's those actions that  
4 start to kick off the process of they will potentially start  
5 calling gas curtailments so that they can maintain gas  
6 pressures. Those gas curtailments then spill over to the  
7 electric system, as I described earlier.

8           So those two last cases had a gas mismatch between  
9 what was scheduled and what the actual gas demand of -- in  
10 the -- in the September 9th case, about 240 million cubic  
11 feet differential between the actual gas demand of the day  
12 and the -- what was scheduled. December 15th was larger.  
13 It was about 750 difference.

14           From that we basically extrapolated, how often  
15 would we potentially be in a condition where we would have  
16 this mismatch? And to provide some of that operational  
17 margin, we chose to say the threshold of pain is about 150  
18 million cubic feet per day differential between the  
19 scheduled gas and the actual gas demand. If you have a  
20 larger differential than that, that is a risk factor. And  
21 so the Gas Company assessed how often they have been in that  
22 position, they -- that comes out to about 6.4 percent of the  
23 days. You start overlaying that with other types of events.  
24 And even though the analysis, the simulation analysis was  
25 done was done with everything else in service, the reality

1 is the gas system has to take outages, as well.

2           Now the gas system peak time is the winter. We  
3 know that. Their off-peak time and when they are available  
4 to take their maintenance outages is more in the summer. So  
5 you have this overlay where they're taking their maintenance  
6 outages on other storage facilities, gas pipelines that can  
7 take additional capacity out of service in the summer, which  
8 is the same time the electric system is putting the most  
9 demand on the -- on the gas system.

10           So the bottom line is if there are other outages,  
11 planned or unplanned outages to either the storage or  
12 pipeline facilities, that can further stress the system out  
13 and cause the magnitude of these gas curtailments when they  
14 are needed to occur to be greater than just what would be  
15 necessary if you just had a flat mismatch between gas supply  
16 and demand.

17           Sorry. That was a long discussion on one slide,  
18 but I wanted to make sure that was clear.

19           So this is effectively -- what we found in summary  
20 out of these results was that the susceptibility, the risk  
21 of gas curtailments are -- next slide -- sorry, this  
22 slide -- are caused by, really, three things. This is more  
23 in the summer condition.

24           One is the differential between scheduled gas and  
25 the actual gas demand. And this is also a function of

1 potential forecast errors, both electric forecast errors,  
2 and then also the gas forecast errors.

3           You can have other planned outages on the  
4 infrastructure, pipeline outages. You can have storage  
5 outages.

6           And just to illustrate this is not something that  
7 is infrequent, there is planned outage on Honor Rancho  
8 coming, starting April 18th and going on for a month. So  
9 Honor Rancho is good for about 1,000 million cubic feet per  
10 day. It will take that capability in half, so we lose about  
11 500 million cubic feet of capacity, of capability in that  
12 case. Now they're taking that outage, I think, because they  
13 want to get that outage done early so we don't get into the  
14 middle of the summer and have to take that later in the  
15 summer. But nonetheless, there could be other outages on  
16 the -- on the system that can occur later in the summer.

17           The third component is if the -- if the gas system  
18 is already stressed, in a stressed condition with  
19 maintaining gas pressures, a rapid ramp, a large rapid  
20 ramping of a gas-fired generator or group of gas-fired  
21 generators that can occur can basically cause the gas system  
22 to be further stressed. And if they're already calling gas  
23 curtailments, they may be limiting our ability to ramp  
24 generation up when we need to, to match supply and demand,  
25 again pointing back to our reliability function.

1 Next slide please.

2 So the assessment report focuses on the summer. I  
3 know we did one case in the winter, but we really focused on  
4 this summer. And it was really to inform the Action Plan.  
5 What are the actions that we can take to mitigate these  
6 risks?

7 Nonetheless, the assessment did identify and  
8 quantify from the assessment that there is 16 days in which  
9 there could be gas curtailment as a result of these  
10 combination of events. Of those 16 days, the gas  
11 curtailment quantity can be great enough in the volume that  
12 would have to be curtailed that 14 of the days would exhaust  
13 the electric systems' ability, both LADWP and the California  
14 ISO's ability in Southern California to respond and provide  
15 that curtailment, at which point we have to start taking  
16 other measures. And this is those 14 days that we're  
17 potentially at risk that we would have to take the  
18 extraordinary measures of having to interrupt electric-load  
19 customers to maintain electric reliability, while still  
20 complying with the gas curtailments.

21 The scenarios, as I described earlier, go into  
22 increasing order of impact, starting with the mismatch that  
23 can happen, again, about 6.4 percent of the time to if you  
24 have a mismatch overlaying with a potential outage to the  
25 storage field, if you have the differential overlaid with a

1 pipeline outage, and I'll give you an example of a pipeline  
2 outage.

3           Last year, June 30th, we're in the middle of  
4 summer and they had a pipeline outage. They had to do  
5 inspection on a pipeline. It took 500 million cubic feet of  
6 capacity out of the system. June 30th was a high-load  
7 electric-load day. Aliso Canyon was available. In this  
8 particular case we got called for gas curtailments because  
9 the electric demand ended up being higher than expected and  
10 it ended up causing the Gas Company to have to say that they  
11 had to curtail gas. We were able to manage that.

12           In the California ISO case we had to shift about  
13 15 megawatt of generation around to other places outside the  
14 Southern California system to compensate for the loss of  
15 that gas supply. That's about where the study indicates is  
16 about our limit of ability to start shifting gas around, and  
17 it's at which point if we have to do more, that's when we  
18 get into that gas curtailment.

19           So I just point out that gas curtailments are not  
20 necessarily unusual, and they do occur in the summer. And  
21 even with Aliso, they do occur and they impact the electric  
22 system.

23           If -- the worst case scenario is if you have this  
24 mismatch and you have potentially both outages, a planned or  
25 unplanned outage on the pipeline system at the same time you

1 have some outage on the storage system, a compressor goes  
2 out, something breaks and you lose that capacity. So the  
3 assessment basically looked at those -- those scenarios.  
4 And out of the 14 -- again, out of the 16, 14 of those  
5 scenarios indicated that there is a potential risk where we  
6 could get to the point where we would have to interrupt  
7 electric load.

8           Where we would have to interrupt that electric  
9 load is uncertain. It may be in the L.A. Area, it may be in  
10 the Orange County Area, if it's just a localized impact to  
11 generation, but it could -- it could be wider than that. It  
12 could be to the Southern California Area in other counties.  
13 And that's because the gas system, they may be calling  
14 curtailments, not just in the L.A. Basin resources but to  
15 other resources beyond just the L.A. Basin if they're having  
16 problems managing the -- the gas pressures.

17           The number of customers that can be impacted is  
18 not insignificant. The assessment does indicate that in the  
19 worst case scenario there could be millions of customers  
20 affected.

21           These outages are different from an unplanned  
22 event, a cascading event. We may, I say may, we may have  
23 some indication ahead of time that we could alert that there  
24 is this risk and there is potential need to conserve, and  
25 that we're at risk of having to do this interruption. These

1 interruptions will effectively be occurred, if they occur,  
2 with someone having to manually open a breaker which would  
3 cut off a supply to a block of load. And there are  
4 emergency plans in place for these types of events and how  
5 they occur and how they're managed, but they are rotating.  
6 So they're not -- maybe one block gets hit for some hours,  
7 and then it gets to another block until you're through the  
8 period that you need to do it. And that's -- that's how  
9 that process works.

10 But nonetheless, if we have to maintain the  
11 reliability we'd have to take these measures. And the  
12 utility companies, LADWP, Southern Cal Edison, and San Diego  
13 Gas and Electric and other local utilities may have to  
14 reduce their load by interrupting customers. Again, I  
15 emphasize, this is the last thing an electric utility wants  
16 to do. But we have to maintain our reliability  
17 responsibility to ensure that the rest of the grid is  
18 maintained and is secure from a reliability perspective.

19 And with that, I will turn it over to Ed to  
20 outline how we use these to kind of start developing the  
21 Action Plan of how we mitigate to reduce the risk of having  
22 to take these extraordinary measures.

23 MR. RANDOLPH: Thank you, Mark.

24 You know, as Mark has outlined there is, you know,  
25 a real, and if not managed, severe risk of both gas and then

1 electric curtailment this summer. You know, but then going  
2 through this, looking at mitigation measures, there's a  
3 number of mitigation measures that we feel can greatly  
4 reduce that risk. You know, it's always worth qualifying  
5 this, it does not completely eliminate the risk but goes a  
6 long ways to reduce this. I'll work through this list now.

7           A few things to say before we walk through the  
8 measures.

9           One is this is a draft plan at this point, so this  
10 list of 18 measures is by no means everything we can  
11 possibly do. We're still listening for input. And there  
12 will likely be more things that come up, other folks that  
13 have either technologies or ideas that are worth pursuing.  
14 Our focus, however, has been on action items that can make a  
15 measurable difference this summer or next winter. I have  
16 had folks come to me for proposals that may be worth  
17 pursuing in other programs, but they don't make an  
18 appreciable difference until 2018 or '19, for various  
19 reasons.

20           The other thing it's worth noting as we go through  
21 this is a number of these items are already underway. As  
22 these lists were developed and the mitigation measures  
23 were -- were agreed upon, the agencies also began the  
24 process right away of what procedural steps would we need to  
25 do to make sure they're in place by this summer. And you

1 know, because sometimes the procedural steps take multiple  
2 months, we needed to start the process to review those, to  
3 have public comment, and then to approve measures now. So a  
4 number of this stuff is already underway at the various  
5 agencies for approval.

6 But then working down through the list, we had  
7 indicated so far 18 action items we could follow. They're  
8 appropriately grouped up in five categories. So instead of  
9 going through all 18 action items, I'm going to focus  
10 broadly on the categories, with some detail in there.

11 And the first category is the prudent use of the  
12 gas in Aliso Canyon. As Mark has discussed, and as the  
13 analysis has shown, you know, if gas can be withdrawn from  
14 Aliso Canyon and is available at -- at pressures we  
15 anticipate there, the risk of curtailment is dramatically  
16 reduced. So I think the most important thing going into the  
17 summer is to make sure we do everything we can to keep as  
18 much gas in the field and only withdraw it on days it's  
19 needed to reduce -- it's needed to eliminate or reduce the  
20 risk of electric curtailment.

21 What we're going to do on that end is the two  
22 balancing authorities, LADWP and California ISO, along with  
23 the Gas Company and CPUC, are going to start getting  
24 together to -- to develop the guidelines or the rules on  
25 when gas should be withdrawn and when it shouldn't be

1 withdrawn to maintain that level. We don't want to have  
2 that dispute on the day of an event. We'd rather have that  
3 set up ahead of time.

4           The next set of changes are kind of broadly  
5 categorized as the tariff changes. These are rule changes,  
6 either at the CPUC, at the ISO, or within the -- SoCalGas's  
7 own operational rule changes. You know, and these are all  
8 aimed at this category of rules, are aimed at reducing the  
9 likelihood of that mismatch between the demand on the system  
10 and the gas that's being brought in the system, that Mark  
11 indicated is one of the great risk in there.

12           A number of actions can -- you know, could be  
13 taken. One that is being considered in a PUC proceeding  
14 right now is to the change the balancing rules. Currently,  
15 for the SoCalGas system, the non-core customers, the  
16 electric generators, the oil refineries, and some the  
17 industrial customers, they aren't required to balance on a  
18 daily basis, meaning they aren't required to bring in the  
19 same amount of gas that they're using on that day, and  
20 instead they are required to balance that over a 30-day  
21 period over the course of a month. If they're required to  
22 balance it over the course of a day instead of over a month,  
23 that potentially will greatly reduce the risk of that  
24 mismatch between supply and demand.

25           You know, an either/or is changes in what are

1 called the operational flow orders. These are orders that  
2 are issued on -- on specific days when there are risk of --  
3 of gas system operational problems to again put an  
4 obligation on the non-core customers to bring more gas in  
5 there.

6           There's some other items in there, but they all go  
7 into that same category of making sure the rules are in  
8 place to reduce those -- those risks and allow the non-core  
9 customers to better manage their gas on the system.

10           The next set of mitigation measures, there's the  
11 operational coordination. You know, one, you know, one key  
12 issue that's become apparent and makes it difficult on the  
13 scheduling issue is that the time of day in which an  
14 electric generator needs to purchase their gas is at 8:00 in  
15 the morning, and that's based on the national market, where  
16 the time of day in which that electric generator becomes  
17 aware of what its obligation in the day ahead on the  
18 electric system happens at one o'clock in the afternoon. So  
19 there's a mismatch in the timing there between when they  
20 know what -- their need for gas versus what they're going to  
21 have to buy.

22           So you -- I don't think you can change either one  
23 of those -- those market timings in a quick period of time,  
24 especially since they're based on national markets. But  
25 there are things that the ISO can do to -- to provide more

1 forecasting information, more information to the generators  
2 ahead of time so they have a better sense before the markets  
3 close on what their obligations are.

4           Additionally, and it's on this list here, but I  
5 think the ISO and the electric generators and the electric  
6 utilities and the Gas Company have done a good job on  
7 rectifying this issue since a curtailment event last year,  
8 which is to better coordinate which gas plants would get  
9 curtailed on a given day if you need curtailment. So the  
10 curtailment to the -- from the gas system side matches what  
11 the electric system side need better.

12           And then, you know, a very important, very tough  
13 one is to also look at plan maintenance that's on the gas  
14 system for this summer and make some determinations on if  
15 some of that maintenance can be delayed. There's -- there's  
16 a plus and a minus to this, as with a lot of these things.  
17 Obviously, planned maintenance, a lot of it does have safety  
18 implications. If you delay a major maintenance project this  
19 summer, that actually -- you know -- you know, you're also  
20 increasing the risk of some other failure in the system  
21 sometime down the road. So that needs to be carefully  
22 coordinated and make sure that the system can sustain that  
23 delay and that maintenance. But there are likely some  
24 projects that were scheduled for this summer that can be  
25 delayed.

1           After that is LADWP operational flexibility. And  
2 rather than me talk about that, we should probably let LADWP  
3 talk about that.

4           MR. WEBSTER: Yeah. Mike Webster.

5           And operational flexibility is key. And we agree  
6 with the CalISO's very accurate description on how balancing  
7 authorities work, how utilities work, and their description  
8 of the risks, but I'm not going to repeat that here but --  
9 here, but that's a balancing authority. We're all in the  
10 same boat.

11           Operational flexibility is really critical, and  
12 there's a few key items here.

13           One is what can LADWP do to reduce the need to  
14 burn natural gas?

15           Well, one is don't buy the natural gas in the  
16 first place, and don't commit to it on a forward basis. So  
17 typically we'd be buying on a forward basis to pull gas into  
18 the system. We're just not going to do that because we want  
19 to maintain, as you'll see in bullet two, is that  
20 operational flexibility of our system. We want to dispatch  
21 our system in such a way that if there were a curtailment  
22 that might happen, that we can respond extremely quickly.

23           So how can we use our hydro differently? How can  
24 we use our other resources differently, our transmission,  
25 our coal facilities, our purchases?

1           And so we're going to operate differently this  
2 summer than what we would traditionally do, is look at  
3 flexibility at all times and make sure that we can respond  
4 to the greatest extent possible.

5           And the last area for operational flexibility is  
6 we don't want to make forward commitments to other entities  
7 in the Western United States. Because if we make those  
8 commitments today it puts more burden on our gas generation.  
9 So we're going to hold off making those commitments so that  
10 we can make sure that our native load customers are more  
11 secure and we can manage through those risks.

12           So those are three areas that are important from  
13 an operational side.

14           But specific to the City of Los Angeles, it's  
15 really important for us to work effectively with our  
16 customers and engage our customers, because the best  
17 electron is the electron that's never generated at all. So I  
18 want to highlight some of our programs.

19           So we have a Demand Response Program. And our  
20 objective is to increase that program 15 percent over what  
21 we had already planned just a month ago. So what we're  
22 trying to do is do more demand response by this summer and  
23 get at least 60 megawatts on our system by working  
24 aggressively with our customers and providing more  
25 incentives to get them to participate.

1           We also have an Energy Storage Program that's in  
2 the early stages of development. And we're trying to get  
3 five to ten megawatts by the peak summer months. So we're  
4 trying to accelerate that through aggressive purchasing  
5 processes, aggressive procurement processes, and really  
6 accelerating the engineering.

7           Now Energy Efficiently is really the gem of our  
8 programs because we have the most aggressive energy  
9 efficiency goal in the nature of 15 percent, and this is not  
10 theoretical, not at all. We are already over 30 percent  
11 implementation from when we set that goal. We're going to  
12 spend \$178 million just next year to get more energy  
13 efficiency. And there's a lot of programs I could talk  
14 about that we already have in place. But we just approved  
15 new programs that we are aggressively ramping, and these are  
16 new things for our customers. And I'll just list a couple  
17 of those out.

18           We have a customer -- a Commercial Direct Install  
19 Program where we can come in and install lighting and  
20 retrofits with commercial customers. This one is just  
21 ramping up and getting started moving forward.

22           We have a commercial HVACs Program that we're  
23 implementing, again, new programs.

24           We have a Food Service Program, this is in  
25 collaboration with the SoCalGas Company, because some of our

1 programs are really to enter into customer sites and save  
2 gas, as well as electricity at the same time. So we're  
3 implementing an MOU with them. And we're working closely  
4 with schools to implement energy efficiency.

5           And we also have residential programs that are  
6 ramping up and are new programs. A residential lighting  
7 efficiency, well, you may think florescent lighting, but  
8 we're actually starting the LED Lighting Program to try to  
9 get beyond florescents into the new technologies.

10           And we have an Air Conditioner Tune-Up Program  
11 that's just starting where we can go and save a lot of  
12 electrical load by tuning up, directly working with our  
13 customers energy efficiency programs.

14           We also have ramped up our solar programs here in  
15 Los Angeles, is that we completely overhauled our process,  
16 turned it upside down. So now we're processing 200  
17 applications a week. We're going to have 180 megawatts  
18 locally. We have 180 megawatts locally, and we're going to  
19 be increasing that. By the end of this year our Utility-  
20 Scale Solar Program will increase 560 megawatts. So we have  
21 a lot of solar that's coming in, and some of that is going  
22 to really be beneficial for this summer.

23           So I wanted to highlight some of those programs  
24 because the partnership with customers and engaging  
25 customers so that we don't use the electrons, this is one

1 significant method that we can reduce some of the risk this  
2 summer.

3           So I'll turn it back to you, Ed.

4           MR. RANDOLPH: Thank you, Michael.

5           Yeah, and so continuing on that list of the action  
6 items we can do reduce the natural gas and the electric  
7 usage and, you know, because the big summer demand for  
8 natural gas is the electric generators, and it seems  
9 counterintuitive to some folks in the public to say that we  
10 have a gas system problem and we want you to save  
11 electricity, but saving electricity this summer is probably  
12 going to do more -- there's more -- it will help the overall  
13 gas system more. There's more potential for savings on the  
14 electric side that will result in gas savings, than at least  
15 on the residential and small commercial side on the gas-  
16 servings sides. So we focus as much, if not more so, on the  
17 electric side this summer than we do on the gas side. As we  
18 develop plans or winter, that will shift a little bit.

19           But working through some of the issues that we're  
20 going to help reduce usage this summer, you know, first is  
21 we've already ordered -- the PUC has already ordered both  
22 Southern California Edison and Southern California Gas to  
23 reallocate low-income funding for low-income energy  
24 efficiency programs to focus specifically on the L.A. Region  
25 and the Orange -- the Northern Orange County Regions that

1 will be impacted by this outage to better develop there.

2           Now, of course, simply reallocating money there  
3 doesn't do a lot of good if we also don't have the programs  
4 in place to spend that on. So we are working right now  
5 through a proceeding on suggestions and ideas on ways we can  
6 more efficiently get that money, you know, to customers, to  
7 energy efficiency programs in the homes by looking at some  
8 rule changes that could both be short term and long term to  
9 allow for more energy efficiency programs to go into those  
10 low-income homes.

11           The second is looking at expanding our demand  
12 response programs. And it's worth noting here and with some  
13 others that, you know, similar to L.A., LADWP, there's  
14 already a very aggressive effort on demand response.  
15 There's already a very aggressive effort on energy  
16 efficiency. There's already a very aggressive effort when  
17 I, you know, I get down the list on the solar thermal. So  
18 there's a lot going on, even if we don't do anything. These  
19 all moving things, potentially marginal, potentially very  
20 big, but we -- they're all things we think are worth  
21 exploring.

22           On the demand response side we've asked Southern  
23 California Edison and other parties to make some -- you  
24 know, to file a plan on how to do even more demand response  
25 this summer than was already in the pipeline. It's -- since

1 that's been filed, comments are still going on. We haven't,  
2 as a regulatory body, replied to that. That list may  
3 change. I'm not going to get, you know, too in-depth in the  
4 list.

5           But on the high level, there's probably going to  
6 be an expansion of the AC -- the Air Conditioning Cycling  
7 Programs which have been successful over time, much more  
8 outreach on that, trying to get more customers to  
9 participate in that. An effort to start getting more start  
10 thermostats out in the households. That helps in the  
11 summertime with -- with air conditioning load. And it can  
12 help in the wintertime next winter with gas load. And there  
13 are some other items in there that are in play.

14           The next down the list is our mainstream energy  
15 efficiency programs. And on that, looking at what can make  
16 a huge difference this summer, because the programs are  
17 already moving along and we're already having conversations  
18 and done a number of program changes the last few years  
19 aimed at getting more energy efficiency out, we think the  
20 best focus there is going to be on looking at programs that  
21 if we didn't do anything else would have an impact next year  
22 or the year after, and trying to figure out how to  
23 accelerate those. And, you know, that's both from a  
24 regulatory side, but then on a specific project side.

25           We've asked the utilities to identify custom

1 projects, for example, that are in the pipelines that they  
2 are aware of that wouldn't have an online date or a finish  
3 date until this fall or next year. And we will start  
4 diligently working through those lists and find ways to get  
5 those on sooner. That can be anywhere from adding staff at  
6 both the agency at the utility to make sure that the  
7 processing that needs to happen with those happens quicker.  
8 It will likely involve working with local governments to  
9 make sure that if they need permitting, that the permitting  
10 is given a priority. And it will very likely involve  
11 greater coordination with Los Angeles Department of Power so  
12 that a lot of these programs that are within the L.A. Area  
13 are also working with SoCalGas so that coordination happens  
14 better and faster.

15           The next thing on the list is reprioritizing some  
16 money towards our Solar Thermal Program. So this is largely  
17 solar hot water heating. This is, you know, hot water  
18 heaters. It can be on industrial sites for their heating  
19 loads, and at swimming pools.

20           The program is in place now. What we're proposing  
21 doing is lifting some restrictions on pool heating. Right  
22 now on pool heating the rebate program can't cover more than  
23 50 percent of the install cost. We're proposing eliminating  
24 that cap, and so the rebates potentially could cover the  
25 entire installed costs. And then we're also proposing

1 increasing the -- the rebates for all other applications out  
2 there so that there's much more money available for the  
3 install cost.

4           On both of these proposals there will be a  
5 geographic and a time element to it. This would only apply  
6 to projects that are in the impacted area. And it would  
7 only apply to projects that can be installed and operational  
8 by the end of this year.

9           Finally, it's on the top of the list but I'm  
10 hitting it last, is a new -- you know, both an expanded and  
11 a new marketing campaign aimed at messaging the need for  
12 conservation. A centerpiece of past efforts to reduce  
13 electric load on high demand days is a program called Flex  
14 Alert which has been a very successful program, a  
15 combination of both paid media and earned media, to reduce  
16 load. We've seen in the last few years on the days that  
17 Flex Alerts are triggered, the news stations do aggressively  
18 talk about the event of that day and the need to reduce  
19 load. And we've seen upwards of 500 megawatts of load  
20 reduced on days a Flex Alert is triggered.

21           The Independent System Operator now actually owns  
22 the brand and controls that through an order of the  
23 Commission, So Cal -- or, yeah, SoCalGas will be funding  
24 that program, and we're working on the coordination effort  
25 of that right now.

1           Additionally, there needs to be a new marketing  
2 and outreach campaign that goes beyond Flex Alert, focused  
3 on gas that's, you know, a broader campaign, other issues  
4 that they can do. The utility is working with LADWP, SCPPA,  
5 and other local governments to develop that -- that program  
6 and that plan as we speak.

7           You know, with that, I think it's back to Rob.

8           MR. ROTHLEDER: So in closing, let me just  
9 highlight a few points to leave -- leave with you. And then  
10 we can answer any questions you may have.

11           The first point is that no gas is going into Aliso  
12 until it's determined to be safe and the site has integrity.

13           The second point being that Aliso historically has  
14 provided the flexibility and it's provided the reliability  
15 for the electrical and gas system. And it's -- has been a  
16 key component of the electric and gas system in the past.  
17 But where we are now is a system that is being operated like  
18 it hasn't been operated before. Without having the  
19 flexibility of the Aliso facility, the margin for error,  
20 whether it be a mismatch in the gas supply and demand mode  
21 or an outage in gas or electricity, the margin there is  
22 very, very thing.

23           Nevertheless, mitigation measures have been  
24 developed through this planning process, and they will help  
25 but not completely eliminate the risk, and that to help

1 achieve reduction in risk is going to require the  
2 participation of consumers who may be called upon during  
3 Flex Alerts to conserve energy and gas, electrical energy  
4 and gas. And that, indeed, the -- the Flex Alerts and other  
5 conservation measures may be necessary beyond the Southland  
6 Region.

7           And finally, we will get to the winter risks soon.  
8 That's our next step in analysis. We'll have a workshop in  
9 the summer months and we'll -- we'll be exploring strategies  
10 for the winter coming up.

11           So with that, I'll turn it over, back to the panel  
12 for -- back to the dais for questions.

13           CHAIRMAN WEISENMILLER: Okay. I'd like to thank  
14 the panel. I note it's now 2:30, so we have a half-hour for  
15 questions from the dais.

16           I think the one thing I wanted to point out, just,  
17 you know, so in this Action Plan we're saying things like  
18 let's increase energy efficiency, in the Action Plan. Now  
19 the actual determination of what that means is going on  
20 through a formal PUC proceeding which will have an  
21 evidentiary record, as opposed to this proceeding. Our  
22 Independent Energy Planning Reports are much more  
23 legislative in nature, you know, not an evidentiary hearing.  
24 The same with some of the things that CalISO is looking at  
25 doing, again, it will be an evidentiary proceeding,

1 ultimately at FERC.

2 But just to clarify how -- and I assume as you go  
3 through that, again, I think Ed did a good job of helping to  
4 translate this notion of more energy efficiency to what  
5 exactly does that mean in terms of programs, so again, with  
6 the broad concepts really fleshed out through the regulatory  
7 forums.

8 So with that --

9 MR. RECTHSCHAFFEN: Bob, just to clarify, and I  
10 also -- this is also a comparable process for DWP. But as I  
11 understood the presentation, there are some programs that  
12 have already been up and running. And monies can be changed  
13 very quickly, in fact already have been reprioritized, so  
14 action has already been taken. Others will take a longer  
15 time in a regulatory process.

16 I just want to ask the panel if they could confirm  
17 that or --

18 MR. WEBSTER: Well, from LADWP's perspective, the  
19 new programs I talked about were approved just a month ago.  
20 And the contracts are now being put in place so that we  
21 could ramp those up by this summer. And that's to the tune  
22 of about \$50 million. So these are new programs that are  
23 already ramping as we speak, which is going to be very  
24 effective for this summer, we believe.

25 MR. RANDOLPH: And, you know, on the PUC side, in

1 terms of what impacts Southern California Edison and  
2 Southern California Gas, it's a mix. As I've said, as each  
3 one of these -- as a mitigation measure comes up the very  
4 first question we ask is what do we need to do  
5 regulatorially and what's the path there? And we  
6 immediately work down it. So for some programs, yes, the  
7 money has already been reprioritized.

8 Commissioner Sandoval, in a proceeding on low  
9 income, she immediately issued and signed a Commissioner  
10 ruling which reprioritized money towards low income.

11 That same proceeding, actually, made some other  
12 decisions on changing some rules. That's ongoing.

13 You know, another example in a proceeding that  
14 Commission Peterman has, we've ordered the utility to -- So  
15 Cal -- SoCalGas to spend some additional money on the  
16 marketing and outreach. The actual amount of that actually  
17 has not been determined yet. That will be determined  
18 through a decision, because we need a decision to do that.

19 COMMISSIONER PETERMAN: It came out today.

20 MR. RANDOLPH: Yeah. The decision -- the proposed  
21 decision came out today, yeah.

22 CHAIRMAN WEISENMILLER: And I think, basically, I  
23 think Rob started out by pointing out, this is a living  
24 document. Certainly the no-regrets actions are what we're  
25 doing now, what we have been doing. You know, we know we

1 need the energy efficiency, so we're starting on that. But  
2 again, it's going to be a living document as we get more  
3 things.

4 I'd like to questions from other folks at the  
5 dais?

6 MS. EDWARDS: Sure.

7 CHAIRMAN WEISENMILLER: Go ahead.

8 MS. EDWARDS: Thank you, Bob.

9 This question is for Mr. Rothleder. Could you  
10 confirm for me or explain to me the criticality of having as  
11 much advanced notice of planned outages on SoCalGas's  
12 system?

13 MR. ROTHLEDER: Sure. The criticality is --  
14 sorry -- in order to respond or prepare and mitigate these  
15 events we can take measures if we know in advance that  
16 outages are occurring, thus putting the gas system in a  
17 potential higher risk or stressed condition. We can start  
18 resources. As I indicated, our options are much more  
19 limited as we get to real time.

20 So if we know in advance we can take other  
21 measures, get supply coming in from outside the system that  
22 we normally would not. We could start other resources, hold  
23 reserves in other parts of the system in advance if we knew  
24 that that was occurring. We may even delay some of our  
25 outages, because there is an interplay between outages that

1 are occurring on the gas system and the electric system.  
2 Because if we're taking electric system outages we may be in  
3 a more vulnerable position from electric reliability, thus  
4 reducing our ability to absorb gas curtailments. So we may  
5 actual schedule, if we can move our schedule of outages if  
6 we knew that the gas system was in a position of higher risk  
7 of gas curtailments.

8 MS. EDWARDS: Thank you, sir.

9 COMMISSIONER FLORIO: I think this is probably a  
10 question for Mark. The affected areas from electricity and  
11 gas standpoint, the point was made that they're not  
12 completely overlapping. What kind of ability do you have at  
13 the ISO to move electric generation from, you know, plants  
14 that may be having a gas shortage problem to plants  
15 elsewhere that still meet the local reliability need but --  
16 but don't have the same gas constraint?

17 MR. ROTHLEDER: So -- so we do have some ability  
18 to do that. We have what's called local capacity areas  
19 which are defined, kind of local reliability areas. The  
20 L.A. Basin is one of those areas. We have a certain amount  
21 of required resources to be online. The resources, at least  
22 in the ISO in the Orange County area, are critical to  
23 maintaining some of the line loadings in case of an outage,  
24 and also maintaining voltages.

25 So if we're -- if we're called upon to move those

1 resources and move generation from those resources, it  
2 becomes a little bit more difficult because I can't just  
3 replace that with another resource anywhere in the Southern  
4 California system. If the ask is, well, can you move gas  
5 off of a group of resources and just reduce the gas and  
6 leave it up to us to decide which ones are needed for  
7 reliability, that provides us the most amount of flexibility  
8 to make the electric reliability decisions.

9           And I think that's a part of the gas-electric  
10 coordination that's happening at the operator level. We  
11 already share information about our expected gas burn on the  
12 generation with the gas company. They come back and say,  
13 well, you look like you're okay, or there's something that  
14 looks like we may be in jeopardy. They give us some  
15 indication that, okay, you may have to start preparing for  
16 gas curtailments, we may start shifting things around in  
17 response to that.

18           We've got to get the generators, obviously, in the  
19 queue there. Because getting them informed, as well, is  
20 important because ultimately any gas curtailment that  
21 translates into an electric generation reduction, they have  
22 to act on that. So it's -- it's a dance that really happens  
23 between three parties, the operator, the system operator to  
24 the electric side, the Gas Company, and then ultimately the  
25 generator itself.

1           COMMISSIONER FLORIO: So it might not work to, you  
2 know, say, well, we're going to generate this in Northern  
3 California or in San Diego, but maybe, you know, if -- if  
4 there was a shortage at El Segundo, you might be able to  
5 generate at Huntington Beach --

6           MR. ROTHLEDER: That's right.

7           COMMISSIONER FLORIO: -- or something like that.

8           MR. ROTHLEDER: And -- and there are limitations.  
9 I mean, we -- we may shift generation to Northern California  
10 to offload the resources in Southern California. But we  
11 will get to a point where we get transmission constrained  
12 between Northern California and Southern California. So you  
13 get boxed in between these multiple constraints that are  
14 occurring on the electric system. But we will do everything  
15 we can. And we will leave ourselves as much flexibility to  
16 do that shifting in real time as part of these mitigation  
17 measures. We may be operating in different ways, and maybe  
18 ways that may cost more money, to mitigate those risks.

19           CHAIRMAN WEISENMILLER: Okay. I would just like  
20 to acknowledge that not only is Senator Pavley here, but  
21 also Councilman Englander is here. And also, we have Staff  
22 from Congressman Knight and from Mayor Garcetti's Office in  
23 the office -- in the audience.

24           Mohsen, do you have a question?

25           MR. NAZEMI: All right. Thank you. I have a

1 question, and maybe a comment, also, for Mike, relative to  
2 the LADWP Demand Response Program that you mentioned, you  
3 were trying to increase it up to 60 megawatts, which is a  
4 very good way of addressing this.

5           One of the concerns our agency has historically  
6 had with demand response is that if the ultimate result is  
7 that the entities that have signed these demand response  
8 agreements, they reduce their load and take that off -- off  
9 the grid, then that's great. But in some cases that we  
10 observed during the California energy crisis was that the  
11 demand response programs, they took their load off the grid,  
12 but then they'd turn on their backup generators that  
13 operated on diesel engines, and they created actually more  
14 pollution than the power plants would have produced if they  
15 had generated the power.

16           So our agency had a concern with that. And I hope  
17 that if you're proceeding with this, that that is not the  
18 ultimately result of the demand response.

19           But my second point is that LADWP actually came to  
20 our office last week and met with me, and they discussed  
21 what other alternatives are there. And back in the '80s,  
22 late '80s, our agency actually phased out the use of liquid  
23 fuel in power -- power generation because of the higher  
24 pollution, compared to natural gas, with the exception of  
25 curtailments. And subsequently, some of the power plants,

1 especially the privately operated ones, completely  
2 dismantled their liquid fuel.

3           But it was my understanding that LADWP provided  
4 four plans; three of them still have capability of burning  
5 liquid fuel. In fact, Harbor Units 1 and 2, and 10 through  
6 14, Haynes Units 9 and 10, and Valley Units 5 through 7  
7 still have that capability. And although our agency is not  
8 in favor of burning diesel fuel, and it's been very, very  
9 prominent with that position, I'm wondering why that was not  
10 analyzed in this report as an alternative to the gas  
11 curtailment if it results in power plants from LADWP not  
12 being able to receive the natural gas?

13           MR. WEBSTER: So on your first comment, we will  
14 take that back and take that seriously about backup  
15 generation, so thank you for that.

16           On the backup fuel, we're in the process of  
17 analyzing our capability to use that in emergency  
18 situations, which is why we had the conversation with your  
19 office. And as that further develops we'll see if that is a  
20 feasible solution for very, very short outages. And the  
21 reason that we have this backup capability, it's really  
22 designed into our system should there be a catastrophic  
23 failure of the electric grid due to a major earthquake or  
24 some other situation. So we need the ability to do what's  
25 called black start, and it's at those times where this would

1 really be helpful. We don't ever intend to use it, we hope  
2 we don't have to use it, but we at least need to explore  
3 that.

4 MR. NAZEMI: Thank you.

5 CHAIRMAN WEISENMILLER: Thank you.

6 Dan? Okay. Do you have one? No. Put it down.  
7 All right. Good. I'm trying to sort of waltz between the  
8 agencies.

9 Commissioner Peterman?

10 COMMISSIONER PETERMAN: Thank you.

11 It was mentioned that actual other gas storage  
12 supply is less than system design. I think you mentioned  
13 this, Ms. Elder. And so are there any steps we should be  
14 taking or can take to increase the other gas storage supply?

15 MS. ELDER: We asked -- we asked pretty early on  
16 SoCalGas if it was possible to increase capacity at any of  
17 their other storage fields.

18 The answer is that they would need to perform a  
19 fairly complicated analysis, at least in the -- as I recall,  
20 in the case of Honor Rancho they would actually need to go  
21 and do some additional reservoir studies to determine if the  
22 reservoir was capable of being expanded. And then in  
23 addition, if you -- if you -- if the results from the  
24 geology was that the reservoir could support it, then you  
25 need to build the additional injection withdrawal

1 capability. So that means drilling more wells, adding  
2 compressors, whatever liquids processing might be needed  
3 depending on what actually comes out of the field in terms  
4 of what other liquids are combined in the gas stream.

5 COMMISSIONER PETERMAN: Okay. But just -- it was  
6 my understanding from your slides that the fields have a  
7 greater system design than is actual experience, so not  
8 expanding the system design but just getting that delta  
9 between the 1.7 BCF per day and the 1 BCF per day as actual  
10 experience.

11 MS. ELDER: And that seems to us to be more of a  
12 maintenance issue and the -- the outages. By maintenance I  
13 mean outages planned, and unplanned outages. For example,  
14 the Honor Rancho work that's going to occur for the next  
15 month would be an example of what takes you from the 1.7  
16 down to the 1.

17 COMMISSIONER PETERMAN: Thank you.

18 CHAIRMAN WEISENMILLER: Commissioner Peterman, we  
19 may want to ask SoCalGas about that specific question.

20 I was going to ask Katie just to also indicate,  
21 she and I explored the question of how much they could  
22 basically use Northern California's storage systems. And  
23 again, why don't you just give the summary and the  
24 conclusion.

25 MS. ELDER: The bottom line is that it sounds like

1 a very attractive idea, given -- particularly given the  
2 private storage that exists in Northern California. The  
3 problem is getting the gas back into the SoCalGas system.  
4 And that pipeline, if you will, over -- over the Grapevine  
5 from Wheeler Ridge into the basin wouldn't be large enough  
6 to move that gas back in.

7 COMMISSIONER PETERMAN: Thank you.

8 CHAIRMAN WEISENMILLER: Okay.

9 Go ahead, Mark.

10 MR. ROTHLEDER: Another thing that has come to our  
11 attention, and someone in the audience will maybe speak to  
12 this, is that there appears to be some opportunity for  
13 moving some onsite small gas storage capability on. I think  
14 it's a matter of scale. I mean, is it large enough to make  
15 a difference for these large generating power plants? I  
16 think it's something to understand. And maybe someone from  
17 the audience will be able to speak to this later.

18 CHAIRMAN WEISENMILLER: Okay.

19 MR. RANDOLPH: I just --

20 CHAIRMAN WEISENMILLER: Sure.

21 MR. RANDOLPH: I wanted to add on to this. So  
22 these are a couple of infrastructure questions on what can  
23 we do infrastructure-wise. And while we looked at some of  
24 that, most of the infrastructure would take, you know, six  
25 months to three years between permitting and actual

1 construction. And so as we move to doing the -- the long-  
2 term viability study, these are the kind of questions that  
3 would be key into that study. But since they wouldn't make  
4 an impact for this summer, they fit better in looking at the  
5 long-term viability.

6 CHAIRMAN WEISENMILLER: Thank you.

7 Tom?

8 MR. DOUGHTY: Mr. Chairman, thank you.

9 I heard a theme from at least four of our five  
10 presenters that I think bears some accentuation, and that  
11 theme is around support and participation by consumers. I  
12 suspect that many in this room and many on the phone have  
13 heard these words, power officials ask that you use less  
14 energy today. Well, now you know who the power officials  
15 are. And this summer -- this summer with this circumstance  
16 that we're confronted, this unprecedented moment, those  
17 words are going to be spoken on television and radio and in  
18 print. This summer we're asking consumers to pay particular  
19 attention to that request.

20 So to those listening, to those here, an advanced  
21 thank you for your contribution to this -- this challenge.

22 Mr. Chairman, I have one more question real quick.

23 Katie, you mentioned extraction and injection  
24 capabilities at Aliso, 1.8 extract, 1.4 BCF inject.

25 Assuming one -- .4, sorry, okay, that even accentuates the

1 point I'm going to ask, assuming that injection is allowed  
2 down the road, there may be a possibility that fewer wells  
3 are available. Does that dramatically change the extraction  
4 and injection capabilities of the field?

5 MS. ELDER: In theory, absolutely. We don't --  
6 that's part of what we don't know yet, in other words, until  
7 the inspections are completed and we have some information  
8 back from SoCalGas about how many wells will actually be  
9 workable.

10 One of the things that came up in the -- I think  
11 in the DOGGR's investigation was the idea that So Cal, and I  
12 think other utilities, too, tend to inject through both the  
13 tubing and -- the well tubing and the well casing. They're  
14 not going to be allowed to do that anymore. They'll only be  
15 allowed to use the tubing. That all by itself would  
16 dramatically reduce the withdrawal capability, but we don't  
17 have numbers yet on how much. We understand that there may  
18 be some idea of potentially using larger tubing, and we  
19 don't know what the impact of that would be. So that is  
20 actually key in some respects for being able to do the  
21 winter analysis is to know, what will our new injection  
22 withdrawal capability be?

23 CHAIRMAN WEISENMILLER: Yeah. I would indicate,  
24 the Energy Information Agency told me they thought that  
25 might halve the amount of injection or withdrawal

1 capability.

2           Actually, let me just make sure we get one thing  
3 on the record from either Katie or Mark. We were talking  
4 about energy storage, and so we have a gas storage field.  
5 We're also going to hear conversations later about  
6 batteries.

7           Could you give just the conversion between a  
8 million cubic feet and megawatts so that people can keep  
9 that in mind?

10           And then I'll go to Commissioner Sandoval.

11           MR. ROTHLEDER: I prepared for this.

12           CHAIRMAN WEISENMILLER: Yes. They were warned.

13           PRESIDENT PICKER: I think we can also direct that  
14 to the --

15           CHAIRMAN WEISENMILLER: Energy.

16           PRESIDENT PICKER: -- storage energy.

17           CHAIRMAN WEISENMILLER: Yeah.

18           MR. ROTHLEDER: So roughly speaking, 1,000  
19 megawatts is about 100 million cubic feet for eight hours.  
20 So 1,000 megawatts of load -- 1 megawatt of load is  
21 approximately 700 households. So if you want to put that  
22 together you can start to see how that plays out.

23           So we're talking about here, gas curtailments on  
24 the order of 100 to 500 million cubic feet over an eight-  
25 hour period. And so it translates into 1,000 to 4,000-plus

1 megawatts of potential generation reduction to accommodate  
2 that.

3 I started my talk about having -- being prepared  
4 for the single largest contingency of a generator. That  
5 would be probably about 1,000 to 1,500 megawatts. We're  
6 talking about a gas curtailment that could take out upwards  
7 of five large generating plants, so it's a significant  
8 amount in scale.

9 That said, a lot of things can add up to make up  
10 that difference. So if we're talking about demand response,  
11 we're talking about batteries of 100 megawatts, and we can  
12 get some of those things in place, those will all help.

13 CHAIRMAN WEISENMILLER: Okay. Commissioner  
14 Sandoval?

15 COMMISSIONER SANDOVAL: Thank you. Thank you so  
16 much. I apologize, my plane was late, and I have a cold.

17 So I just wanted to also support. I think it's  
18 going to be very important, the response of consumers, in  
19 many ways, both in call for the demand response and -- so we  
20 really appreciate all the work with the Flex Alerts. I will  
21 pledge to also be available to do some Flex Alerts en  
22 Española, asking people to (speaking Spanish), so I've done  
23 before. And so we'll be asking people in multiple  
24 languages. So this is one of the things I think we need to  
25 bear in mind is the tremendous language and ethnic diversity

1 of Los Angeles. It's going to be important to communicate  
2 to all communities.

3           And then I also just wanted to underscore that  
4 another theme that we've been talking about is how we can  
5 not only do things through demand response, both by asking  
6 people to turn down, but also asking things to turn down.

7           So one of the examples that's been brought up is  
8 the Air Conditioning Cycling Program. So I wanted to also  
9 ask, like to the extent that some of our existing programs  
10 don't already have, as deemed measures or authorized  
11 measures, really internet of things, capable stuff. There's  
12 more and more stuff, whether it is lighting or other things  
13 that are capable of receiving signals.

14           So I wanted to know what we're doing in terms of  
15 our programs, both the CPUC and LADWP, to try to accelerate  
16 the ability to propose new measures?

17           With our Energy Savings Assistance Program, which  
18 is targeted at low-income Californians, I anticipate having  
19 a proposed decision published early next week that will  
20 propose acceleration of the program, plus the suspension of  
21 certain rules, the three-measure minimum rule, and also the  
22 ten-year go-back rule that will, again, enable us to help to  
23 install energy efficiency in low-income households to really  
24 structurally reduce demand.

25           And lastly, when we talk about also making sure

1 that we're thinking broadly about both existing measures and  
2 new measure that we also think not only about the techy  
3 things, like internet of roof stuff -- internet of things  
4 stuff, but also cool roofs, which are now actually becoming  
5 more techy. So you know, there's one way to do cool roofs.  
6 You can just paint a roof white and increase the  
7 reflectivity of the building and really dramatically  
8 decrease its absorption of energy from the sun, and thus the  
9 need for air conditioning. There's a lot of very  
10 interesting stuff that's going on with both cool roofs, and  
11 also cool pavements.

12           And I know that the City of Los Angeles has a new  
13 pavement replacement program. And so really thinking about  
14 how do we integrate this because part of what contributes to  
15 the urban heat island is the darker roofs, and also  
16 pavement, including asphalt.

17           So I think we really need to -- we have this  
18 opportunity to think about our built environment, but also  
19 think about what can we do in our programs to make it easier  
20 for people to propose these measures as energy efficiency  
21 saving measures that also contribute to DHD reduction.

22           Thank you.

23           CHAIRMAN WEISENMILLER: Okay. Thank you. I was  
24 going to say, it's probably a good opportunity for us to  
25 encourage competition between LADWP and Edison on who can

1 get the most additional megawatts of demand response and  
2 energy efficiency for this summer.

3 Marcie?

4 I should note, we're sort of at the five-minute  
5 point. Okay.

6 MS. EDWARDS: Thank you, Mr. Chair.

7 This is for Ms. Elder. As a self-proclaimed gas  
8 geek, you may have a broader view on this than I do. I've  
9 heard anecdotally that there are some alternative gas  
10 transportation systems available that we could look at. I  
11 haven't heard of that, but have you?

12 MS. ELDER: I have. At various points in my  
13 career I might have even been involved in ideas about  
14 bringing some of those to fruition. There aren't any quick  
15 easy ones.

16 The one that you might have heard most lately  
17 might be the rest of the old ARCO line that ran to Long  
18 Beach from the Four Corners. Questar bought part of that a  
19 number of years ago, converted part of it to gas service.  
20 The second -- the western leg of it, so to speak, was never  
21 converted to natural gas. We actually confirmed that this  
22 week.

23 So, you know, if somebody wanted to buy that and  
24 get it certificated to provide natural gas service, they'd  
25 still have to go through all the remediation work, not only

1 the certification process, but the remediation work in  
2 getting that line converted to actually move gas.

3 MS. EDWARDS: Thank you. Just as a follow-up  
4 question, I'm also curious, there are other parts of the  
5 country, other states, that are not anywhere as reliant on  
6 storage as we seem to be. Could you help me understand why  
7 that is?

8 MS. ELDER: Yeah, I could. Storage is -- natural  
9 gas storage is very often an accident, if you will, of  
10 geology. If you look at the entire Eastern Seaboard, there  
11 is virtually no underground gas storage along the Eastern  
12 Seaboard because the geology doesn't permit it.

13 That's -- if you're sitting in Massachusetts or  
14 New York, your closest storage -- or New York City, I mean,  
15 or Boston, your closest storage is Western Pennsylvania and  
16 Western Upstate New York. It's a long ways away.

17 If you look at Texas, Louisiana, Illinois, Indiana  
18 and Michigan, there's gobs of storage, just gobs of it.

19 As you come further less you get less and less.  
20 There are a couple fields in the Rockies. El Paso Natural  
21 Gas owns a relatively small one in eastern -- Southeastern  
22 New Mexico.

23 But -- and then until you get to the West Coast,  
24 there isn't anymore. Most of what's here in the West Coast  
25 is concentrated in California. There's a relatively small

1 storage field up around Portland, I think. If I remember  
2 correctly its name is Mist. There is a relatively small gas  
3 storage field somewhere between Evanston, Wyoming and Salt  
4 Lake City that Questar owns called Clay Basin, and there's  
5 just not a lot else in the west.

6 CHAIRMAN WEISENMILLER: Commissioner McAllister?

7 COMMISSIONER MCALLISTER: So --

8 CHAIRMAN WEISENMILLER: What's that? Okay.

9 Great.

10 COMMISSIONER MCALLISTER: So I'm the Lead at -- on  
11 Energy Efficiency at the Commission. And I definitely want  
12 to endorse all the efficiency stuff that's been said. And  
13 kudos to DWP and to the PUC for acting quickly on leveraging  
14 the existing programs, and certainly thinking about how  
15 to -- how to put them on steroids and put new programs in  
16 quickly.

17 You know, Commissioner Sandoval's cheerleading  
18 about some of the great new things that are going on  
19 definitely is appropriate. And, you know, there are --  
20 there are so many products out there that can improve  
21 people's lives and save a lot of energy. And really it's an  
22 opportunity to really encourage everyone to install LEDs and  
23 do all the wonderful things that, actually, they're not a  
24 sacrifice at all. In fact, they are better products than  
25 the incumbent product.

1           So -- so anyway, a big opportunity to think and be  
2 a little more flexible and put some resources on figuring  
3 out how to do things better going forward, independent of  
4 the Aliso issue, but obviously very much coordinated with  
5 it.

6           I have a question for Katie. It's your moment, I  
7 guess. The -- so one of the -- one of the strategies is  
8 more frequent balancing. And I'm wondering if you could  
9 be -- give a little more detail on what that entails, how  
10 much flex, what it actually gives us in terms of equivalent  
11 new gas, and how implementable it is, what that entails,  
12 with a little more specifics?

13           MS. ELDER: I'm trying to decide whether to tell  
14 you the good news first or the bad news. The bad news is  
15 that it's ugly. It's not something that anybody here is  
16 used to. We've had monthly balancing with a ten percent  
17 tolerance since the first balancing rules were adopted in  
18 about 1989 or 1990. And we were able to do that because we  
19 had lots of storage. So one of our problems here is that  
20 one of our key storage assets, and I sort of mean we in the  
21 sense that we're all in this together and we need  
22 everybody's help to get through this.

23           One of our key storage assets is now gone. And it  
24 was one of the ones that was used most frequently to provide  
25 balancing service. So now we have this problem that we

1 don't have that. Then we do the analysis and we look and we  
2 see that the days that we had problems on the system were  
3 the days that had large mismatches that we couldn't fix.  
4 And so our first thought kind of lends itself to, well, then  
5 we've got -- we've got to find a way to fix those  
6 mismatches, otherwise we're going to have more days that are  
7 going to -- going to be a problem.

8           Some of those, the -- the -- there are lots of  
9 other pipelines and utilities across the country that live  
10 with daily balancing. That's not to say that they're like  
11 us. Their systems are different.

12           What I've said to lots of people over the years  
13 when I talk about gas systems and balancing rules and what  
14 kind of flexibility power generators need is that systems  
15 that have more storage can provide people with more options.  
16 So again, it takes us back to this vicious circle. We just  
17 lost our biggest -- our biggest asset in Southern California  
18 for providing balancing service.

19           CHAIRMAN WEISENMILLER: Okay. At this point,  
20 Senator Pavley has been sitting here patiently. It's now  
21 3:01.

22           I'm sorry, Mohsen.

23           But -- so let's transition over to Elected  
24 Officials.

25           Please, Senator Pavley.

1 MR. ROTHLEDER: Chairman Weisenmiller, can I --  
2 can I just say one more thing?

3 CHAIRMAN WEISENMILLER: No.

4 MR. ROTHLEDER: Okay.

5 CHAIRMAN WEISENMILLER: Senator Pavley?

6 (Colloquy)

7 CHAIRMAN WEISENMILLER: Please, Senator Pavley.

8 SENATOR PAVLEY: Yes. Thank you. Thank you very  
9 much. And there might be one or two more of us joining in  
10 the --

11 CHAIRMAN WEISENMILLER: Sure.

12 SENATOR PAVLEY: -- in the next few minutes.

13 But I wanted to start out and thank you for  
14 holding the workshop in the 27th Senate District, instead of  
15 in Sacramento or some other place. My constituents and  
16 myself both appreciate that very much.

17 And hopefully, Chair Weisenmiller, you mentioned  
18 some other hearings or workshops --

19 CHAIRMAN WEISENMILLER: Uh-huh.

20 SENATOR PAVLEY: -- you may have in the future.  
21 I'm looking at the winter, and then also looking at natural  
22 gas in general --

23 CHAIRMAN WEISENMILLER: Right.

24 SENATOR PAVLEY: -- in 2017. We'd welcome your,  
25 again, selecting the 27th Senate District as it relates to

1 L.A. and Aliso Canyon, having you back here again.

2 And thank you for increasing our tax base, as  
3 well. We appreciate that. Hope you're staying overnight.

4 My comments are sort of generic at this time, will  
5 be more formalized in time for your April 22nd deadline.  
6 And that's your deadline; correct? And I will be submitting  
7 those in writing.

8 I have read, however, the 33-page Aliso Canyon  
9 Action Plan To Preserve Gas and Electric Reliability For The  
10 L.A. Basin. I attended your two-hour presentation. I've  
11 also reviewed the six-stage testing and inspection process  
12 produced by DOGGR which I think they've, frankly, done an  
13 outstanding job, and I want to say that -- when DOGGR does a  
14 good job I should say that -- and looking at the other 114  
15 wells at Aliso Canyon. But I want to give you a little  
16 sense of history, of where I'm coming from.

17 Of course, I'm speaking on behalf and many -- in  
18 behalf of the constituents who live in the area,  
19 particularly Porter Ranch and the surrounding communities of  
20 Chatsworth and others. But looking back historically,  
21 California has responded to crises in the past. And there  
22 are some models here.

23 In the 1970s we had an energy crisis which led to  
24 gas shortages and longer lines at the pumps. But California  
25 responded with public awareness campaigns. I remember those

1 odd-even days. And Governor Reagan decided to create the  
2 California Energy Commission to address energy reliability.  
3 And out of the good work of the Energy Commission, like I  
4 think of Commissioner Arthur Rosenfeld, we did a lot in the  
5 space of energy efficiency, building in appliance standards.  
6 And as Mr. Rosenthal [sic] said, conserving energy is  
7 cheaper and smarter than building new power plants.

8           In 2001, my first year in office, with  
9 deregulation, Enron gamed the system and caused rolling  
10 blackouts in several areas of California, including right  
11 here in Los Angeles. The state responded by developing the  
12 Renewable Portfolio Standard, creating a market for in-state  
13 solar, wind and geothermal energy. We diversified our  
14 energy supply to make us less reliant on out-of-state or  
15 foreign energy sources.

16           You all know that 91 percent of our natural gas  
17 comes from outside of California, and that methane is one of  
18 the strongest of our climate change pollutants, so we do  
19 have a lot at stake here. We probably became too reliant on  
20 this 86 billion cubic feet natural gas reservoir to meet our  
21 regions energy needs. We can only hope that there will not  
22 be another leak in the future.

23           I do understand and have said so myself that there  
24 will always be a minimum need of 15 billion cubic feet in  
25 the reservoir for emergencies, and we may need to ramp that

1 up over time.

2           But last year, speaking of a crisis, it was our  
3 fourth year of record drought. The Governor issued a state  
4 of emergency and a Water Action Plan. He called for bold  
5 actions to reduce our water consumption. Local and state  
6 agencies worked together and the public responded. We took  
7 shorter showers, tore up our lawns -- you should see us in  
8 Southern California, we did a good job -- and became part of  
9 the solution, not part of the problem. We were also  
10 planning for the future and the predictions of longer  
11 droughts. The state, for the first time, passed historic  
12 groundwater management legislation. And we all learned that  
13 we needed to develop regional solutions to water supply,  
14 including investing in recycling treated wastewater and  
15 capturing stormwater to reuse it.

16           Unfortunately, when I read the Summer Action Plan  
17 I thought you missed, or the administration, or the PUC,  
18 whoever we'd like to talk about here, released -- missed an  
19 opportunity to use that ingenuity and innovation and bold  
20 leadership that we've come to expect in California.

21           Listening to many of your comments today, you've  
22 built on that plan and filled in some of those spaces that I  
23 was curious about, but I know we can do better. And I know  
24 residents have a lot of ideas and suggestions to be part of  
25 the solution here.

1 I had met with solar and battery storage  
2 companies. They see Aliso Canyon as an opportunity to  
3 diversify our energy supply, reduce safety risks, as well as  
4 economic uncertainties, and also meet our state's climate  
5 targets.

6 Although the plan analyzes possible service  
7 interruptions during two weeks of summer, and probably also  
8 this winter, I don't think it measures -- its measures go  
9 far enough to reduce our risks, nor help us plan for a more  
10 reliable and safer future, so here are two suggestions.

11 First, we should accelerate all available programs  
12 to reduce electric demand this summer. And that's what  
13 you've been having in conversation, just not articulated in  
14 the plan. So people that have just read the plan and are  
15 not participating in this conversation are missing an  
16 important part of your thinking on this.

17 And -- so some of these ideas are things that you  
18 have just talked about in brief, but I'd like to reiterate  
19 them.

20 How about a flex-your-power-type program for  
21 natural gas for businesses and homeowners. It worked  
22 incredibly well before. How could each business and home  
23 cut their energy consumption by ten percent this summer?  
24 What kinds of incentives could be out there to get them to  
25 do that?

1           How can we convert domestic water heating to  
2 thermal water heating? Are there any renewable or energy  
3 efficiency projects that are almost ready to go that can be  
4 accelerated, especially in lower-income neighborhoods?

5 There is lots of rooftop solar in the Los Angeles Basin, and  
6 this has all occurred in the last ten years. Can energy  
7 storage be added?

8           Is SoCalGas inspecting all their wells and on- and  
9 off-site pipelines for leaks? Stopping leaks could create  
10 additional supplies in natural gas, and decrease methane  
11 emissions at the same time. Let's all remember, lessons  
12 learned here, it was deferred maintenance and incompatible  
13 land use decisions that helped cause this disaster in the  
14 first place.

15           Second, I wrote to Chair Nichols of the Air  
16 Resources Board in response to the draft Methane Mitigation  
17 Program last month. She wanted to use a large portion of  
18 the money, and I wanted to use a large portion of the money,  
19 as well as Mayor Garcetti, on local and regional energy  
20 efficiency, solar thermal, rooftop solar, EV charging  
21 infrastructure, and other beneficial projects that will also  
22 reduce residents' and businesses' gas and electric bills.

23           I also recommended that we use part of the  
24 mitigation money to purchase the site of the proposed Hidden  
25 Creek development, luxury home project, which actually lies

1 adjacent to Aliso Canyon. And it could serve instead,  
2 putting no more homes adjacent to a potentially incompatible  
3 land use, it would serve as an open space buffer to the  
4 existing residents. And also it should be considered, along  
5 with SoCalGas property, as a place to generate electricity  
6 from wind and the sun. I've spoken to residents here and  
7 they thought that was a good tradeoff, energy reliability,  
8 but in a safer way than large amounts of natural gas in  
9 their neighborhood.

10 Do we want to build more neighborhoods next to  
11 producing oil and gas fields anywhere in the state?

12 Probably not. This is a lesson learned from this  
13 experience. Energy reliability can be obtained by  
14 conservation and ramping up renewable energy supplies.

15 We need Southern California Gas, Edison and LADWP  
16 to work with us to begin this transition to a new safer and  
17 more reliable energy future. It's not the time to just  
18 return as quickly as we can to business as usual, and that's  
19 what the residents and myself worry about. The leak is  
20 sealed, we're going to ignore it. And that's why this  
21 hearing that -- or this workshop you're having here today is  
22 incredibly helpful and important.

23 Our actions should not pit protecting the health  
24 and safety of the neighboring residents against the region's  
25 energy reliability. That's what highly paid consultants are

1 now doing, whether it's in the halls of Sacramento or on the  
2 airwaves of Southern California. We all need to make it  
3 clear that protecting families should be our highest  
4 priority.

5           That's why I introduced a package of bills that  
6 does both. It asks the state to walk and chew gum at the  
7 same time, because until the experts can assure us that  
8 every well has been inspected and is not leaking, we must  
9 not rush to refill the reservoir and risk a second major  
10 leakage. That would be far riskier to the homeowners and  
11 our region's energy reliability, and to Southern California  
12 Gas.

13           I would also like to request that the CEC, PUC and  
14 LADWP amend their lists of next steps that's on page 32 of  
15 the report to offer both a short- and long-term vision that  
16 is consistent with the Governor's 2030 and 2050 climate  
17 targets, as well as our goal of protecting the residents and  
18 ensuring a safer, cleaner, diverse energy supply. I look  
19 forward to your future workshops to do just that.

20           Now the good news. The good news is that as of  
21 last week I have heard that SoCalGas is reporting that it  
22 has begun tests on more than 50 of the wells at Aliso  
23 Canyon. About 24 of them have been taken out of operation.  
24 Others are undergoing more rigorous inspection, as outlined  
25 by DOGGR in their six-stage requirements and standards,

1 before bringing wells back online. If DOGGR and Southern  
2 California Gas stay on track, some of the wells should be  
3 deemed safe enough to be back in operation by the end of  
4 this summer.

5 My capitol and district staff and I will continue  
6 to provide oversight over the state agencies through  
7 legislation and follow-up meetings. We will work very hard  
8 to minimize risks to the residents that have endured a  
9 significant disruption to their lives. I want them to feel  
10 safe returning to their homes. I do feel confident that  
11 together we can accomplish both goals of creating a cleaner,  
12 more reliable energy future, as well as the protection of  
13 residents throughout California who live and work near  
14 producing oil and gas facilities.

15 Thank you very much for allowing me to attend  
16 today.

17 CHAIRMAN WEISENMILLER: Thank you.

18 We are broadcasting both live streaming and WebEx.  
19 It turns out some of the live streaming is spotting, but my  
20 understanding is the WebEx is fine. So if you're listening  
21 to live streaming, please go to WebEx and you'll get a  
22 better listening experience.

23 Please now, Mr. Englander.

24 COUNCILMAN ENGLANDER: Great. Thank you very  
25 much. I'm L.A. City Councilmember Mitchell Englander. And

1 I want to thank the Senator for reading all of my notes into  
2 the record. No, I think you nailed everything I was going  
3 to say, but I'm going to maybe say some things a little  
4 differently.

5 I do also want to thank you, though, for being  
6 here and hosting this workshop here in the community. I  
7 think it's very important. It sends the message and brings  
8 the local stakeholders here, so I support that and -- and  
9 welcome you here. I think in terms of sending the message  
10 and flexing your own power, perhaps all the lighting in the  
11 background could be shut off.

12 But in any event -- and I suppose you were  
13 expecting me.

14 CHAIRMAN WEISENMILLER: Yeah.

15 COUNCILMAN ENGLANDER: The -- you started off,  
16 Senator, by throwing DOGGR a bone. And I would like to say  
17 that that is really an animal with a tail and no teeth. I'd  
18 like to see and support all the legislation packages come  
19 through fruition to actually give that regulatory body some  
20 stake in the game and give them the true ability for their  
21 own independent hiring of inspectors. And what we really  
22 need to do to stop the self-policed industry, if you will,  
23 and self-checked regulatory environment that allows  
24 utilities to self-inspect and self-regulate and self-  
25 diagnose and self-report, and I think we've got to change

1 that. And this is a paradigm shift in the ability to do  
2 that.

3           With that, I appreciate the opportunity to comment  
4 here today, as well. And I want to thank the respective  
5 agencies for their contribution to drafting the plan. As  
6 the Councilmember for the affected communities of Porter  
7 Ranch, Granada Hills, Chatsworth and Northridge, and also a  
8 local resident in the affected five-mile radius, I feel  
9 compelled to convey the seriousness of the ongoing impacts  
10 that the Aliso Canyon gas leak has had on the residents and  
11 businesses of this community.

12           To date, this ongoing tragedy has caused the  
13 relocations of many thousands of families, the closures of  
14 two schools, and the devastating consequences for many local  
15 businesses. SoCalGas's negligence in maintaining their  
16 critical infrastructure has left everyone with two  
17 unacceptable options: Either they inject gas into their  
18 facility that has not yet been independently inspected or  
19 declared safe, posing an immediate risk to the thousands of  
20 local residents, or we endure scheduling rolling blackouts  
21 in a region known for its extreme temperatures during the  
22 summer months, potentially risking the lives of our most  
23 vulnerable.

24           In fact, I want to thank you for those that came  
25 out of town that brought the lovely weather we're enjoying

1 today. We did need some rain.

2 Perversely, this announcement comes on the heels  
3 of SoCalGas's parent company, Sempra Energy, paying out  
4 millions in bonuses to their executives. This is appalling.

5 Shockingly, it appears that SoCalGas is no closer  
6 to completing the mandatory inspections of the other 114  
7 wells, even though some of the inspections may have started  
8 as recently as last week, than they were when this crisis  
9 started. This is particularly unnerving as we face the  
10 information set forth in the report.

11 As the only large gas storage facility inside the  
12 L.A. Basin, the Aliso Canyon facility serves 11 million  
13 citizens. It directly and profoundly affects the energy  
14 reliability of another 11 million Southern Californians.  
15 Per this reliability report and conversations with our own  
16 L.A. Department of Water and Power, and I want to thank  
17 Marcie for being here, as well, the implications of this  
18 reliability crisis is far reaching.

19 The imminent risks to our region are planned and  
20 unplanned outages throughout the gas and energy delivery  
21 system, and depletion of the remaining 15 billion cubic feet  
22 of gas left in the reserve in Aliso Canyon. In basic terms,  
23 we're looking at at least 14 summer days requiring electric  
24 service interruptions, potentially to millions of customers,  
25 and vulnerable customers. And given the fact that LADWP is

1 one of the eight balancing authorities in California, with  
2 the CalISO being the largest, we have an interdependency  
3 that is undeniable. If this causes curtailment in the Los  
4 Angeles Region or something unexpected happens within the  
5 other entities within the network, it could have un-  
6 mitigatable implications for all of us.

7 I call on all of you to hold SoCalGas accountable  
8 for their prudent use of their remaining gas in their field.

9 Efficiently and quickly complete the inspections; make them  
10 independent and transparent at Aliso Canyon. Crystallize the  
11 communications between all the involved entities for the  
12 maximum amount of predictability and reliability;  
13 collectively develop and outreach and communication plan,  
14 one that they, too, failed miserably on, to inform customers  
15 and agencies alike of strategies for reducing energy usage  
16 over the peak summer months and into the winter. Expand  
17 energy efficiency programs and incentives for all customers,  
18 prioritizing the largest reductions in addition to the  
19 greatest need.

20 Lastly, I feel compelled to point out that the  
21 communities in proximity to the Aliso Canyon gas leak have  
22 suffered enough at the negligent hands of this utility. I  
23 urge your steadfast commitment to the inspection and safety  
24 of all remaining gas wells.

25 It would be a gross miscarriage of justice to

1 authorize the unsafe use of the Aliso Canyon Field, simply  
2 because we are not as a region sufficiently weaned off our  
3 dependence on natural gas. The report is nothing if not a  
4 cautionary tale of the consequences of this independence.

5           Again, I'd like to thank you. I appreciate you  
6 coming here, and I appreciate the opportunity to share my  
7 thoughts with you on behalf of the local residents and  
8 stakeholders. Thank you.

9           CHAIRMAN WEISENMILLER: Thank you.

10           Representative Sherman? Please.

11           CONGRESSMAN SHERMAN: Hello. I'm Congressman Brad  
12 Sherman. Is the mike working?

13           CHAIRMAN WEISENMILLER: No.

14           CONGRESSMAN SHERMAN: Hello. I'm still  
15 Congressman Brad Sherman. I live in Porter Ranch, about as  
16 close to SS-25 as anyone. I want to thank Fran and Mitch  
17 for the outstanding representation that they're providing to  
18 the community I live in.

19           Back on January 21st I wrote a letter, and in bold  
20 I said, "I urge you to undertake all steps and use all the  
21 authority granted by the Governor's Declaration of Emergency  
22 to make sure that we do not face a choice between unsafe  
23 storage in Aliso Canyon on the one hand and a lack of  
24 electricity or reliability during the summer months on the  
25 other."

1           That is exactly where we are today.

2           Before the -- the county health officials have  
3 said that our carpets and our drapes are safe to be in the  
4 same house with, we are told that neighbors must move back,  
5 and we are told that we're having a hearing about injecting  
6 more gas into the field.

7           We're here to consult to deal with a report that  
8 has on the cover four authors. But when you get to page six  
9 you realize there's a fifth author where they say that  
10 SoCalGas has the data, and therefore joined the task force.

11           What does SoCalGas want?

12           They want modest short-term improvements in  
13 safety, no long-term improvements in safety, and to go back  
14 to business as usual, and to pass all the costs of this onto  
15 consumers. Please do not be a tool of the SoCalGas Company.

16           What should we be doing?

17           Decide that you're going to limit the pressure or  
18 the amount of storage at Aliso Canyon as reasonably as  
19 possible, looking at the other gas storage facilities and  
20 other electric import -- our ability to import electricity  
21 from other regions.

22           Demand that we eventually get, and as quickly as  
23 possible get subsurface safety valves on every well that is  
24 going to be used, but longer term. Because we're being told  
25 in a big rush, oh my God, we've got to act. Give SoCalGas

1 everything they want, and maybe you have to do some of that  
2 for this summer. But by two years from now we need a robust  
3 system of natural gas storage so that no facility is too big  
4 to fail. You don't want to be sitting here two years from  
5 now when of those other vintage wells blows up or one  
6 other -- or some other problem occurs and you're once again  
7 forced between unsafe storage on the one hand and blackouts  
8 on the other.

9           Don't turn to the Porter Ranch community and say  
10 you're going to inject more natural gas in that hill behind  
11 our homes, and you've got no plan to have what we need in  
12 this community, and that is at least half a dozen, perhaps a  
13 dozen natural gas storage facilities all -- so that if one  
14 goes out, then you'll be free to close down if it's unsafe  
15 without having blackouts.

16           Finally, your -- we heard testimony before the  
17 Assembly Utility Committee where your representative said,  
18 "Rest assured, we're looking at SoCalGas's expenses closely,  
19 and no unreasonable cost will find its way into utility  
20 bills."

21           You should know that at the hearing I said, "No,  
22 none of the costs, I don't care whether -- of this should be  
23 passed through to consumers. It is a direct result of the  
24 negligence of SoCalGas."

25           And while the federal government doesn't have a

1 direct role in your work, every member of the committee  
2 chimed in to agree with that conclusion.

3           So it's not -- if you agree to the reinjection of  
4 natural gas short-term without a long-term plan to make sure  
5 that every well that's used has a subsurface safety valve  
6 and has all the other testing and safety it can have, until  
7 we have a medium-term or long-term plan to have a variety of  
8 natural gas storage facilities around the community, if you  
9 give them the keys to the car again without a plan, then  
10 you'll be back here a few years later saying, once again,  
11 we're going to have blackouts or we're going to have this --  
12 or we're going to have to once again overlook the bad safety  
13 record.

14           The safety of my community is in your hands, and I  
15 hope you'll look at it both short term and long term. Thank  
16 you.

17           CHAIRMAN WEISENMILLER: Thank you. So at this  
18 point, I think we have some other statements from other  
19 elected officials, which we will move into the record.

20           And our Court Reporter has requested a break, so  
21 we're going to break for five minutes. Be back promptly at  
22 3:30. Thanks.

23           (Off the record at 3:27 p.m.)

24           (On the record at 3:37 p.m.)

25           PRESIDENT PICKER: Hi. The Chair has asked me to

1 begin the panel, the next -- get the next panel started.  
2 He's off doing a news interview, but he'll back with us  
3 shortly.

4 Tom?

5 So we're going to start this next panel. This is  
6 a panel of -- of other sector representatives. So I'm going  
7 to call first on Deepak Ramlatchan from FERC. And then  
8 he'll be followed by Pat Hoffman from U.S. Department of  
9 Energy, Jim Robb from the Western Electricity Coordinating  
10 Council, then Jeff Reeb from L.A. County.

11 So, please.

12 MR. RAMLATCHAN: Thank you. How's my mike?

13 So good afternoon, and thanks for the invitation  
14 to the workshop today. And thank you for your coordination  
15 on -- on these electricity and natural gas issues.

16 As we have heard, joint entities have done a lot  
17 of work analyzing and planning for system operation in light  
18 of the current situation. I am here to discuss FERC's role  
19 today, but I need to clarify that all the comments that I  
20 make this afternoon are my own and do not represent the  
21 position of any commissioner or the commission itself.

22 So I had some slides, if we have them. They're  
23 not critical. Okay. Thank you.

24 So FERC's role in helping address this situation  
25 is limited to the authority granted to it by congress.

1 Next slide please.

2 FERC has no authority over Aliso Canyon itself, as  
3 it is not part of a natural gas storage facility used for  
4 interstate commerce. However, the loss of Aliso Canyon  
5 storage activities does have implications for the  
6 commission. Specifically, FERC has authority over all the  
7 power system reliability. We accept and review filings and  
8 regulatory changes requested by the California Independent  
9 System Operator. And we provide market oversight,  
10 monitoring and enforcement activity over the associated  
11 energy markets.

12 Next slide please.

13 In the last few years FERC has emphasized the need  
14 for improved coordination between gas pipelines and power  
15 grid operators to enhance the reliability and market  
16 performance of both systems. Improving coordination across  
17 markets is not specific to Southern California. This is  
18 something that must be improved upon around the country. In  
19 this situation, without the operation of Aliso Canyon, it  
20 seems likely that Southern California will become more  
21 dependent on its pipeline interconnections to maintain  
22 service.

23 FERC's efforts, as well as those of the California  
24 ISO, SoCalGas, and state agencies have improved natural gas  
25 and electric coordination over the last few years in this

1 region. Experience over the last few years regarding  
2 generation retirements and pipeline operations have  
3 underscore the need for continued improved coordination.

4 We heard the Governor's Office today speak about  
5 the San Onofre units. And we heard the ISO mention pipeline  
6 outages. The experiences over the last few years have  
7 provided some benefit for us to improve that coordination  
8 between industries.

9 Thus, it's critical that the power and natural gas  
10 sectors and government entities work together to protect  
11 consumers and markets this summer, and enhance planning and  
12 coordination efforts for this region.

13 Next slide please.

14 One of FERC's major roles is to oversee the  
15 reliability of the bulk power system. Among other things,  
16 FERC works with the electric reliability organization, NERC,  
17 and regional reliability entities. It approves reliability  
18 standards and conducts investigations into reliability  
19 problems that arise on the power grid. Operators of the  
20 bulk power system are subject to mandatory security and  
21 reliability standards. FERC will be monitoring closely for  
22 reliability problems and their implications.

23 Again, the CalISO mentioned the potential for  
24 cascading outages, and just the interconnected nature of  
25 balancing authorities in the -- in the region. So what

1 happens here locally has ramifications for the greater  
2 region. FERC expects that all parties will cooperate in  
3 maintaining a reliable power grid and service to its  
4 customers.

5           From a market oversight standpoint, FERC also  
6 oversees the performance of power and natural gas markets,  
7 and the behaviors of market participants in both industries.  
8 As mentioned, the loss of Aliso Canyon may increase reliance  
9 on natural gas from pipelines, potentially increasing prices  
10 above what they otherwise might have been. Any issues on  
11 pipelines outside of California that affect the flows in --  
12 of gas into California may create additional concerns. FERC  
13 staff will continue to keep a keen eye on market performance  
14 and monitor participant behavior.

15           Some of the actions that may result from this  
16 planning effort and the coordination may end up in front of  
17 FERC. CAISO has -- or the California ISO has a stakeholder  
18 process underway, looking at possible market changes to  
19 address related issues. We don't know at this point what  
20 their ultimate proposals will be. However, changes to  
21 California ISO's tariff to change market rules or generator  
22 compensation would be submitted to FERC. FERC's rules  
23 require that it not prejudge a filing, that it makes its  
24 decision based on the record, and that it provides for due  
25 process.

1           As a result, I can't speak to what the commission  
2 might do with regards to filings in front of it. However, I  
3 can say that FERC has provided guidance on how independent  
4 system operators, such as the California ISO, can seek  
5 expedited action on their tariff filings.

6           Lastly I'll say, again, while Aliso Canyon is not  
7 under FERC's jurisdiction, please know that we do stand by  
8 ready to do our part to protect consumers and markets  
9 affected by the situation within the authority granted to  
10 FERC by Congress. We have been and will continue to be in  
11 communication with state agencies and natural gas and power  
12 grid operators as the summer moves on. And I expect you  
13 will hear more about these and some of our other efforts in  
14 the coming weeks.

15           Thank you.

16           CHAIRMAN WEISENMILLER: Thank you.

17           I just have a short announcement. In indicated  
18 earlier that we had statements for the record submitted by  
19 Senators Feinstein and Boxer. We also have one that will be  
20 submitted for the record from Councilman -- excuse me --  
21 Antonovich.

22           MS. EDWARDS: That's Supervisor Antonovich.

23           CHAIRMAN WEISENMILLER: Supervisor, excuse me,  
24 that will also -- he has a representative from his staff  
25 here, and we'll -- we'll submit his statement into the

1 record.

2           Go on, please, Ms. Hoffman.

3           MS. HOFFMAN: Thank you. Thank you very much. My  
4 name is Assistant Secretary Pat Hoffman from the Department  
5 of Energy. And I really appreciate the invitation for you  
6 to -- to join you today.

7           The Aliso Canyon leak, as was stated earlier, was  
8 identified as an area of great concern. And it is our goal  
9 that we will support a comprehensive effort to share best  
10 practices and lessons learned, develop recommendations, and  
11 implement appropriate actions to assess and mitigate  
12 nationwide impacts.

13           During the leak the State of California utilized  
14 the team of technical experts from the Department of Energy  
15 California-based National Laboratories to provide state  
16 officials with analytical and technical support. Secretary  
17 Moniz and Undersecretary Orr visited the site in February.  
18 The Secretary deeply appreciated the spirit of partnership  
19 and collaboration between state and local agencies across  
20 California, along with support from federal partners to  
21 respond to this incident.

22           Secretary Moniz stated in February, "Regrettably,  
23 there is a broader theme than Aliso Canyon. An action plan  
24 is needed to ensure similar leaks do not occur at other  
25 storage sites."

1           As part of the public-private partnership efforts  
2 to accomplish this goal, the administration announced on  
3 April 1st a new Interagency Task Force On Natural Gas  
4 Storage Safety. I would especially like to recognize  
5 Senators Boxer and Feinstein for their leadership on this  
6 issue in pursuing the creation of this multi-agency Task  
7 Force. The Department of Energy's Undersecretary for  
8 Science and Energy and the Administrator of the Department  
9 of Transportation's Pipeline and Hazardous Materials Safety  
10 Administration will lead this multi-agency effort. They  
11 will be joined on the Task Force by technical experts from  
12 the Department of Interior, the Federal Energy Regulatory  
13 Commission, EPA, the Department of Health and Human  
14 Services, and the National Oceanic and Atmospheric  
15 Administration.

16           As we are all aware, natural gas is an increasing  
17 part of the energy mix. In fact, this year will be the  
18 first year that natural gas-fired generation will exceed  
19 coal in supplying electricity. Today, natural gas supplies  
20 nearly one-third of electrical generation. There are  
21 approximately 400 storage facilities in the United States,  
22 and approximately -- 2 of the -- 200 of which are  
23 intrastate. That is why is the Task Force will focus on  
24 ensuring well integrity, safe operations of storage  
25 facilities, and the potential vulnerabilities to energy

1 reliability posed by the loss of use of a storage facility.

2           The Task Force will work closely with all  
3 stakeholders, including state government, industry and  
4 environmental organizations. It will hold special workshops  
5 and will summarize its findings and share them with the  
6 public when it is completed in about six months.

7           At the Department of Energy we are planning to  
8 work on two critical areas of study.

9           The first is on well integrity and is being  
10 conducted by the Office of Fossil Energy and is supported by  
11 our National Energy Technology Laboratory. It will review  
12 existing practices, proposed best practices for well  
13 inspections and maintenance operations. It will draw on the  
14 expertise of other laboratories throughout the country and  
15 will include those experts retained by the state of  
16 California during the leak.

17           The second study, conducted by my office, the  
18 Office of Electricity Delivery and Energy Reliability, and  
19 the Office of Energy Policy and System Analysis will focus  
20 on the potential energy risk posed by the loss of gas  
21 storage facilities. Our National Labs will develop risk  
22 assessment methodologies to rank the impact from the  
23 possible loss of these storage facilities so we can take  
24 future actions to prepare for and mitigate these types of  
25 incidents. With the gaps in our current knowledge these

1 studies will help provide us valuable information in the  
2 maintenance of gas wells, and held us evaluate the  
3 consequences to the energy sector from the loss of these  
4 facilities.

5           The Department expects to have two workshops this  
6 summer. Overall, we will continue to work closely with the  
7 State of California, Los Angeles County and the City of Los  
8 Angeles to provide technical assistance and draw upon their  
9 expertise and experience to improve our nationwide natural  
10 gas infrastructure.

11           We all know that the nexus between natural gas and  
12 electricity is complex and has increasing interdependence.  
13 Therefore, we must work together to continue to analyze and  
14 understand the impacts to our nation's electric reliability.

15           Let me close by saying the Task Force appreciates  
16 this partnership and looks forward to contributing to the  
17 near- and long-term solutions for our country.

18           MR. ROBB: Thank you very much for the opportunity  
19 to address and participate in this workshop on the Aliso  
20 Canyon Action Plan For Local Energy Reliability. My name is  
21 Jim Robb and I'm the CEO of the Western Electricity  
22 Coordinating Council, WECC. WECC is the regional entity  
23 with delegated authority from the North American Electric  
24 Reliability Corporation, or NERC, and we are tasked with  
25 assuring the reliability of the bulk electric system across

1 the entire Western Interconnection. We accomplish this  
2 critical reliability mission by focusing on long-term  
3 planning and analysis and enforcing compliance with  
4 industry-accepted and NERC's approved and FERC approved  
5 reliability standards.

6 Today I'd like to offer our perspective on the  
7 reliability concerns associated with the reduced level of  
8 gas storage available for generation in the L.A. Basin, the  
9 potential impact to the bulk electric system across the  
10 West, and what WECC can do to support the local companies in  
11 dealing with this issue.

12 While we're extremely sympathetic to the evolving  
13 energy plight faced by the Los Angeles Basin, it's important  
14 to note that WECC does not have any direct jurisdiction over  
15 gas supply, gas storage or the local electricity  
16 distribution systems.

17 That said, we've been brought into the ongoing  
18 discussion and work by SoCalGas, the ISO, the Department of  
19 Water and Power, and many state agencies in California. And  
20 I must say that we're very, very impressed with the level of  
21 coordination of information and the efforts among the many  
22 agencies and operating companies in the L.A. Basin,  
23 especially considering the jurisdictional differences  
24 between those entities. We encourage all the parties to  
25 continue that level of coordination and cooperation.

1           Now in dealing with issues like this it's  
2 important to remember that Los Angeles is not alone. The  
3 Western Interconnection is a highly integrated system,  
4 spanning from British Columbia in the north, Baja California  
5 to the south, and to the east as far as El Paso, Texas. In  
6 such an interconnected system, events in one area can impact  
7 companies and customers hundreds of miles away. And  
8 conversely, when there's pressure on one part of the system,  
9 help and support can come from other utilities.

10           While the epicenter of the Aliso Canyon gas  
11 storage issue is the L.A. Basin, a loss of generation  
12 capability in L.A. could have impacts elsewhere, and at the  
13 same time operating conditions, outages and other events in  
14 the rest of the interconnection can impact the efforts to  
15 address the local issues here in L.A.

16           So what can WECC offer?

17           Our analytical team develops tools and study  
18 scenarios to model these highly complex interactions and  
19 identify potential reliability issues before they occur so  
20 that mitigation actions can be identified and put in place.  
21 If, as the working group postulates their substantial risk  
22 of losing local generation for a number of days in the L.A.  
23 basin over the balance of this year, it will place a strain  
24 on system operations to balance and control the entire  
25 interconnection.

1           We're reviewing the final report on Aliso Canyon  
2 for areas where we can perform additional interconnection-  
3 wide analysis or provide an alternative perspective on the  
4 work that's already been performed. The main area we will  
5 be looking at is resource adequacy in terms of both real  
6 power, as well as reactive power. And reactive power is  
7 highly necessary and essential to be able to maintain local  
8 voltage and stability of the electric grid. We will also be  
9 looking at the transfer capability of the bulk electric  
10 system to safely and reliably import energy into the L.A.  
11 Basin under a variety of scenarios, and the ability of those  
12 resources to support the ramping needs to ensure the system  
13 stays in balance in local -- under local conditions. In  
14 addition, we've offered analytical support to the extent  
15 that it's helpful to the working group.

16           We are also working with our Entity Oversight  
17 Department to review our upcoming audit schedule to see if  
18 we can modify the scope of or delay audits for the effected  
19 entities so that to the extent that we are interacting with  
20 them, we are doing so on areas that are helpful and  
21 important to this important task in front of us. And also  
22 to be sure that we're not burdening key operating personnel  
23 during a time of system stress and allow them to focus on  
24 summer, fall and winter operating -- operations and  
25 contingency plans.

1           The situation, as L.A. Basin is managed by the  
2 operating companies over the next several months, our main  
3 concern is going to be that any adverse impact, such as loss  
4 of load, be contained here locally and not develop into the  
5 cascading events that have been described by others.

6           In conclusion, we're very pleased to have been  
7 brought into the work. And we believe that our capabilities  
8 can help augment the excellent work that is already  
9 underway. We endorse the recommendations that we have heard  
10 so far. And we'd especially ask the local utilities the  
11 basin to take steps now to both enhance existing demand  
12 response and energy conservation programs, be prepared to  
13 safely handle any emerging supply shortfalls that may be  
14 occurring -- may be occurring over the course of this year,  
15 and to continue to work together and coordinate and share  
16 information across the industry participants, which we  
17 believe will help minimize the potential for customer  
18 disruptions and protect the broader electric system.

19           There's always been a spirit of cooperation and  
20 camaraderie in the West that will help us all work through  
21 this. We've seen that in the study work already underway,  
22 and I'm confident we will see it going forward. I want to  
23 leave our colleagues in California and all of you with the  
24 knowledge that you have our support. Thank you very much.

25           CHAIRMAN WEISENMILLER: Thank you.

1 MR. REEB: Good afternoon. I'm Jeff Reeb. I'm  
2 with the Los Angeles County Chief Executive Officer, Office  
3 of Emergency Management. And I want to thank you for the  
4 opportunity to discuss emergency preparedness as it relates  
5 to Aliso Canyon and energy resiliency in general.

6 I'd like to begin my comments with a pitch for  
7 personal preparedness. Disasters tend to be novel.

8 And we'll wait for the -- I'll continue the  
9 PowerPoint and we'll catch up, I'm sorry.

10 You know, disasters tend to be novel. Katrina,  
11 Superstorm Sandy, even recently the wind storm in the San  
12 Gabriel Valley which, you know, we hadn't had 100-mile-an-  
13 hour winds before in the San Gabriel Valley, which took out  
14 a lot of trees and knocked down a lot of utility lines and  
15 so forth.

16 So we advocate, in my office we advocate for an  
17 all-hazards approach to preparedness because you cannot  
18 predict which the next novel disaster will be. Certainly, a  
19 methane gas leak, the effects of which we had, was very  
20 novel.

21 And then we advocate with all of our communities,  
22 you know, universal preparedness steps, which you'll see on  
23 the next slide, please, you know, to make a plan, keep  
24 supplies at home, stay informed, which I'll touch back on,  
25 and then get involved. And that makes for a resilient

1 community that can -- that can withstand or tolerate service  
2 disruption better than one that's not as prepared.

3           Next slide please.

4           We're a very big proponent -- if there are service  
5 disruptions, we're a very big proponent to make your smart  
6 phone resilient. I noticed that, like myself, many of you  
7 have glanced at your phone and so forth. And so if there is  
8 a disruption, we advocate that people have a backup power  
9 supply for that cell phone, whether it be a solar charger or  
10 a reserve battery, or even when you find some power that is  
11 available, you know, you can share it with others and have a  
12 plug-in there, so -- because it's so important to be able to  
13 maintain communications in a disaster or during a period of  
14 strife.

15           And then given a disruption there's a likelihood  
16 that perhaps people will turn to improvised generation  
17 devices, and they'll turn to make their own power with a  
18 portable generator. And that can cause a risk to servicemen  
19 who are on the grid if they do not have the right transfer  
20 switch and so forth. And so -- and also, portable  
21 generation, there's an issue with liquid fuels, that they  
22 use those and so forth. So we'll be advocating that should  
23 they turn to their own generation, that they do it safely  
24 and they do it in compliance with the electrical code.

25           Next slide please.

1           In any type of disaster it is our vulnerable  
2 populations that often feel the first effects in the sense  
3 that they can be medically dependent on the power that's  
4 generated or they'll be relying on that power for their  
5 mobility or the way in which they communicate.

6           And so we -- we advocate with this population to  
7 make sure that they have a plan for their caregivers, a  
8 multi-layered plan for those people who provide care to  
9 them, that if they are electrically dependent that they have  
10 a backup or a reserves supply. And many of the devices that  
11 are out there, there are battery backups and systems  
12 available. And then our utility providers often do provide  
13 a way for them to register that they are medically dependent  
14 on power and so forth, so that they can receive outreach  
15 services and reduce their vulnerability. But we always --  
16 we do advocate for them because they are very much on the --  
17 have a disproportionate impact when there are disruptions.

18           Next slide please.

19           Finally, I touch on our role as the local  
20 emergency manager. The Office of Emergency Management wears  
21 two hats in the region. One, we work within the county, 36  
22 departments, 108,000 employees to build unity of effort and  
23 to coordinate and direct emergency organization of the  
24 county. Then we serve a role as the operational area  
25 coordinator, coordinating the delivery of services and the

1 flow of information between the state and the independent  
2 cities in the times of a disaster. So very much, when there  
3 is a disruption to the normal day-to-day operations of the  
4 area, we're involved in oversight on that, maintaining  
5 situational awareness and providing information to key  
6 stakeholders and elected officials.

7           When an event occurs that requires additional  
8 resources, we turn to our partner at Cal OES and our  
9 surrounding counties to bring those resources in. And if it  
10 escalates to the point where federal resources are  
11 necessary, we do that as well.

12           The county also operates cooling centers during  
13 periods of heat alerts. And should be incur that this year,  
14 we'll be sure to provide that capability.

15           And then finally, my comments today are available  
16 in large font and will be posted online as well. So those  
17 people with disabilities and others with access and  
18 functional needs will be able to see my comments.

19           And thank you for an opportunity to present today.

20           CHAIRMAN WEISENMILLER: Thank you.

21           MS. CRACIUM: Thank you. My name is Paula Cracium  
22 and I'm President of Porter Ranch Neighborhood Council. I'm  
23 very grateful that -- for all the work that you guys have  
24 done.

25           THE REPORTER: Ma'am, can you put your mike on?

1 MS. CRACIUM: I'm not positive, is it working?  
2 Should I just switch?

3 CHAIRMAN WEISENMILLER: Switch microphones.

4 MS. CRACIUM: I'm going back to go to -- there we  
5 go.

6 CHAIRMAN WEISENMILLER: There you go.

7 MS. CRACIUM: Is that better? Okay. Oh, that's a  
8 lot better. Sorry, guys. Anyway, just thank you for the  
9 work that you've done.

10 According to Southern California Gas Company there  
11 is still 4,700 families living outside of their homes, an  
12 estimated 14,000 in a community of 30,000. Southern -- the  
13 County Health Department is doing a number of testing on the  
14 surfaces in the homes to determine whether or not the homes  
15 are safe to go back into. That's important because it's an  
16 ongoing crisis for us. I know that the leak is fixed, but  
17 families are not able to go back home. They're not safe to  
18 go back home. And the county does not yet have a  
19 determination on whether or not it is safe on the  
20 environments in their home.

21 People who have returned home, of the few that  
22 have, well over 200 are experiencing the same symptoms they  
23 experienced before, including nosebleeds and headaches,  
24 stomach problems, and many other things. So it's an ongoing  
25 crisis for the community.

1           So we understand that balancing reliability is an  
2 important component in what you guys are all looking at.  
3 But we just want to make sure that it's clear that  
4 reinjecting into the well site before testing is done is  
5 just not an option. Sorry.

6           The moratorium on gas injections must stay in  
7 place to ensure the community is not put at risk after a  
8 life-altering catastrophic event, like the one that we're  
9 still in. We want to make sure that you know that we do not  
10 blackouts any more than anyone else, but that the Aliso  
11 Canyon storage facility is not fit to operate until those  
12 wells are deemed safe. There is no way to know whether or  
13 not there is another leak, like the one we experienced, or  
14 something more devastating waiting to ravage the community  
15 and the environment again until the inspections are  
16 complete.

17           It is beyond unacceptable that Los Angeles is  
18 brought to this intersection, but we want to make this is an  
19 intersection that we're at only once. It's unfortunate that  
20 the risk of blackouts may exist over the summer months, but  
21 it would be a greater travesty if as mitigation efforts you  
22 were to add unreasonable risk to the Porter Ranch and the  
23 surrounding communities and the environment by allowing  
24 reinjections into the facility prematurely.

25           Simply put, the risk of possible blackouts cannot

1 outweigh the possible risk of another catastrophic local,  
2 state and federal incident from the untested wells. In order  
3 to protect the health and wellbeing of the people, which is  
4 children, families and the elderly living in the community,  
5 all the wells must either be sealed off from the storage  
6 facility, tested and verified safe before Southern  
7 California Gas is allowed to start reinjection into the  
8 facility.

9           We understand the concerns that everyone has  
10 regarding reliability. But there is a number of questions,  
11 even from hearing from everyone today, that are still out  
12 there. We want to understand, who is going to make the  
13 decision on how to move forward? If reinjection is going to  
14 be on the table, who is going to seek out that? Is that  
15 someone from your Board? Is that someone outside your  
16 Board? Who is going to be seeking that and making the  
17 decision on how we navigate this reliability situation that  
18 we're all in?

19           We also want to know, with the Flex Alerts and him  
20 saying that 500 megawatts is saved, how much of that would  
21 help mitigate the issue? What they talked about earlier  
22 today was a number of things relating to things that they  
23 could do to cut, but they didn't talk about necessarily how  
24 some of those things would weigh into. For instance, there  
25 is 15,000 BCFs left down at the facility. If we used ten of

1 those, would that solve the problem? If we did the Flex  
2 Alerts, would that solve the problem?

3           How long are these 14 days? Is it an hour of 14  
4 days? Is it 8 hours of 14 days? Is it 6 hours of these 14  
5 days? It just really would help us to understand exactly  
6 what we're looking at as to how long those interruptions  
7 would be.

8           And since Southern California Gas is working so  
9 feverishly to get their site back online, certainly using  
10 those ten BCFs now would be a mitigated risk against us  
11 looking at the winter down the line, knowing how quickly  
12 they're working to try to get that facility back online.

13           I thank you for your work. And just for the  
14 Porter Ranch community and the surrounding communities,  
15 please do not even consider bringing that facility back  
16 online until every well is tested, certified safe, and even  
17 before when they bring it back online that it is not allowed  
18 to go back to full levels until the full investigation is  
19 completed. Thank you.

20           CHAIRMAN WEISENMILLER: Thank you.

21           PRESIDENT PICKER: Let me try to answer your very  
22 specific question as to has authority to -- to remove the  
23 order not to inject gas. There is also an order not to take  
24 any other gas out right at this point. From my perspective,  
25 that came from the CPUC. I know there's a consistent order

1 that has taken place from the Division of Oil, Gas and  
2 Geothermal Resources.

3           We are both committed to observing the Governor's  
4 Executive Order which requires either isolation of wells  
5 completely from the gas storage facility, or testing. We  
6 are depending on the Division of Oil, Gas and Geothermal's  
7 research -- Resources oversight of -- of So Cal Edison's  
8 testing, which is pretty thorough, before we're willing to  
9 even consider that. So we will work with them to make sure  
10 that that occurs. And frankly, I am reluctant in my own  
11 mind to even allow reduction -- or production from the gas  
12 field until we have some assurances that the wells that we  
13 might do that from are actually also sound and have  
14 integrity to operate.

15           Now using them to produce gas from the field will  
16 reduce pressure. So it actually could be seen as over --  
17 reducing the overall risk. But again, there is a concern.  
18 And I don't think that we'll move ahead. Now that, without  
19 having that -- that very clear signal from -- from DOGGR,  
20 the Division of Oil, Gas and Geothermal Resources, there's  
21 integrity. I'll break for them.

22           But I also will then talk a little bit about the  
23 challenges and maybe help to integrate it with all the other  
24 things that we're talking about so that you have a sense of  
25 how that works.

1 CHAIRMAN WEISENMILLER: That's good.

2 Ken?

3 PRESIDENT PICKER: I don't know if you have  
4 anything to add to what I just said?

5 MR. HARRIS: No. I would just say that what  
6 you've said is absolutely correct in the order that I signed  
7 on March 4th -- March 3rd, whatever date it was, lays out a  
8 very specific series of testing protocols that all the wells  
9 that must go through. It's very clear. SoCalGas so far has  
10 been very good about instituting those tests. We have 21  
11 engineers who are working full-time. We have one or two  
12 engineers onsite every day, seven days a week, overseeing  
13 the work. And our goal is to ensure, number one, safety of  
14 the fields, safety of the public, and protection of the  
15 environment.

16 MS. CRACIUM: Can I ask if there's any deviation  
17 from that plan, that you come back to the community and make  
18 sure that we are fully involved in that conversation?

19 MR. HARRIS: I have no plans at this point to  
20 deviate from that plan, and I have not been asked to do so.

21 MS. EDWARDS: Well, I just wanted to quickly note  
22 that -- that on behalf of L.A. Mayor Garcetti and the City  
23 Council, we are in strong concurrence with what you heard  
24 here about ensuring the safety and validity of those wells  
25 before any kind of injection. So I just wanted to say that.

1           PRESIDENT PICKER: Now I just want to say that our  
2 modeling discusses a lot of circumstances under which we  
3 foresee potential problems. We could have a very cool  
4 summer and warm winter next year. We had a warmer winter  
5 than we expected, which meant that we didn't have to draw on  
6 the 15 billion cubic feet that was in the Aliso Canyon  
7 storage capacity, so that we move into the summer with more  
8 gas than we might have had to.

9           We did experience something similar when the San  
10 Onofre natural gas plant dropped out of the grid. And the  
11 agencies that you see here were very active in trying to  
12 deal with that.

13           This is a little different because it wasn't just  
14 electricity. It involves both electricity and gas. Sixty  
15 percent of the -- the gas used in Southern California in the  
16 wintertime is used for home heating, cooking and hot water.  
17 So that's a different set of challenges than we've talked  
18 about here today.

19           And so from my perspective I would like to know  
20 that we -- well, first, I don't assume that -- that Aliso  
21 Canyon will be back online this year, this winter, next  
22 winter. I assume that we won't know that until DOGGR is  
23 done with the studies. So I'm very anxious as to not only  
24 making sure that we use the gas reserves prudently, but that  
25 we plan ahead to next winter. Heat storms kill people. Gas

1 outages kill people. But cold storms also cause havoc in  
2 our communities.

3           So I'm -- I am -- I expect that I will not sleep  
4 well this spring, this summer, next fall or next winter.  
5 And we will be using everything that we can to both prepare  
6 and reduce the risk, and we'll be using all the tools at our  
7 disposal to deal with -- with the worst case.

8           I will say that during that -- that very tense two  
9 summers where we were adjusting to a world without the San  
10 Onofre natural gas station, we called on the people of  
11 Southern California, Los Angeles, North San Diego, Orange  
12 County, to make efforts on those peak days. And we got as  
13 much as 850 megawatts in just citizen response, which is  
14 enormous. If our goal is 1,500 megawatts, we have to keep  
15 chewing that.

16           What I will say is that people do respond. But  
17 after about five days of real heat, they tend to turn the  
18 air conditioning on. They just can't take it. Their kids  
19 are sick. They just -- they do the best they can.

20           We've never had a Flex Alert for natural gas.  
21 This is new. That's why we ordered more money early.  
22 That's why we're beginning to talk about how it will work.  
23 What kinds of things can we tell people to do? What will  
24 work? How will they sustain that over four or five days?  
25 How will we give additional resources on top of that to

1 build permanent reductions into the system.

2           So for example, you heard about the solar thermal.  
3 That's -- that's hot water heating on your roof. It works  
4 but it's expensive.

5           Similarly, we could start making a transition all  
6 across Southern California to electric water heaters. They  
7 have value because you can actually heat the water, storage  
8 it in an oversize tank, and then be able to use it  
9 throughout the day and avoid turning your electricity on  
10 during those other peak uses. People learn how to do this.  
11 It's a very, very effective tool through the northeast.

12           The challenge is, of course, that that means  
13 people got to get rid of their gas hot water heaters and  
14 replace them. I can't make them do that. That's a local  
15 government task. It's a building code. We will help, but  
16 this is going to take us all into a new world. If we were  
17 to replace all the gas hot water heaters throughout Southern  
18 California in 5.7 million homes, we probably would have full  
19 employment for every plumber and every electrician  
20 throughout the United States for the next couple years just  
21 going through the tasks of replacing, plus which stresses  
22 the worldwide manufacturing supply for electric water  
23 heaters. I'm up for it if you guys are.

24           CHAIRMAN WEISENMILLER: Okay. We're down to two  
25 minutes.

1 Commissioner Sandoval?

2 COMMISSIONER SANDOVAL: Thank you very much.

3 So really, first of all, I wanted to thank all of  
4 you, and also particularly thank the Porter -- the Porter  
5 Ranch Neighborhood representative.

6 I'm, perhaps, in a better position than many to  
7 understand some of what you've experienced. When my family  
8 moved from East L.A. to Montebello we moved into a  
9 neighborhood that I checked with my dad, and he said when he  
10 bought his house he wasn't told that our house was on top of  
11 a natural gas storage field. And so that field eventually  
12 had a leak and was closed down by the CPUC Commission in the  
13 year 2000.

14 But this also gets to the issue. One suggestion  
15 was, well, can we open up new storage fields in L.A. or  
16 Orange County? And it's a very difficult thing to do, and  
17 siting is a very difficult thing.

18 So our house was on top of the storage field. So  
19 I do understand how disruptive it is. And I think this  
20 is -- I'm saying this to underscore that our number one  
21 commitment is to safety. So we are very concerned and we  
22 will make sure that all of the rules are followed. And we  
23 are conducting an investigation separately that looks into  
24 some of the issues about why this happened in the first  
25 place. So thank you.

1           And then just second is getting to one of our  
2 other twin responsibilities is reliability. So as was  
3 mentioned, a lot of this will be driven by the people of  
4 L.A., Orange County and Ventura County taking steps, not  
5 only for demand response, but also letting us into your home  
6 to help install energy efficiency measures and really make  
7 these changes. There are a lot more -- there a lot of  
8 programs where, you know, we really struggle to get people  
9 to participate, that there's more money than participants.

10           So I think you really have a unique voice and  
11 opportunity to be cheerleaders, to ask your fellow Angelinos  
12 to enroll and to participate. We will do our part and  
13 really look forward to your partnership. And I think that  
14 there are people all over -- you know, I'm from L.A.  
15 County -- there people all over here and all over the state  
16 who want to help and be part of the solution.

17           And the last thing that I would say is also I  
18 wanted to also stress something that Mr. Reeb said about the  
19 vulnerable populations, including those who are on medical  
20 devices that depend on the use of energy. I really wanted  
21 to encourage everyone who is using such a device to enroll  
22 in their utilities medical baseline program, and that's  
23 important for a lot of reasons. I know for the investor-  
24 owned utilities that people enrolled in medical baseline get  
25 a little credit on their electricity -- it's more than a

1 little credit -- but they get a credit on their electricity  
2 to account for their device, and so it lowers their bills.

3 But in addition to that, and perhaps more  
4 important in the crisis, it gets you on the list so that  
5 they know that, you know, in this house there's somebody  
6 with a medical baseline, or in this apartment, that there  
7 are ten people with medical baseline.

8 And so, Ed Randolph, I also want to follow up with  
9 you about master meter apartment buildings and medical  
10 baseline to make sure -- this was an issue that came up in  
11 Long Beach -- that where we have master meter buildings,  
12 that we still have the people registered so that we know  
13 that there might be 10 or 100 people inside what looks like  
14 only one electric customer because they're on master meter.  
15 So this is very important to be able to identify vulnerable  
16 people. And San Diego Gas and Electric did a particularly  
17 good job knocking on doors and calling people during  
18 outages.

19 And the last thing is also we'd encourage  
20 everybody to sign up for outage alerts. I know that a  
21 number of the investor-owned utilities, and I would imagine  
22 that LADWP, has outage alerts, and this was very helpful.

23 At my house we had a windstorm a couple of months  
24 ago and my husband and I experienced an outage. It lasted  
25 about three of four hours. But because he was on outage

1 alert, he got a call to his cell phone. They said, you  
2 know, how many people were out. And then they called back  
3 about ten minutes later and said trucks are on our way,  
4 here's our estimate. So it also allowed us to make  
5 decisions about whether we could stay home and scrounge from  
6 the frig or whether we had to leave. And so those outage  
7 alerts are really important.

8           So these are all examples of things that people  
9 can do to help to make sure that we can get through all of  
10 this together as we engage in both the short-term planning  
11 and the long-term planning. Thank you.

12           CHAIRMAN WEISENMILLER: Okay. Thank you.

13           We're going to go on to the next panel.

14           Tom, next time you're first.

15           MR. DOUGHTY: Thank you.

16           CHAIRMAN WEISENMILLER: Thank you again. Thanks  
17 for your participation.

18           So let's start with Bret Lane. And the one  
19 microphone doesn't seem to be working. If you could snag  
20 that --

21           MR. LANE: Is this the one? It's number four  
22 right here.

23           CHAIRMAN WEISENMILLER: It might be batteries.  
24 Please, Bret.

25           MR. LANE: Thank you. Good afternoon. I

1 appreciate the opportunity to be here. I thought I'd start  
2 today with our -- the first slide, if you can. It's on the  
3 next slide. It's a map that several have shown. It's of  
4 Southern California. It shows our -- our gas system, but  
5 also interspersed on top is all of the electric generation  
6 within Southern California. And as we look at this, you  
7 know, we see there's three primary pockets, one within the  
8 L.A. Basin Area, one in San Bernardino and Riverside Area,  
9 and then down into the San Diego Area.

10 We have about close to 3,800 miles of transmission  
11 lines that we provide service to our customers with. We  
12 have our large system that brings the gas into California.  
13 And then we have what's called the loop system which serves  
14 the Greater Los Angeles Area.

15 As has been mentioned previously, our pipeline  
16 capacity is about 3.8 billion cubic feet a day. Storage, if  
17 you include Aliso Canyon, is about 3.5 billion. These  
18 numbers are important as you look at some of our peaks that  
19 we've had over the past several years. As one example, our  
20 winter peak is around 5.5 billion cubic feet in one day.  
21 And so storage is a critical component of providing that. I  
22 believe Commissioner Picker mentioned earlier, as far as the  
23 loads we have on the winter, over 60 percent goes to our  
24 what we call core, which are the residents.

25 What we have seen is an interesting shift over

1 time. In the summer that percentage actually shifts to  
2 electric generation. So around 60 percent is actually used  
3 to serve electric generation during the summer.

4           Again, as has been mentioned, with the change to  
5 natural gas and as we've eliminated fuel switching, you  
6 know, to help our environment within Southern California,  
7 we've seen the demand on the system increase. But in  
8 particularly, over the last several years with our state's  
9 goals on renewables, and as we've seen more and more come  
10 online, the critical interdependency between gas and  
11 electricity just continues to grow, that we've seen more and  
12 more as far as the demand. And the thing that we're  
13 learning over time is that the daily usage is important, but  
14 what's actually more important is the hourly usage.

15           And as to give you an example really quickly, when  
16 we have a large peaker plant come on the system that is  
17 critical with our -- our electric system, if that plant  
18 burns 100 million cubic feet a day it doesn't look like it,  
19 you know, could be a huge impact, but if it only runs for  
20 three hours, actually what it only uses during the day is 12  
21 million. And so as people look at actual usage it could  
22 actually look small. But the reality is what we have to  
23 deal with is the hourly usage of it because, as has been  
24 mentioned, gas moves fairly slowly.

25           This also gets into what we call our core and non-

1 core customers. And it's been described, I won't go through  
2 it again as far as our curtailment procedures and the way  
3 they work, perhaps it's worth just the distinction of why  
4 there is a difference, and it's a very large difference in  
5 curtailing gas customers versus electric customers. It's  
6 not simply nor easy to do, but on the electric side it can  
7 be a disconnect of a switch. Generally for customers it may  
8 simply mean you have to reset clocks and things like that.

9           On the gas side it's vastly different. If your  
10 curtailment occurs there that means every meter at every  
11 home and every business must be closed. It must be assessed  
12 from a safety standpoint before we can restore gas to that.

13           And a good framework of reference on that is back  
14 to the Northridge earthquake when we had about 200,000 or so  
15 outages. It took us six weeks to restore them with help  
16 from several utilities outside of our territory.

17           What we face this summer is something that we've  
18 actually been dealing with over the last several years.  
19 We've been working very, very closely, and I think the  
20 relationship continues to improve with the California ISO  
21 and with DWP as far as the discussions that occur, in  
22 particularly at the operator-to-operator level daily, and  
23 hourly as needed, as we move forward.

24           If you can go to the next slide please?

25           So as -- what we've seen over the years is we

1 needed to change some of the tools that we had to better  
2 operate the system. And so to do this we have made a number  
3 of filings, both to give us some regulatory flexibility, as  
4 well as doing some physical enhancements to the system to  
5 try to continue to meet the growing needs on the system to  
6 help the nexus between gas the electric reliability.

7           If you can go to the next slide?

8           We have had curtailments in our system. I'll  
9 highlight 2011. That's the first curtailment we've called  
10 on our gas system in over 20 years. That one was a little  
11 different where we had freeze off of gas supplies in the  
12 Midwest and we had very little supply coming into  
13 California. Storage was able to provide that service. We  
14 have seen this on some occasions.

15           I think even as the modeling showed within the  
16 report, I'll highlight the June 30th of last year, that last  
17 of June, first of July where we had very sustained heat  
18 waves. And again, working in very, very close coordination  
19 with the ISO and with DWP, actually these curtailments, as  
20 we call them, helped shift loads around that ultimately  
21 prevented or helped prevent calling for electric curtailment  
22 or blackouts.

23           So again, this is something that we have been  
24 dealing with. It will be a challenge for us as we move into  
25 the summer. But for us, also, it's -- we're already looking

1 at this coming winter as we move forward.

2 Next slide.

3 As has been discussed, we did receive an order  
4 from DOGGR in December to maximize withdrawal. The  
5 Governor's Order came out in January. In a lot of  
6 discussion with the Public Utilities Commission during  
7 January it was very highlighted, the concern, I think both  
8 to us and to them as far as the reliability for the rest of  
9 the winter, as well as the upcoming reliability concerns in  
10 the summer and following winter. And shortly after we  
11 received the order from the Public Utilities Commission to  
12 hold the inventory at no lower than 15, and to use it only  
13 as critically needed from a reliability standpoint. And I  
14 think that's truly one of the challenges we have right now  
15 is how to judiciously use the 15 in the next few months.

16 Next slide.

17 Now if I can shift forward of just where are now  
18 and as we move forward, in particular with Aliso?

19 We look at it as three work streams. We're  
20 participating and supporting as needed the root cause  
21 analysis that's being led by the Public Utilities  
22 Commission, as well as DOGGR. DOGGR has also issued the  
23 emergency regulations that apply to all of storage within  
24 California. We're in the process of implementing that, one  
25 we fully support as far as further enhancing the safety of

1 all the facilities.

2           And then the last is the comprehensive safety plan  
3 that is directly for Aliso Canyon. And if you go to the  
4 next slide, I'll spend a couple of minutes describing the  
5 process that we're making there.

6           On that, the DOGGR -- DOGGR, working again with  
7 National Labs, issued an order as far as the type of  
8 procedures they wanted to see to ensure the integrity of all  
9 114 active wells there. That is something that we have  
10 begun working on. We look at it as actually three phases.  
11 Phase 1 is to do the first two diagnostic tests which we  
12 have to do on all the wells, and we're over halfway done  
13 with that at this time.

14           From that then, for each well we look at a process  
15 of either putting a rig on it and conducting the four  
16 remaining very detailed comprehensive diagnostics, or we put  
17 a plug in it and fill it full of fluid and we temporarily  
18 suspend it. That procedure isolates the well, creates  
19 another safety barrier for it, and essentially takes it out  
20 of service until such time as we can bring a rig on the well  
21 and complete the full diagnostics.

22           I will tell you, from my position and for me  
23 personally I will not give this field to DOGGR to look at  
24 and certify until I'm absolutely satisfied that every one of  
25 these steps have been done for every well up there.

1           The last step then, once that is done, is we will  
2 turn to DOGGR for their final review and certification,  
3 working with the other agencies, as needed, before injection  
4 recommences.

5           One interesting challenge that we do have with  
6 this process is as we start plugging the wells to  
7 ultimately, again, turn the field over for review and  
8 certification, as we put plugs in the wells it actually  
9 takes those wells out of service. And so the available --  
10 the availability of withdrawal from the field or the rate  
11 that can come from the field declines. This is a fairly  
12 complex calculation that we're working with the various  
13 agencies on as far as what -- what is that right number?  
14 I'm not sure there's a right number, but what is the optimum  
15 number that we want to have available for injection, but  
16 also that we have available for withdrawal in particular to  
17 help us in the coming months of summer.

18           Our eyes are already on the winter, as well, as  
19 far as what do we need from a reliability standpoint to  
20 protect all our customers as we move into the winter?

21           Next slide.

22           So to summarize, again, we -- we strive to provide  
23 reliable service. We will provide safe service, but we  
24 strive for reliable service for all of our customers. Our  
25 obligation is to serve the core. And hopefully the

1 description, again around curtailments and the safety issues  
2 around curtailments with the core, can help some understand  
3 that a little bit better.

4           And again, from the field's perspective, we're  
5 going to continue working on this as efficiently as we can,  
6 but we're only going to do it safely. This is not a mad  
7 rush for us. We're going to get it done, again, as  
8 efficiently as we can. But ultimately we really want to  
9 make sure that all the wells have been thoroughly assessed  
10 to ensure their safety and integrity as we move forward with  
11 the facility. Thank you.

12           CHAIRMAN WEISENMILLER: Thank you.

13           Stu, go ahead.

14           MR. HEMPHILL: So I'm Stu Hemphill. I'm with  
15 Southern California Edison, one of -- one of the larger  
16 electric utilities in Southern California. I did want to  
17 say I appreciate the efforts of the agencies getting  
18 together to understand the magnitude of the challenges  
19 associated with Aliso Canyon. You've done a remarkable job.  
20 You developed the reliability action plan, and that's --  
21 that's the very first step towards mitigation. So let me  
22 first say thank you to you for what you've already done.

23           Southern California Edison's primary concern is  
24 the safe and reliable operation of the natural gas and  
25 electric grid systems in Southern California. That's what

1 we do. And we are deeply concerned about the agency's  
2 findings that the natural gas shortages could result in  
3 power outages, that it could impact millions of electricity  
4 customers for up to 32 days over the next 12 months, 14 of  
5 which are in the summer. That's -- that's a really big  
6 wake-up call, and that's something that we all need to take  
7 very seriously.

8           You can be sure that Southern California Edison  
9 will do all it can to prepare for that, and we're doing --  
10 we're beginning that already. I think Ed Randolph earlier  
11 gave a summary of some of the proposals that were going  
12 forward. Demand response and energy efficiency, of course,  
13 are a very core part of what we're doing. We have a 1,100  
14 megawatt demand response program. And not only -- we're  
15 going to take a look at what we can do to even get more out  
16 of that demand response program. So we do plan to expand  
17 our programs.

18           And we're also exploring contracts. As you all  
19 know, I think, 85 percent of the power that we deliver for  
20 our customers comes from contracts; 15 percent is utility-  
21 owned. So we have the ability to seek contracts from --  
22 from sources outside, not being served by Southern  
23 California, as a way of helping to supplement the generation  
24 portfolio.

25           So that -- those are the two main areas. I going

1 to keep this very brief so we can get back on time. I -- we  
2 believe it's essential that Southern California Gas have the  
3 ability to withdraw gas this summer to -- in the event that  
4 we're getting close to having power outages. That's  
5 something I think that was identified in the report. And I  
6 just want to make sure that that's an available option. As  
7 you all know, power outages also present safety concerns.  
8 And that's very important for us to focus on, particularly  
9 in the summer.

10           After the summer we have the winter. And that is  
11 something that we also need to be prepared for. And as your  
12 report identifies, we have significant challenges for the  
13 winter for both the core and the non-core customers because  
14 of the limited supply.

15           So SCE agrees with the public officials who spoke  
16 earlier regarding the importance of inspections of the  
17 remaining 114 wells. California cannot afford to return any  
18 wells if they pose a safety risk of any kind to the public.

19           We request that the responsible agencies act with  
20 urgency to complete these very important inspections.  
21 Agencies should then revisit the amount of storage necessary  
22 to ensure reliable natural gas and electric service. We owe  
23 it to the citizens of California to provide safe, reliable  
24 and affordable and clean energy. And we at Southern  
25 California Edison are committed to do our very best part to

1 make that a reality. Thank you.

2 CHAIRMAN WEISENMILLER: Thank you.

3 MR. FLETCHER: Good afternoon. I'm Fred Fletcher,  
4 Assistant General Manager from Burbank Water and Power,  
5 representing Southern California Public Power Authority. We  
6 operate SCPPA's Magnolia Power Plant that provides power to  
7 both the CAISO and the LADWP balancing areas. We recognize  
8 that this has been a difficult time for everyone. Some of  
9 our employees even live in Porter Ranch and were displaced.  
10 We recognize that even greater challenges may lay ahead,  
11 challenges that will not only affect Porter Ranch, but  
12 everyone in Southern California.

13 With the release of the report this week we are  
14 now beginning to understand the effects of not having the  
15 storage facility in operation. We are 11 municipalities and  
16 1 irrigation district. The 11 of us also provide water to  
17 our citizens. We are all governed by city councils. We are  
18 each a vital part of our communities. Conservation of both  
19 water and electricity has been part of our culture since the  
20 energy crisis of the 1970s. Clean air and clean water are  
21 vital to the quality of life in our communities.

22 The last time I faced a possible curtailment of  
23 natural gas that would have required curtailment of load was  
24 July 1989. Back then oil was an alternative fuel. At that  
25 time smog was so bad, Stage 3 alerts were routine. Today

1 our air is cleaner than what many thought it ever would be.

2 Our citizens want us to continue this process.

3 They want sustainable and reliable energy. I am confident

4 that we can achieve more in the next 15 years than many

5 think is possible, just like we've done in improving air

6 quality.

7 SCPPA is key in helping us municipals make these

8 kind of improvements possible. SCPPA allows us municipals

9 strategies that best fit our particular needs, yet by

10 working together enable us to do so economically. Four of

11 our member cities receive Smart Grid Grants and installed

12 important technology associated with the merging electric

13 delivery systems. We've been able to improve our

14 reliability while increasing our use of renewable energy.

15 Our citizens want more renewable energy, which means less

16 coal and natural gas. Our exit of coal has been approved.

17 Our use of natural gas at our utility is only for that which

18 is absolutely required for renewables.

19 But this Aliso Canyon is of grave concern for all

20 of us. This facility must be safely returned to service.

21 We support the call for improved safety measures with

22 associated quality control and assurance. Natural gas wells

23 and natural gas storage technology is a mature technology

24 with a proven track record. This is a conventional oil and

25 natural gas field. It's not one of the ones that have used

1 fracking. It's not even a particularly dense field. It's a  
2 conventional-conventional field.

3 We at SCPPA believe that the storage field needs  
4 to be tested, inspected and returned to service with a  
5 clearly defined plan for maintenance and operations that's  
6 based on the best practices that have been proven in the  
7 industry. Again, this supports the measures proposed and  
8 not a continuation of the past practices. We want to avoid  
9 outages. I cannot overstate how much we want to avoid power  
10 outage.

11 Some question, how do we know there will even be  
12 outages?

13 We know this because the Gas Company has told us  
14 how high and low operational flow orders will be issued and  
15 how those orders will be incorporated in outage  
16 curtailments. We'll be called and we'll be directed to  
17 reduce generation by 30 or 40 percent. But our plant if  
18 reduced by even 30 percent cannot go that low. We cannot  
19 reduce the load that level, so it means it has to be turned  
20 off. So the Gas Company has said, well, if that's the case,  
21 notify us, let us know that and we'll see whether we can  
22 reduce your curtailment. But it's their decision. And if  
23 their system has severe flow problems, they must enforce the  
24 curtailment and we'll have to turn the plant off.

25 We would then be deficient in supply. We would

1 notify Los Angeles Department of Water and Power. And we  
2 would take the actions required, either to secure  
3 replacement power or curtail load.

4           There are a number of measures we can take. The  
5 listed 18 measures are ballot measures and important. But  
6 on a very, very, very hot day these measures may be  
7 insufficient. On a hot day, for example, two-thirds of our  
8 required load power is coming from local natural gas. Under  
9 these hot peak load conditions all other SCPPA cities are  
10 facing those same demand for power and our comparable  
11 dependencies on local natural gas. The magnitude of the  
12 reductions that would be needed could well exceed these  
13 other options.

14           In addition, Riverside and Pasadena have even more  
15 certain outages when curtailments are enacted. Both cities  
16 require natural gas generation to serve a significant number  
17 of customers. As the distribution system is not capable of  
18 moving sufficient power from the interconnection with the  
19 CAISO, both cities would expect outages on the order of  
20 20,000 customers. Further, these outages could last for  
21 hours, even into the night.

22           We have more work to understand how the loss of  
23 in-basin generation will adversely affect electricity  
24 transmission. We have a lot of work to do to enact load-  
25 shedding plans that are sufficient to address the loss of

1 the Magnolia Plant at the same time other plants are down.

2 The hospital in Burbank has already contacted us.

3 We will need to work with all of our customers to prepare  
4 them for these outages during these hottest times of the  
5 year. There are public health and safety issues associated  
6 hospitals, traffic management, and emergency response. The  
7 police have raised issues with public safety that might  
8 impact crime rates. Instead of principally seeking to  
9 prevent outages, we are now seeking to best manage outages.

10 With Aliso Canyon in service, reliability is met. With  
11 Aliso Canyon out of service, reliability is not secured.

12 Times like this can bring out the worst in people,  
13 but times like this can also bring out the best in people.  
14 By being proactive and preparing we can best bring out the  
15 best. Thank you.

16 CHAIRMAN WEISENMILLER: Thank you.

17 Emily?

18 MS. SHULTS: Good afternoon. My name is Emily  
19 Shults and I'm the Vice President of Electric and Fuel  
20 Procurement for San Diego Gas and Electric. I lead the team  
21 responsible for acquiring energy and capacity to our  
22 customers. This includes the procurement of natural gas for  
23 electric generation, and therefore we are a market  
24 participant and are treated like all other electric  
25 suppliers.

1           Let me begin by applauding the CEC, the CPUC, the  
2 California ISO, and LADWP for their leadership in developing  
3 the Action Plan and the technical report that was issued  
4 earlier this week, and for hosting this open dialogue.

5           I also would like to thank the other state and  
6 local agencies represented here today, along with members of  
7 the Federal Energy Regulatory Commission, the Department of  
8 Energy, the Western Electricity Coordinating Council, and  
9 energy companies similar to SDG&E who are here not only to  
10 share their concerns, but also to find solutions to the  
11 situation we may all -- we may all find ourselves in this  
12 summer, and possibly into the winter.

13           The participation by here -- everyone here today  
14 certainly shows not only the seriousness of the situation,  
15 but also the importance of coordinating where and when we  
16 are able to. SDG&E is grateful for the opportunity to be  
17 here to represent the interest of our customers.

18           I would like to take a few minutes of your time to  
19 highlight our concerns about our ability to delivery  
20 reliable power to our customers in the wake of the action  
21 report findings, the steps we are taking to ensure  
22 reliability and effective communication to our customers,  
23 and the careful coordination we will need to have with many  
24 of the agencies that are here today, particularly the  
25 California ISO.

1 First I'll begin by addressing reliability.

2 At SDG&E, providing safe and reliable electric  
3 service to our customers in our top priority and is what our  
4 customers deserve. Reliable gas supply is essential to  
5 reliable electric supply and it impacts the delivery of  
6 energy to our customers. While the Joint Agency Technical  
7 Report and Action Plan are focused on reliability impacts in  
8 the L.A. Basin, as you've heard, the interconnection and  
9 interdependencies of the gas and power grid in California  
10 means that SDG&E customers may be called upon to conserve if  
11 there are constraints on the system.

12 SDG&E's Electric and Fuel Procurement Group, my  
13 team, is a non-core gas customer. Non-core gas customers  
14 consist mainly of large industrial and commercial customers,  
15 refineries, plus electric generation. SDG&E doesn't have  
16 much large industry or refineries in San Diego, so the  
17 largest user of non-core natural gas in our service  
18 territory is electric generation.

19 While SDG&E leads the industry in the -- in the  
20 delivery of clean renewable energy, roughly 33 percent in  
21 2015, natural gas supply is still critical to continue  
22 electric reliability. Of serious concern to SDG&E are the  
23 findings in the -- in the technical report regarding energy  
24 deliveries to our customers possibly being interrupted  
25 should there be a gas curtailment to non-core or electric-

1 generation gas supply. Simply stated, it says that a choice  
2 may have to be made between letting more gas stay within the  
3 L.A. Basin to preserve operating pressures versus sending  
4 natural gas south to San Diego.

5           As you've heard several times already today, the  
6 California ISO ensures both electric system stability and  
7 electric supply. And SDG&E has been and will continue to be  
8 responsive to any directives that we may receive from the  
9 California ISO. We believe the CAISO will make every effort  
10 to balance reliability concerns and operate resources in a  
11 cost effective manner. However, based on the current market  
12 rules and mechanisms that are in place to ensure reliability  
13 in the L.A. Basin, we must share our concerns that being  
14 responsive to this directive could create the potential for  
15 increased costs to our customers.

16           The second item I would like to cover briefly is  
17 what SDG&E is doing to ensure reliability and effective  
18 communication to our customers. The company works hard all  
19 year long to ensure that energy supplies meet our customers'  
20 needs, and this year is absolutely no exception. We also  
21 are continuously improving our reliable power grid,  
22 something that we take very seriously. And the efforts that  
23 we have made over the years have awarded us the distinction  
24 of being named the most reliable utility in the West for ten  
25 years. We don't take this for granted and we are working

1 every day so that we can be afforded this distinction for  
2 another decade.

3           We are making plans now to increase communication  
4 to our customers about conservation measures and increased  
5 enrollment in our Reduce Your Use Programs. Our customers  
6 have done a fantastic job in the past to both reduce their  
7 energy use and act upon any CAISO Flex Alerts. Much work  
8 will be completed in the coming months to ensure effective  
9 widespread communication to garner the necessary results.

10           And last, I would like to discuss why careful  
11 coordination and collaboration will be particularly  
12 important for the benefit of our customers. With as many as  
13 14 days this summer that could limit electricity service to  
14 consumers in Southern Orange County and San Diego it will be  
15 critical that we continue to remain closely coordinated with  
16 the California ISO to minimize impacts and effectively  
17 communicate to our customers. SDG&E is engaged in the  
18 current CAISO stakeholder process that is focused on  
19 electric and gas coordination and discussing the need to  
20 address existing market mechanisms swiftly to mitigate the  
21 risk of curtailment.

22           Increased and continued coordination between the  
23 CAISO and Southern California Gas Company will be essential  
24 to manage the potential for gas curtailments with timely  
25 notification and transparency to all market participants,

1 like SDG&E. We have good history of collaboration and we  
2 will do our part to avoid interruptions and keep our  
3 customers lives powered with clean reliable energy.

4 Thank you for your time.

5 CHAIRMAN WEISENMILLER: Thank you.

6 Mr. Foster, you're a substitute.

7 MR. FOSTER: Thank you.

8 CHAIRMAN WEISENMILLER: You're welcome.

9 MR. FOSTER: Thank you. Thank you for the  
10 opportunity to be here. My name is Tony Foster. I'm the  
11 Business Operations Manager for Long Beach Gas and Oil. And  
12 what I'm hoping to do this afternoon is to share a local  
13 municipal gas utilities perspective on the Aliso Canyon  
14 matter.

15 So we have the slide deck brought up.

16 I think the best way to approach this is to give a  
17 little background about Long Beach Gas and Oil. And all  
18 these facts, while it just seems like random statistics,  
19 will play into our final perspective on the matter.

20 So Long Beach Gas and Oil was established in 1924.  
21 It was a municipal utility founded by a bond measure for the  
22 citizens of Long Beach to have better control over their gas  
23 supply. It's the fourth largest municipal gas utility in  
24 the U.S. It serves residents and businesses of Long Beach,  
25 as well as Signal Hill and several neighboring cities and

1 jurisdictions. We -- this will become important because  
2 this is really a bedroom community that we're talking about.  
3 It's not a large base coverage. It's primarily homes and  
4 small businesses. We delivery between 8 and 9 BCF annually,  
5 which is not small but not very sizeable compared to some of  
6 our neighboring utilities in this forum.

7 Two slides in now. Thank you.

8 We serve about 500,000 residents and businesses.  
9 And this represents approximately 150,000 accounts.

10 Now here's where we get into some important  
11 information. Ninety-six percent of our accounts are  
12 residential accounts, Ma and Pa Smith. Of these, 53 percent  
13 of all gas supplied is to our residential customers. When  
14 we look at our core customer load, residential, core  
15 commercial and core CNG, this represents 78 percent of our  
16 total load.

17 Next slide.

18 Long Beach is also unique in that we have entered  
19 into a very large prepay agreement. It's a 30-year prepay  
20 which supplies 80 percent of our gas. We do not purchase  
21 gas from So Cal. We purchase it through a prepaid  
22 agreement. And the differential we purchase on the spot  
23 market, with a small percentage coming from local producers  
24 due to our oil operations in the city. This plays into the  
25 larger scheme of things because when we get into discussions

1 of daily balancing we have to balance the load input into  
2 our system from the local producers. And when that's  
3 impacted we really being to impact oil operations, which is  
4 a large source of revenue for both the state and the city  
5 alike.

6           When we have this situation we don't have many  
7 options to dispose or divert our prepaid gas because this  
8 gas was purchased by tax-exempt bonds and we must find  
9 qualified users to use this excess gas.

10           Next slide.

11           For our locally produced gas, it's well known that  
12 Long Beach is a trustee for the state's local oil  
13 operations. And the produced gas from those operations is  
14 delivered into our system. As I alluded to earlier, this  
15 represents about five percent of our total load is supplied  
16 by these local oil producers. And this represents up to 10  
17 million cubic feet per day which can be delivered into our  
18 system.

19           So how does this all come together for the effect  
20 of Aliso on us?

21           Long Beach is a large customer of SoCalGas, but  
22 our agreement to use their pipelines to deliver gas into our  
23 system is as a wholesale customer with core requirements.  
24 What this really means is that we have core parity with the  
25 SoCalGas utility. So when we get into the curtailment order

1 and the possibility of shutting own gas supply, it's  
2 important to know that our customer load is primarily  
3 residential. And curtailments that would reach down to  
4 residential could have a very big impact on us. If we're  
5 thought of as a non-core user, that goes against our  
6 understanding of the agreement with SoCalGas because we  
7 believe the contracts and the rules show that we have core  
8 parity with the So Cal utility.

9           Long Beach, even though we have three electric  
10 generation facilities in our city jurisdiction, we do not  
11 supply any of those gas-fired plants. We have a variety of  
12 lease and franchise agreements which supply these plants.  
13 So again, this goes back to our belief of core parity with  
14 So Cal and the very firm belief that we have that should  
15 curtailments occur, while that might have electrical outages  
16 in the city, which we are hoping to work with all of our  
17 sister utilities and the Commission Members here, we have  
18 our understanding that our primary load should be secure  
19 under the existing conditions.

20           And that concludes my report.

21           CHAIRMAN WEISENMILLER: Thank you.

22           I was going to ask Bret one follow-up question.  
23 So in terms of -- who are your wholesale customers at this  
24 point?

25           MR. LANE: It would be Long Beach and SDG&E.

1 CHAIRMAN WEISENMILLER: And is Vernon or just --

2 MR. LANE: Vernon, yes.

3 CHAIRMAN WEISENMILLER: Yeah. It's those three?

4 MR. LANE: Yes.

5 CHAIRMAN WEISENMILLER: Okay. And in terms of --  
6 at this point what's your best estimate on when you might be  
7 in a position to start reinjection?

8 MR. LANE: We're -- we're looking at late summer.  
9 We're having a lot of discussions internally, as well as  
10 with DOGGR, of if we can narrow that down to sometime in the  
11 later August time frame, that's what we're tentatively  
12 looking at right now as we do the iterations as far as  
13 trying to, in the most efficient way, think about which  
14 wells to try to bring back on as we plug the rest of them.

15 CHAIRMAN WEISENMILLER: Now --

16 MR. LANE: So that's -- that's what we're looking  
17 at right now.

18 CHAIRMAN WEISENMILLER: What -- what would -- what  
19 is the likely range of wells you'll bring back?

20 MR. LANE: That's -- that's part of the math that  
21 we're doing now as far as, you know, is it -- would 10 be  
22 sufficient or do we really need 40 available --

23 CHAIRMAN WEISENMILLER: Okay.

24 MR. LANE: -- to go on injection. The bigger  
25 issue is the availability for withdrawal --

1 CHAIRMAN WEISENMILLER: Right.

2 MR. LANE: -- because the wells themselves, you  
3 can get much more -- again, from an injection side, the mass  
4 injection is -- availability is 400. And it does not take  
5 as many wells to be able to sustain that. It's the issue of  
6 withdrawal. And especially if the lower inventory -- and as  
7 a reminder, the other safety measure that we have, not only  
8 the inspections, now going forward for Aliso, they will only  
9 flow through the tubing.

10 CHAIRMAN WEISENMILLER: I see.

11 MR. LANE: So now there's an extra barrier of  
12 safety around it, as well. We're still doing a lot of the  
13 hydraulic modeling on that, as well, to best understand all  
14 wells flowing tubing only, what's the impact of that?

15 PRESIDENT PICKER: I've also been very interested  
16 in learning what the changes in the standards that DOGGR is  
17 going to enforce, how that's going to affect the operation  
18 of the wells, the -- the question of how many wells are left  
19 that are usable at the end of your -- your search, and then  
20 how we're going to operate the gas field?

21 So how do you begin to think about those  
22 optimization questions? And what will you be presenting to  
23 us in terms of an operation plan? Are you starting to  
24 assembly different scenarios, and can you bring them to us  
25 so we can start to -- to also understand those questions so

1 that we can think about longer-term reliability issues?

2 MR. LANE: Yes, exactly. That's the work we're  
3 doing now that we'll -- we'll bring forward to you and other  
4 agencies, as needed. Because as -- the way I look at  
5 it's -- one is short term. Again, nothing gets short-  
6 circuited as far as the safety review. But how can we most  
7 efficiently bring wells back on and have them available?  
8 But then as we look down the road there's still an  
9 opportunity to actually go back into the well and put larger  
10 sized tubing into the well. We may not have it initially.  
11 But we could come back and upsize it which gives you a  
12 greater flow area, which is a great withdrawal rate from the  
13 well.

14 PRESIDENT PICKER: So I think I have to speak to  
15 you both as a member of this Reliability Task Force, and  
16 then eventually as the President of the PUC. And so I'm  
17 just going to address that here.

18 I think we, as an entity, need to really have some  
19 engaging with you to look through all those scenarios so  
20 that all these other parties can also begin to do some of  
21 their long-term planning. There's going to be cost issues.  
22 There's going to be questions of what kind of tariffs do we  
23 design and take to FERC and how do we explain it to them, so  
24 I hope that you'll do that. Then, of course, we'll have to  
25 factor that in at the PUC into our rate making at some

1 point.

2 CHAIRMAN WEISENMILLER: When would you anticipate  
3 filing a plan or plans with the PUC?

4 MR. LANE: Well, the discussions, again, I'm  
5 hoping, you know, starting now or, you know, very soon after  
6 now that we are sitting down with the Commission staff and  
7 having those discussions, along with DOGGR, as far as  
8 what -- what they look like from both perspectives to how to  
9 best optimize, especially again through the summer because  
10 we do need to have a better definition of how we use that 15  
11 BCF that's in the ground, but also understanding what's  
12 truly available. It's one thing to have the volume there,  
13 it's just how much can you actually pull out on a daily  
14 basis. And that's the iterations we want to go through,  
15 have various scenarios that we can all sit down and discuss.

16 CHAIRMAN WEISENMILLER: What about, in terms of  
17 the curtailment, there's obviously a history of PUC  
18 decisions and tariffs on the -- on the curtailment  
19 sequences. Do any of those need to be clarified for this  
20 summer?

21 MR. LANE: Well, we do have an active proceeding  
22 on changes there. And so with the ex parte rules, that's  
23 probably where I should stop.

24 CHAIRMAN WEISENMILLER: Great.

25 Mohsen?

1 MR. NAZEMI: Yeah. Just a couple of quick  
2 questions for Bret.

3 As far as the reinjection, I think our agency has  
4 started to do the air monitoring in Porter Ranch community,  
5 the first agency. And we've been pretty much engaged. I  
6 have staff there every day, including weekends and holidays.  
7 And we're doing continuous monitoring for methane and  
8 benzene and other.

9 My question is when DOGGR completes the testing,  
10 would they be testing at existing capacity? As you may  
11 know, the pressure when the leak started was over 3,000 PSI,  
12 now it's about 700. And what our concerns are -- and we've  
13 committed to stay and continuously monitoring until  
14 everything is settled. But our concern is that if the  
15 pressure starts to -- if the testing is done at the present  
16 condition and then the pressure in the reservoir builds up,  
17 would there be additional leaks that wasn't testing under  
18 existing pressure?

19 And then the second question, if you have time, we  
20 heard from -- from a gentleman about Long Beach. There are  
21 a number of oil and gas production sites throughout the  
22 region, L.A. County in particular, that a lot of them don't  
23 actually have good use for their gas and they flare the gas.  
24 And I was wondering if there is any potential as a  
25 mitigation measure to look at during these state of

1 emergency or curtailment process? Maybe you can allow them  
2 to inject into the pipeline, and would that help at all?

3 MR. LANE: Well, we're -- we obviously want to  
4 participate in any way we can as far as to try to add that  
5 kind of load, if it's feasible. The one thing we have to  
6 keep in mind is the quality of the gas from a safety  
7 integrity standpoint of how it exists. And that's something  
8 that we work with our -- with the local suppliers on quite a  
9 bit. And again, I think it's an option that we can continue  
10 to pursue.

11 As far as your first question, how we're looking  
12 at our integrity program and how we've been looking at it is  
13 very similar to what we've done with our pipeline integrity  
14 program. And the tests that DOGGR has put forward, with the  
15 help from the National Labs, I think looks at it that way as  
16 far as the -- the thickness of the steel that's in the  
17 ground, its ability to withstand certain pressures that far  
18 exceed even the highest pressure the field would ever see.

19 And so again, from a stress perspective on that  
20 pipe, it's being looked at it in very similar ways of how we  
21 in the industry look at our pipelines. And if we don't see  
22 that it has that type of -- of, one example only is  
23 thickness, that would indicate how well it can handle that  
24 pressure, then that well will -- will end up being plugged  
25 and then permanently abandoned, and it will be taken out of

1 service.

2           So I think of the robustness of the program that's  
3 been developed and the critical eye that will be looked at  
4 for each well, that it -- the design of the wells that are  
5 left in service will be able to, with a great safety factor,  
6 meet the pressures that it would see.

7           MR. NAZEMI: Thank you.

8           CHAIRMAN WEISENMILLER: Marcie?

9           MS. EDWARDS: Thank you, Mr. Chair. I have a  
10 brief comment, and then a question for Mr. Lane.

11           The comment is I'm perfectly prepared to stipulate  
12 to this significant ramifications of doing gas curtailments,  
13 and I'm very sensitive to that. I would caution, however,  
14 about characterizing electric outages as an exercise in  
15 resetting clocks. There's certainly far more to it than  
16 that.

17           Secondly, you emphasized the criticality of the  
18 impacts on more of an hourly basis. And I definitely agree  
19 with you there. But we have heard to some extent  
20 anecdotally that the market participation rules are standing  
21 the way of sharing greater incremental information on both  
22 planned outages and hourly implications with the two  
23 agencies who are charged, basically, with keeping the  
24 systems in balance.

25           Do you have any suggestions or recommendations

1 where we could facilitate greater information sharing in  
2 those areas?

3 MR. LANE: Well, it -- I'll address, I think, two  
4 points there, if I can.

5 As far as the first one, I apologize. I stand  
6 appropriately reprimanded because I did not mean to make  
7 light of that at all. I know how serious it is.

8 On the second aspect, again, with the ISO we  
9 entered into a nondisclosure agreement.

10 MS. EDWARDS: Did LADWP, as well?

11 MR. LANE: And we recently finished that which I  
12 think will allow us to have a much more open flow of  
13 information with both agencies. And it's something I know  
14 from our side we need to continue to work on to continue to  
15 improve.

16 MS. EDWARDS: I look forward to that. Thank you,  
17 sir.

18 CHAIRMAN WEISENMILLER: Mike?

19 COMMISSIONER FLORIO: Yes, a question for Ms.  
20 Shults. While we're in this difficult period is there any  
21 potential for SDG&E to acquire additional gas from Mexico  
22 through Otay Mesa?

23 MS. SHULTS: So at this point I can't specifically  
24 address that. What I can tell you is that our leadership  
25 team, as well as our team, are looking at all options to

1 help ensure that we can maintain the -- the gas reliability  
2 in -- on the southern system. So I can't specifically  
3 address that, but we are looking at all options.

4 CHAIRMAN WEISENMILLER: Any other questions?  
5 Heather, do you want to make an announcement  
6 please?

7 MS. RAITT: Thanks. I have a couple of  
8 announcements.

9 So we're going to get ready to take our break.  
10 And I just wanted to ask the folks on the phone and WebEx to  
11 please stay on the line. Because if you want to make  
12 comments our staff will be contacting you, and it's important  
13 that we reach you and confirm that you'd like to make  
14 comments.

15 Also for the folks in the room, the Marriott  
16 restaurant is open and available to do quick orders. So if  
17 you wanted to get some food there, it's down the curved  
18 hall. And then when you get to the lobby, just turn left  
19 and keep going.

20 And third, we had some sound glitches during the  
21 live streaming. But we've confirmed that the recorded  
22 version is fine, and that will be posted early next week.

23 And then finally, for our last panel, I request  
24 that the speakers come back five minutes early. And then  
25 for everybody else, return promptly at -- we'll resume at

1 6:00 please.

2 CHAIRMAN WEISENMILLER: So we're adjourned until  
3 6:00.

4 (Off the record at 5:07 p.m.)

5 (On the record at 6:05 p.m.)

6 CHAIRMAN WEISENMILLER: Welcome. Let's start the  
7 last panel.

8 I'll note that Rod Cameron of Long Beach is sick  
9 tonight, so he's not going to be here. But the Chamber will  
10 cover part of that. Thank you.

11 So, Alex?

12 MR. MORRIS: Hi. I'm Alex Morris with the  
13 California Energy Storage Alliance. And I wanted to talk  
14 with you all a bit about the views from the energy storage  
15 community. And I know we've used the word storage ad  
16 nauseam today. So when I refer to storage, typically it's  
17 from the electricity side. And you can think of batteries.  
18 And so we'll get the slides up.

19 CESA, for those of you who are not familiar with  
20 us, represents 65 or so energy storage companies, really  
21 across the whole spectrum of energy storage. We have  
22 project developers. We have manufacturers. We have a whole  
23 suite of different technologies. And we try to -- you know,  
24 one of our main missions is to help get energy storage as  
25 part of the mainstream toolkit for California. And one of

1 the structures we pursue is so that, you know, we want rules  
2 that allow them a fair chance to compete and to get fairly  
3 valued, and then we, you know, we expect that they're going  
4 to fight it out and hopefully win.

5           So part of our effort today here was a joint  
6 effort with CESA, and also the Large Scale Solar  
7 Association, and the Solar Energy Industry Association, so  
8 CESA, LSA and SEIA. And we got together to brainstorm some  
9 ideas of how we could help. We understand this is a big  
10 challenge and we thought we could try to be proactive and  
11 share some ideas. This was before the recent report came  
12 out, so I think some of these ideas may be a bit  
13 duplicative. But what I was going to focus on today is the  
14 storage piece of it.

15           And while we're still a nascent and evolving  
16 industry, we'd like to play a role. And I've been pushing  
17 hard on the CESA members to try and provide quantifiable  
18 information to you all about what they can do by summer and  
19 what they can do by winter.

20           CHAIRMAN WEISENMILLER: It turns out that they  
21 don't have your presentation up yet but --

22           MR. MORRIS: Okay.

23           CHAIRMAN WEISENMILLER: So why don't we just move  
24 over one, and we'll come back to you last.

25           MR. MORRIS: No problem.

1           CHAIRMAN WEISENMILLER:   Okay.

2           MR. TOEBBEN:   Good afternoon.   My name is Gary  
3 Toebben.   I'm President of the Los Angeles Area Chamber of  
4 Commerce.

5           Well, and as you've already heard so many times  
6 today, Aliso Canyon has a direct impact on electrical grid  
7 reliability in our region.   Much of the electricity consumed  
8 by Southern Californians is produced by power plants fueled  
9 by natural gas, and Aliso Canyon is a direct source of  
10 energy for many of those power plants.   Today, natural gas  
11 accounts for more than half of all the energy used in homes  
12 and businesses in Southern California.   And because  
13 California imports most of its natural gas via interstate  
14 pipelines, it's essential that we have regional storage  
15 facilities like Aliso Canyon.

16           Reliable electrical service for the businesses I  
17 represent, that's 235,000 businesses in Los Angeles County,  
18 is crucial.   In the City of Los Angeles and much of Southern  
19 California that reliability is based on the flexibility  
20 by -- of natural gas storage in Aliso Canyon.   You all know  
21 that's been the case for decades.   But since California  
22 placed a greater emphasis on renewable energy, natural gas  
23 from Aliso Canyon is one of the major sources of energy to  
24 fill the gaps when the wind doesn't blow and the sun doesn't  
25 shine.

1           A recent report by Beacon Economics found that the  
2 loss of revenue a business suffers from a blackout, that's  
3 all businesses, average \$17,000 to \$20,000 per hour. You  
4 know, blackouts are not just an inconvenience, they're a  
5 financial disaster. And when a restaurant doesn't have  
6 access to gas and electricity, cooks and servers don't work.  
7 When a manufacturer doesn't have power, it can't meet the  
8 schedule for the delivery of products that it has promised.  
9 And when the ships that call on our ports can't use cold  
10 ironing to reduce emissions, then neighbors and governments  
11 are both up in arms.

12           Because the Port of Long Beach and L.A. couldn't  
13 be here this evening, I want to mention how essential  
14 electrical reliability is to those ports in reducing  
15 emissions. Their green ports plans revolve around the  
16 ability to use electricity to stop emissions from these big  
17 ships that call on those ports.

18           The two messages that I bring from the business  
19 community in Los Angeles County are safety and urgency. We  
20 urge every organization that is represented here today to  
21 work together to safely expedite the restoration of all or  
22 parts of Aliso Canyon so that electrical and natural gas  
23 availability -- reliability is assure while the process  
24 continues on the inspection and certification of every well  
25 and the plugging of those wells that pose a risk. Dark

1 businesses and dark homes could be the unfortunate result if  
2 we do not do everything possible to safely restore the use  
3 of a large portion or all of Aliso Canyon.

4           Without the reliability that natural gas and Aliso  
5 Canyon provides to our electrical system, elected officials  
6 throughout the city and county of Los Angeles will be faced  
7 with armies of residents and businesses asking that their  
8 government protect their geographic area from rolling  
9 blackouts. We just all collectively pursue a path that's  
10 both safe and expeditious and work to avoid energy blackouts  
11 that could stall our economy and threaten our quality of  
12 life.

13           Thank you, Mr. Chairman.

14           CHAIRMAN WEISENMILLER: Thank you.

15           Please go next, Tim.

16           MR. O'CONNOR: Great. Thank you. My name is Tim  
17 O'Connor. I work for the Environmental Defense Fund where  
18 I'm our California Director in our Oil and Gas Program.

19           As the reliability analysis, the work plan, and  
20 many of the comments in this workshop have shown,  
21 California's natural gas utilization for power generation  
22 has digressed to a dependency. And that dependency has  
23 negative implications to the state's economy, to the public  
24 health, and to the environment. Not only do reliability  
25 issues affect people and businesses, the massive utilization

1 and lock-in of natural gas is occurring at the same time  
2 that the state is vigilantly developing plans to reduce  
3 long-term climate pollution across the state and meet  
4 reduction targets.

5           So there can be no doubt that the design and  
6 operation of our energy markets that result in that gas and  
7 that have created the conditions which require Aliso Canyon  
8 to remain open and operational or else, as we're hearing  
9 today, are taking us in the wrong direction. These markets  
10 continue to favor deployment of natural gas supported by  
11 natural gas storage at Aliso and others, instead of  
12 fostering competition in which natural gas and clean energy  
13 resources can compete against one another.

14           This is a fundamental problem facing California  
15 and an opportunity for Aliso Canyon to serve as a wake-up  
16 call for California. More specifically, Aliso Canyon  
17 provides a strong warning that natural gas is not the key to  
18 either deploying renewable energy and maintaining energy  
19 reliability, notwithstanding what some market participants  
20 would say. And, in fact, it is quite disconcerting to see  
21 that when agencies in California, like the Energy Commission  
22 in its recent IEPR scoping document, proposes to have  
23 wholesale changes -- holistic changes to the way we think  
24 about natural gas, oppositioned by gas companies as most  
25 recently as of March 4th of this year, once we started

1 realizing that there were some reliability issues, say on  
2 the record that there was absolutely no evidence that  
3 reliance on natural gas is problematic.

4           Well, natural gas is an important resource in our  
5 energy system. It's clear that in the context of our  
6 collective effort to deploy and meet energy goals we cannot  
7 and should not rely exclusively on natural gas  
8 infrastructure to provide the system balancing and  
9 reliability services and -- that are attendant to a more  
10 renewable energy grid. In fact, numerous studies suggest  
11 that system resource mixes that achieve reliability and the  
12 reduction based on AB 32 have to be provided by a  
13 combination of resources, including demand response, battery  
14 storage, dispatchable hydro made available by extending the  
15 CAISO energy imbalanced markets.

16           And so what does this reliable -- reliability  
17 incident from Aliso Canyon teach us?

18           It's because it is the result of systematic market  
19 issues that we are here and that in addition to laws and  
20 policies that require more clean energy, we need market  
21 design changes, and that those changes have huge  
22 implications on the mix of energy resources that we deploy  
23 and relative cost effectiveness and environmental  
24 attributes.

25           And so shifting the focus to the plan itself, at

1 its core there are some modest refinements to the electric  
2 market design that are included, including coordination  
3 between gas pipeline operators and electricity market  
4 participants. Notably, the plan also seeks to expand  
5 demand response. But while recognition of an enhanced  
6 reliability role for demand response is a good idea, it  
7 shouldn't happen only in response to a crisis. And we can't  
8 pretend that the resources are going to be fully utilized if  
9 we rely on the system that exists.

10 As such, there should be an immediate effort  
11 discussed in this plan, something which is lacking right  
12 now, to start the process of recognizing the value of  
13 reliability resources, like demand response and battery  
14 storage, within the CAISO wholesale market design. A market  
15 design that allows all viable resources to compete in and  
16 earn revenue from providing balancing and reliability  
17 services will not only facilitate market participation by a  
18 broader set of resources, it will have the effect of  
19 lowering greenhouse gas emissions in comparison to the  
20 excessive reliance on natural gas that we currently have.  
21 It will also generate new investments in innovation and  
22 emerging market solutions.

23 And so how can all of this be deployed  
24 immediately? Well, I have two suggestions.

25 First and foremost, the reliability assessment in

1 the plan is couched in terms of reduced gas volume  
2 availability and how that may result in reduced availability  
3 for electric generation. However, by conducting the  
4 analysis in this way, through the lens of gas availability  
5 instead of through the lens of the shortfall in electric  
6 generation expressed in megawatts, the report offers really  
7 little guidance or targets on the amount of energy that  
8 needs to be saved.

9           If this multi-agency effort wants to fully address  
10 reliability and generate new electric investments it should  
11 immediately conduct an additional analysis on the electric  
12 shortfall needed to be made up and propose market  
13 signatures, such as immediately allowing demand response  
14 providers short-term payment of whatever additional load  
15 curtailment they can provide up to the shortage that's  
16 identified. The de-ramp process demonstrates how successful  
17 these market tools can be, and California can and should do  
18 more in this regard.

19           Second, while the report and some of the  
20 presentations before you today talk about the value of  
21 doubling down on existing demand response and energy  
22 efficiency programs, the report makes little to no mention  
23 of time-of-use electricity rates. In a city like Los  
24 Angeles where 50 percent of the energy use comes from 4  
25 percent of the buildings, we need all options on the table,

1 including immediately consideration of new electricity rates  
2 and structures that reward energy users for shifting energy  
3 load.

4           And please, if I can make one parting point, I  
5 know that my time is up, it's this, if I'm correct, and I've  
6 spoken to a lot of people in the community about this plan,  
7 there's a lot of concern out there. And the concern is not  
8 just because there's reliability issues that are identified,  
9 it's because it's based on the status quo that got us here.  
10 The reliability response is based on the status quo, and  
11 that is indeed a problem. Better use of gas, inspecting the  
12 field, more energy efficiency, more demand response, these  
13 are all great. But this is all couched in the same  
14 framework that got us here. And we will face the same long-  
15 term limitations that got us here if this is what we follow.

16           And we realize that this is a short-term plan  
17 dealing with what is said to be a very short-term issue, and  
18 for that I am not surprised with how it came out, just like  
19 I'm not surprised that my cat is not a dog. But what I've  
20 seen is the dependency on natural gas, just like having too  
21 many cats, isn't a good thing.

22           So what we need in the short term is a plan that  
23 immediately starts us down a different road, down a  
24 different than how we got here, and it starts to fix the  
25 system that we have, while we're also addressing those

1 reliability issues. Thank you.

2 CHAIRMAN WEISENMILLER: Thank you.

3 Michael?

4 MR. SHAW: Thank you, Mr. President, Members of  
5 the Committee. Michael Shaw of the California Manufacturers  
6 and Technology Association. Appreciate the opportunity to  
7 come before you this evening now to talk about the  
8 importance of manufacturing and natural gas and electricity.

9 And I want to echo what -- what Mr. O'Connor just  
10 said. You know, the status quo is not good. We have a  
11 system that is very delicately balanced. Many of your  
12 agencies and your responsibilities are to keep that in  
13 balance. And I think you've done an admirable job on a  
14 number of fronts because, you know, the fact that we haven't  
15 been in this situation in some time, you know, is I think a  
16 testament to the work.

17 As far as -- as far as Aliso Canyon goes  
18 specifically, you know, certainly you can't -- you can't --  
19 it can't go without being said, you know, enough that safety  
20 is first. And we as manufacturers recognize that, even as  
21 we look at a very delicately balanced reliability picture  
22 down the road. But we also believe that safety and  
23 reliability are not mutually opposed to each other, that we  
24 can do these together. We want to encourage, you know, all  
25 of your efforts and appreciate what you've already done, as

1 well as SoCalGas, in restoring Aliso Canyon to operability,  
2 granted albeit in a limited fashion, but to do so in a  
3 timely manner because it has great important to  
4 manufacturers.

5           And manufacturing is very important to -- to the  
6 L.A. Region. Generally speaking, employers, private  
7 employers in general have about 5 million jobs here in the  
8 L.A. Basin, all of which are dependent in one way or another  
9 on electricity and natural gas.

10           Sixty percent of our transportation fuels, I  
11 believe it was mentioned earlier in the presentations, are  
12 produced in this region by refineries. Forty percent of the  
13 contained rice cargo that enters the United States comes  
14 through -- comes through the Ports of L.A. and Long Beach.  
15 Numerous other activities take place, from aerospace to  
16 technology to food processing and other activities, all of  
17 which are critical to our wellbeing and livelihood here in  
18 California, particularly in the L.A. Basin.

19           I have heard a lot of talk about electricity  
20 today. And granted, that is incredibly important to  
21 manufacturers as well. What I want to touch on, as well,  
22 and ensure it has equal footing here is natural gas as a  
23 productive use. It's not just for generating electricity.  
24 Numerous types of manufacturing utilize natural gas from  
25 refineries that utilize significant portions of natural gas,

1 as well as electricity, to produce those transportation  
2 fuels, specifically California's unique blend, for which if  
3 we had a disruption in production here because of  
4 curtailment or shutdown of some nature would -- would  
5 significantly impact our fuel market and fuel prices here in  
6 the state, as well as, you know, things such as medical  
7 gases necessary for our public healthcare system. In order  
8 to ensure that we have those we need to make sure that the  
9 system is balanced so that we're able to produce those, our  
10 members are able to produce those.

11 As mentioned, food processors, you know, need both  
12 the natural gas, as well as electricity, to ensure food  
13 safety standards. They often operate for short time frames  
14 in terms of the period of the year, but 24 hours a day. So  
15 it's very intensive work but it's done very -- in a short  
16 time frame in terms of the whole year.

17 I do want to talk on one particular point of the  
18 plan at this point we do have an issue with in particular.  
19 And just before I do that, acknowledge that many of the  
20 steps, you know, that were laid out in terms of mitigation  
21 measures take advantage of some of the existing tools that  
22 are in place to quickly address these issues, both in terms  
23 of balancing the system from a natural gas and electricity  
24 perspective, but also in terms of addressing Aliso Canyon  
25 specifically and getting that back up and running in a

1 timely manner.

2           But one of the particular issues that we have is  
3 the daily balancing rule that is currently proceeding under  
4 the PUC with SoCalGas. It's proposed as a temporary  
5 measure, but it does create significant challenges for  
6 manufacturers in this state. The proposed tolerances are  
7 extremely tight, and on a daily basis is likely impossible  
8 for many of our members to meet that due to the natural  
9 flexibility, planned, unplanned outages effecting their  
10 businesses.

11           A number of businesses have told us that their --  
12 one of their compliance strategies, if that rule is in  
13 place, is going to be to overbuy gas and burn off the  
14 excess. Now that certainly doesn't help them financial  
15 because they'll be hit with the excess gas costs on the  
16 front end. And on the back end they might be hit with air  
17 quality permit issues, as well as GHG compliance costs.  
18 So -- and I doesn't serve the overall system.

19           So the daily balancing rule, as it's written  
20 today, would create a significant cost burden on them and  
21 force them to consider, is the compliance penalty greater or  
22 is the -- the costs and the GHG compliance costs greater,  
23 and make a choice between those two. The 150 percent  
24 penalty, we believe, is excessive as well.

25           We appreciate the opportunity we've had to have

1 conversations with SoCalGas and other parties around this  
2 issue, and we'll continue to do so. We would encourage, you  
3 know, President Picker, as well, to, you know, move that  
4 along.

5           But I did also want to thank again, you know, the  
6 members here, you know, who participated in putting together  
7 this report and forming a strategy for dealing with Aliso  
8 Canyon.

9           And I did want to mention one other thing. Mr.  
10 O'Connor mentioned time-of-use rates. We think that that is  
11 a very intriguing possibility. Manufacturers may be able to  
12 play a significant role in helping California address those  
13 issues to be a good opportunity for use of the excess solar  
14 that's produced during certain times of the day at certain  
15 points in the year, and we're happy to do that. I've got  
16 some members who have told me that they choose not to run  
17 pieces of equipment during the middle of the day when we  
18 have the excess solar power because it -- because it  
19 triggers them into a higher rate band so that they then have  
20 the additional costs. They choose to run it at night  
21 instead.

22           I wanted to remind -- remind everyone, you know,  
23 manufacturing provides a significant number of good paying  
24 jobs in the state, high wages. We look forward to the  
25 outcome, you know, of this proceeding and other proceedings

1 related to that to help restore Aliso Canyon and ensure  
2 California energy reliability. Thank you.

3 CHAIRMAN WEISENMILLER: Thank you.

4 Alex, your deck is loaded now, so go ahead.

5 MR. MORRIS: Okay. Fantastic. Thanks. I'll jump  
6 right back into it.

7 But as I think about each one of the agency's  
8 organizations you represent I really do believe that the  
9 joint set of ideas from CESA, LAS and SEIA has something for  
10 every one of you, and I hope you'll have time to take a look  
11 at it.

12 A little bit about energy storage. You know, I'm  
13 going to walk you through some basics, then share how we  
14 think we can help. And I'll try to provide you with a few  
15 numbers from the storage community that would illustrate if  
16 we can make a meaningful difference, and then what it would  
17 take to do that. And then thanks, also, for having me here  
18 and for many of you who have sorted participated and engaged  
19 with the storage community so far.

20 If you're new to storage, know that energy  
21 storage, there's many types, there's many different  
22 technologies, there's many different business  
23 configurations. And it always seems to be more complicated  
24 than we'd prefer. There's third-party or utility-owned  
25 business models, and storage can play numerous roles on the

1 grid. It can help with ramping. It can provide voltage or  
2 VAR support. It can adjust customers' load profiles, et  
3 cetera. We'll see those come back as how it can help in  
4 basin. And we know that already some storage is deploying  
5 in the basin.

6           The way it works is, as we know, the market right  
7 now, it's really reliant on some incentive and long-term  
8 contracts to support the financing, so that's required. And  
9 then when I talk to our manufacturers they share that they  
10 can provide for the pipeline but they do need notice. And  
11 when I talk to the developers they say we can develop the  
12 projects but interconnections take time. So those are some  
13 of the basics.

14           If you'd go to the next slide?

15           This is, you know, a hokey picture that  
16 illustrates where and how storage can play a role, and I'll  
17 try to very briefly speak to it.

18           So we know that, you know, some of the challenges  
19 that have been expressed today have to do with the ramping  
20 electricity load, serving electricity through generators  
21 from -- that are gas fired, and we can help. Storage can be  
22 collocated with the power plant and it can help with ramping  
23 there. It can also sort of add and reduce or adjust the use  
24 of the transmission system and power flows, helping us to  
25 import more power under certain circumstances.

1           You can have energy storage sited at substations  
2 where it can feed or island in some ways, or at least limit  
3 the draw from the downstream feeders. You can also have  
4 distributed energy storage. When you aggregate it that can  
5 change the net load shapes in certain areas who aren't  
6 aggregate. And then it also has the ability to be  
7 dispatchable from the CAISO market. So there's all of the  
8 permutations for where and how storage can function in the  
9 basin. And since we know that it can be deployed and we're  
10 seeing it deployed, particularly in smaller installations  
11 behind customer meters, we think there's still some  
12 possibility there.

13           So what I -- we at CESA, we asked our members very  
14 cynically, what can you do? What is possible? How can we  
15 help with this problem? And we've put together some  
16 numbers. And I know, given the scale of the problem, they  
17 may seem modest. But we still think these will move us in  
18 the right direction and warrant consideration.

19           So we gave them the question: What can you do by  
20 August? And then we said, what can you do by December, and  
21 what would it take to get you there? And by August, through  
22 repurposing and through other sort of, I think, larger  
23 lifts, storage could be deployed, probably 8 -- 18 megawatts  
24 of new incremental storage could be deployed in or around  
25 the basin to help out with the challenge.

1           And then if we look to winter when we know we'll  
2 have another sort of challenge with Aliso Canyon operations,  
3 we can add another 136 megawatts. And some of our storage  
4 companies, you know, many of them are dreamers. And so  
5 we've tried to be very certain that we are under promising  
6 and capable of over delivering. And I do think that they  
7 took that -- the took that notice to heart. And so these  
8 are the questions we've asked of the developers, and we've  
9 also asked, can the manufacturing provide that? And the  
10 answer is sort of with some caveats is, yes.

11           And what this doesn't represent, which is  
12 represented in these sort of -- these dashed boxes is other  
13 utility actions. And as some of you know, you know, I've  
14 worked for some of the utilities in California. I worked on  
15 the Tehachapi Storage Project back in 2009 when we were just  
16 starting to figure out some of this stuff. And, you know,  
17 we opted to site storage at a substation. We were able to  
18 use the existing footprint. Part of that helped us avoid  
19 the CEQA process. You know, that was appropriate for that  
20 installation. And we were able to work closely with the  
21 CAISO who has continued to work and investigate energy  
22 storage, and also the PUC who has continued to think about  
23 storage from interconnection, and also in other ways. So we  
24 think there's possibility for the utilities to come up with  
25 ideas for where and how storage could play a role.

1           And ultimately, I wanted say, you know, this won't  
2 happen without some action. So I'll share some of the  
3 supportive actions we think, if this is of interest, would  
4 need to occur.

5           So I'm calling them support actions. So for the  
6 August capacity to come online, we think we would need  
7 expedited interconnections and permitting. We do think  
8 that's possible, but it would take some -- some strong  
9 action and leadership.

10           We also know that the SCE local capacity projects  
11 for storage are approved by the Commission but are still in  
12 potential appeal -- appeal or rehearing process, in a sort  
13 of waiting room. And until that is resolved, some of these  
14 projects don't have the final and official and un-appealable  
15 go-ahead. And we think that if -- if the Commission were  
16 interested in giving, I think assuring SCE the cost recovery  
17 they would need, then these projects could go forward and we  
18 could start deploying that. And that's important because  
19 those projects have sites already lined up and contracts  
20 already lined up. The customer acquisition process has  
21 occurred. And then finally, for these resources to go, you  
22 know, we need the immediate utility contracts, incentives or  
23 cost recovery mechanisms to cover the costs.

24           Looking ahead to December it would be some of the  
25 same actions, but we'd like to get information on the

1 transmission system import capabilities. I've read the  
2 technical report and I feel sort of what I've heard is, you  
3 know more information and specificity will help them dream  
4 up solutions, so that would include transmission system  
5 import capability information. Getting information to help  
6 with customer and site identification, probably beyond just  
7 the substation list would help. And then to get started for  
8 these December capacity, what I'm hearing consistently is,  
9 you know, negotiated term sheet by the end of April so they  
10 can sort of start in parallel to get this process moving.  
11 And that really has to do with them putting their money up  
12 to order the storage and battery systems.

13           You know, looking ahead, like I've discussed,  
14 other potential actions would be these utility directed  
15 actions, substation-sited storage, utility-owned storage,  
16 and then CAISO actions. We have a history with the -- of  
17 quickly, and for reliability reasons, deploying the  
18 Reliability Must Run Synchronous Condenser. And we saw that  
19 as a really fast avenue for deploying this resource sort of  
20 as a transmission resource.

21           And finally, you know, the community is saying  
22 if -- you know, this is going to be hard. But if you're  
23 looking at 2017, let us know, too, and we can get started on  
24 that now.

25           CHAIRMAN WEISENMILLER: Okay. Thank you.

1           I was actually going to suggest, now that you've  
2 got the staff report it would be good to look at and what  
3 the issues are. And in your April -- on your April 22nd  
4 filing be somewhat more thoughtful on how it fits. You  
5 know, certainly there's a lot we can do here. But it would  
6 be good to make sure that you're on target as to what the  
7 issues are.

8           MR. MORRIS: Okay. Thank you.

9           CHAIRMAN WEISENMILLER: Okay. And I guess it just  
10 probably would be good to get on the record from the Chamber  
11 the number of -- what's the -- you know, I've heard  
12 different numbers for what the ports mean or what goods'  
13 movement mean for economy down here, 20 or 30 percent?

14          MR. TOEBBEN: Well, it's probably not quite that  
15 high. But it's -- it represents immediate employment of  
16 300,000 people. And then the indirect employment is much,  
17 much greater than that. And it is particularly great  
18 employment for those individuals who don't have to have a  
19 college education.

20          CHAIRMAN WEISENMILLER: Right. That's good. And  
21 probably the basic message, again, to people looking to help  
22 here is to really look at the report and see what the issues  
23 are. You know, I tell this story that I take in the SONGS  
24 contest, I said we need this stuff in Orange County. Next  
25 person who stopped me said I have great project in San

1 Bernardino. And it was like, okay, you know, did you listen  
2 at all to the message?

3 So, Marcie?

4 MS. EDWARDS: Thank you, sir. Briefly.

5 This is directed at Mr. Morris. I did have the  
6 opportunity to read your more detailed inquiry list. And I  
7 wanted -- I wanted to compliment you on the degree of  
8 specificity in there. Because at least at this juncture it  
9 gives us more of an understanding on what you think the  
10 ideas are and the information you needed. From the L.A.  
11 perspective, we're looking forward to sitting down with your  
12 group and working through those particular areas.

13 Secondly, Mr. Toebben, we're going to need to rely  
14 on you significantly about communicating with the business  
15 community in Los Angeles, depending on how these issues move  
16 forward. And I hope I can count on your support on that.

17 MR. TOEBBEN: Yes.

18 MS. EDWARDS: Thank you, sir.

19 MR. TOEBBEN: So long as they don't kill the  
20 messenger.

21 CHAIRMAN WEISENMILLER: Anymore questions?

22 Otherwise, I think we can adjourn.

23 Thank you. Thank you all very much.

24 So let's -- let's start now. We're a little bit  
25 early in terms of starting on the public comment part, but

1 it's certainly been a long day so far.

2           So Tom Williams, please.

3           MR. WILLIAMS: Good evening. Dr. Tom Williams,  
4 Sierra Club, representing the Citizens Coalition for a Safe  
5 Community. Oh, by the way, I've worked as a consultant for  
6 the CPUC a long time ago in Montebello and in Playa del Rey  
7 on gas storage. Also, the Sacramento gas storage which  
8 finally went down, so close it down. I also have a degree  
9 in geology, a member of the API, ASTM, SPE, AAPG, and all  
10 the other acronyms. I did my first well 60 years ago.  
11 Somewhat qualified.

12           Basic issue: Why now? Why are we at this now?  
13 There's a gentleman from the emergency services. Is there  
14 an emergency response plan for any gas storage facility in  
15 the State of California? We have a basic problem. We don't  
16 know what we're dealing with. We don't know how to deal  
17 with it.

18           Somebody said a subsurface shutoff valve.  
19 Documents from the Aliso Canyon Field show that SS-25, at  
20 least from 2005 to 2014, had a subsurface shutoff valve.  
21 However, Gas Company says, oh, no, we took it out in 1979.  
22 Hello, DOGGR, wherever you are, an official submittal for a  
23 permit condition was made that has a fraudulent entry.  
24 There were no subsurface shutoff valves. So we have a basic  
25 problem.

1           We're going to be submitting written comments for  
2 this, but some of the high points.

3           Testing correct. Right now there's enough staff  
4 available throughout the United States, I just came from  
5 Texas, to do all of the wells in all of the gas storage  
6 facility in the next three months, 24/7. Yeah, it's  
7 complicated, but it can be done. So why not do it right  
8 now?

9           Now the big issue: How do we understand and know  
10 what's going on? People have talked about pressure. There  
11 are two forms of pressure in a gas storage facility. One is  
12 how much you pump in. That's gas. It's also a matter as to  
13 how you control the water level. And you can change the  
14 pressure just by pumping in more water. So we have the  
15 access.

16           One of the issues right now is, okay, how to  
17 reduce demand? Very simple, 10,000 dwellings, we have 5000  
18 square feet each for solar water heating and for solar  
19 voltaic generation, especially in the San Fernando Valley  
20 because it's at the edge of the distribution system. It's  
21 an opportunity that would also ally with the ARB's  
22 Mitigation Program. And would solve some of the problems,  
23 both in short and long term.

24           That's pretty much.

25           CHAIRMAN WEISENMILLER: I was going to say --

1 MR. WILLIAMS: Who pays --

2 CHAIRMAN WEISENMILLER: -- well, thank you, and  
3 we're looking forward to your written comments.

4 Alan Weiner?

5 MR. WEINER: Yes, hello. My name is Alan Weiner.  
6 I'm the organizer of 350 Conejo, San Fernando Valley, a  
7 chapter of the global climate movement, 350.org. and I'm  
8 speaking on behalf of that group.

9 I think I'll be saying something that you haven't  
10 heard yet today. I'm here to address you all as agents of  
11 government because our government at all levels has the  
12 legal obligation to preserve and protect certain recognized  
13 irreplaceable resources defined as the public trust. The  
14 public trust is a mandatory affirmative duty that government  
15 cannot alienate, repudiate or deny. The public trust is an  
16 inherent and inalienable right imbedded in our Constitution  
17 whereby the state serves as trustee on behalf of present and  
18 future generations of citizens to protect our natural  
19 inheritance. Nowhere in this doctrine is any trustee, and  
20 that means all of you as agents of government, nowhere is  
21 any trustee allowed to harm the trust, no matter if rich and  
22 powerful corporations bid them to do so. You are bound as  
23 fiduciaries to this Constitutional duty which overrules any  
24 contracts or agreements that may harm the public trust.

25 Today we're talking about a resource that is part

1 of that trust, specifically the atmosphere climate system.  
2 Natural gas, methane is a carbon-based fossil fuel. And  
3 even when it does not leak, when it's burned for energy,  
4 that's its sole intended purpose. The byproduct is carbon  
5 dioxide, raising the atmospheric level of that global-  
6 warming gas. We are already under mandate in our state by  
7 AB 32 to reduce our global warming and reduce our emissions  
8 below the levels from 1990. We are already over that safety  
9 line.

10 Now how does this apply to you as agents of  
11 government?

12 Because you are poised to decide about adding more  
13 gas to the Aliso Canyon wells. Adding more gas whose sole  
14 purpose is to be burned would be an affirmative act of harm  
15 on your part. You, the legally bound protectors of the  
16 public trust, would be violating that trust and causing harm  
17 to our current and future citizens.

18 So here and now, on behalf of the beneficiaries of  
19 that public trust, I expect you, agents of government, to  
20 recognize and abide by your duty as trustees. And I  
21 respectfully entrust you and instruct you to keep closed  
22 that which now is closed. Thank you.

23 CHAIRMAN WEISENMILLER: Thank you.

24 Richard Matthews, please.

25 MR. MATTHEWS: Hi. I'm Richard Matthews. I'm

1 Chair of the Science and Research Committee at Save Porter  
2 Ranch. And my background is engineering and science. I  
3 started in physics at Cal Tech and went into a 35-year  
4 career in engineering.

5           And what I see presented here is scare tactics not  
6 based on good science or good engineering. Scare tactics  
7 designed to justify resuming injection. Scare tactic  
8 designed to justify maintaining 15 billion cubic feet when  
9 that was a number that was created for winter usage, not for  
10 summer. Scare tactics based on using the winter peak usage  
11 rate when we know that peak usage in summer is much lower,  
12 and leaving as practically a footnote that, oh, summer usage  
13 is lower. Scare tactics based on telling us what the  
14 capacity is for gas pipelines and other gas storage but then  
15 using the numbers from the historical usage but, of course,  
16 the historical usage was much lower because we had Aliso  
17 available and we didn't need to run those at full capacity.

18       Scare tactics based on ignoring the potential for diesel  
19 backup. And maybe worst of all, scare tactics based on a  
20 quad-system failure.

21           Now as an engineer, I love to design systems that  
22 are based on being able to service a dual-system failure,  
23 two independent things that go wrong. But this is looking  
24 at the possibility of four independent things go wrong.

25           The first one already went wrong. That's the

1 Aliso blowout.

2           The second one is that we have summer usage like  
3 we've never seen before that looks a lot more like the  
4 winter usage, and that's not too likely to happen.

5           The third is to have an unscheduled gas system  
6 failure that would force us to shut down the local power  
7 generation and depend on power generation coming from  
8 elsewhere in the state.

9           And then the fourth failure would be to have the  
10 rest of the states not actually be able to provide us that  
11 electricity, to have a problem on the electrical grid.

12           To risk residents' health from the potential of  
13 another single failure by planning for a quad failure is  
14 totally ridiculous and we should not be doing that.

15           Now there is one thing that I noticed that we  
16 really should be doing, and that is that the spring  
17 maintenance is really, really important. We don't want to  
18 call that off. We want to do the spring maintenance to make  
19 sure we don't have these failures come up in summer.

20           And I would suggest even further, on top of that,  
21 that we do some stress testing. Because if we are going to  
22 run these other systems at full capacity when they've  
23 historically run at slightly lower usage, we could stress  
24 those systems into failing. And if we run stress tests in  
25 the spring where we can test them one at a time and fix them

1 one at a time, instead of waiting for summer when we are at  
2 peak usage and can't deal with those failures, we should do  
3 those stress tests now.

4 Thank you very much.

5 CHAIRMAN WEISENMILLER: Okay. Thank you.

6 Alexandra Nagy.

7 MS. NAGY: Good afternoon. My name is Alexandra  
8 Nagy. I'm the Southern California organizer with Food and  
9 Water Watch.

10 We stand here calling on you to permanently shut  
11 down the Aliso Canyon storage facility. We have over 40,000  
12 petitions and many of the people in this room working with  
13 us to do a report.

14 Thank you so much, Richard, for those excellent  
15 comments.

16 We have a lot of information that we'd like to  
17 share with you about how that facility can be shut down. It  
18 is really the best choice to protect this community, to  
19 protect our climate. And we really need to start making the  
20 transition to 100 percent renewable energy.

21 So we look forward to being able to provide a  
22 rebuttal to your numbers. A lot of them are either inflated  
23 or deflated to help the Gas Company make the case to keep  
24 Aliso Canyon open. This is what we call regulatory capture.  
25 It is a really big problem. And we hope that you will work

1 with us to prove us wrong, because that is what we think.  
2 There's a long history of corruption and really not just not  
3 a great track record of some of the agencies sitting up at  
4 this table.

5 And so we want to work with you to -- you really  
6 need to prove to us how this facility needs to stay open.  
7 Because at this point we're looking like it doesn't need to.  
8 So we wanted to talk about that.

9 And then, you know, 15,000 people were displaced  
10 in this community. And so for the -- for the reliability of  
11 our energy needs in Los Angeles, we really have to shut it  
12 down. That's -- that's all I'm going to say. Thank you.

13 CHAIRMAN WEISENMILLER: Okay. Thank you.

14 Paul Hunt.

15 MR. HUNT: Paul Hunt, Porter Ranch.

16 The -- there's really one issue on the table for  
17 you today, and it is that should we change the meaning of  
18 comprehensive from testing six wells down to testing only  
19 two? The rest of this is smoke in mirrors.

20 You have a simple question: Can the Gas Company,  
21 in a reasonable period of time, do all six tests? And the  
22 answer is, they can. But why won't they? Because you have  
23 a higher possibility of finding failure.

24 So I want to bring up that just this week alone,  
25 I'm talking only this past week, the AQMD has found that

1 there is high methane levels near SS-01. So we have a  
2 possible leak at that well. The methane levels near and  
3 around SS-25 from the off-gassing has actually been  
4 increasing over the last several weeks, rather than going  
5 down as you would expect from gas that is only residual.

6 DOGGR has added to their website this last week  
7 that of the first 22 wells that were inspected, that two of  
8 them have passed -- have failed the superficial tests. So  
9 we have two that are bad out of the first 22 that were  
10 inspected. And SoCalGas has had a major mercaptan leak this  
11 week, we're talking this week. We did not have a belief  
12 that there is a level of competency at this point. Now in  
13 the future there could be.

14 But at this point you do not have the community's  
15 belief there is a level of competency for SoCalGas to be the  
16 custodians of this much methane within the facility. If  
17 they can test them with all six required, that's a different  
18 story. But that is the actual question in front of you  
19 right now, not whether there is going to be a blackout  
20 because the decided to shortcut or to increase the timing it  
21 would take to do the testing.

22 Thank you very much.

23 CHAIRMAN WEISENMILLER: Thank you.

24 Gina Goodhill-Rosen, Solar City. Is Gina --

25 MS. GOODHILL-ROSEN: I'm here.

1           CHAIRMAN WEISENMILLER: Oh, go ahead, please.

2           MS. GOODHILL-ROSEN: Sorry about that. Thank you  
3 for taking public comments today.

4           My name is Gina Goodhill-Rosen. I'm with Solar  
5 City. We are a full-service solar power provider for  
6 homeowners and businesses. And in addition to rooftop  
7 solar, Solar City develops and deploys other distributed  
8 energy resources for both residential and commercial  
9 customers. We offer smart thermostats, battery energy  
10 storage systems, and grid-enabled electric water heaters to  
11 help customers manage their energy use. We're planning to  
12 submit more extensive written comments. So for now I'm just  
13 going to focus on a couple of key recommendations.

14           First, rooftop solar is an ideal resource to meet  
15 the summer afternoon peak demand for gas usage. It can be  
16 deployed easily in transmission constrained load pockets.  
17 It generates energy during the peak hours. And it could be  
18 deployed quickly, without the need for extensive  
19 environmental review, new transmission lines or other  
20 infrastructure. There's also nearly 500 megawatts of  
21 rooftop solar installed in the L.A. Basin. And it's clear  
22 that the potential gas curtailments identified in the Aliso  
23 Canyon Risk Assessment Technical Report would be  
24 significantly higher without these PV systems.

25           Based on the production profile of solar, on the

1 peak day from 2015, the rooftop solar already in place can  
2 be expected to offset over 20 million cubic feet of gas  
3 usage on the summer's peak day. This represents nearly 25  
4 percent of the curtailment volume identified in Scenario 1  
5 of the joint CAISO-LADWP analysis within the report.  
6 Increasing adoption by another 300 megawatts by the summer  
7 of 2017 would reduce the curtailment volume in this scenario  
8 by more than 40 percent.

9           There are specific measures that could help  
10 accelerate deployment of behind-the-meter solar in L.A.  
11 Basin. Such measures could include utilities promoting the  
12 benefits of solar in these local areas, allowing PPAs in  
13 LADWP territory to increase solar installations for large  
14 commercial projects, and accelerating site identification  
15 and permitting approval for PV in areas in most need of  
16 local reliability services.

17           Second, Solar City recommends the state consider a  
18 pilot program in the L.A. Basin for grid-enabled electric  
19 water heaters paired with rooftop solar. Such devices are  
20 easy to install when the customer is already installing  
21 rooftop solar, and they can operate in sync with the rooftop  
22 solar system such that they completely eliminate the natural  
23 gas requirement of home water heating in winter, not only  
24 summer.

25           In addition to reducing natural gas consumption in

1 homes, grid-enabled electric water heaters can respond to  
2 grid conditions and serve as renewable integration assets  
3 which may help the state meet its long-term greenhouse gas  
4 goals. We feel deployment of these systems can be  
5 accomplished with a modest rebate a pilot program. And the  
6 L.A. Basin test rebate levels and technology standards could  
7 a first step for a larger program.

8 We look forward to working with the agencies here  
9 today to develop and implement these approaches, and those  
10 outlined in our written comments. And we can do whatever  
11 needs to be done to help address the current challenges in  
12 the L.A. Basin. Thanks so much.

13 CHAIRMAN WEISENMILLER: Thank you.

14 Lorraine Lundquist.

15 MS. LUNDQUIST: Hello. Thank you for taking  
16 public comment. My name is Dr. Lorraine Lundquist. I have  
17 a PhD in physics from UC Berkeley. And I want to say -- and  
18 I live in Northridge.

19 This crisis has been a terrible tragedy for so  
20 many of the residents in my neighborhood. But now, post  
21 crisis represents a tremendous opportunity that we dare not  
22 waste.

23 We have seen a rapid rise in U.S. methane  
24 emissions, even prior to this blowout event. The EPA  
25 announced that it would need to redo its methane emissions'

1 estimates due the enormous amounts of fugitive methane that  
2 is constantly released throughout the natural gas  
3 extraction, transmission and storage process. So these --  
4 we know now that these leaks are routine and they will  
5 happen all the time, and it's damaging our climate system.

6 In fact, in February of this year, satellite data  
7 released by Harvard researchers showed that these methane  
8 emissions wipe out a large portion of the climate gains that  
9 have been made by the Obama administration. From all this  
10 data and from the repeated calls for urgency on the behalf  
11 of climate scientists it has become abundantly clear that  
12 our nation as a whole has to get off natural gas as fast as  
13 we possibly can. And that is why right now represents such  
14 an opportunity, right, because the temporary closure of  
15 Aliso Canyon gives us a tremendous opportunity to have a  
16 chance to demonstrate our capability to live off of less  
17 natural gas and to reduce our needs for natural gas.

18 So I urge the government agencies here to do  
19 everything in your power to get us through this closure, not  
20 by opening more wells in Aliso Canyon, but by permanent  
21 changes to our energy systems, increases in energy  
22 efficiency, dramatically beefing up our demand response  
23 programs, and increasing solar power, like this previous  
24 speaker spoke of, both thermal and photovoltaic.

25 SoCalGas could help with this. SoCalGas did

1 promise to offset their climate emissions. It's really kind  
2 of a slap in the face to see them instead rushing to reopen  
3 wells before families have even moved back or been  
4 reimbursed. It's time for all of us to get serious about  
5 climate and use this crisis to accelerate a transition to  
6 clean energy that will never leak and will never run out.  
7 Thank you.

8 CHAIRMAN WEISENMILLER: Thank you.

9 Let's go to WebEx. Jim Stewart? Okay.

10 Before we go, we have four more in the room.

11 Helen Atti, please.

12 MS. ATTI: Hi. My name is Helen Atti. I'm a  
13 resident of Granada Hills. I'm not a public speaker, I'm  
14 not a scientist, and I'm learning a lot more than what I'd  
15 like to learn about this mess that's going on.

16 CHAIRMAN WEISENMILLER: Right.

17 MS. ATTI: I was watching you guys on live stream  
18 earlier today. And a gentleman, I don't remember who, I  
19 remember that they were saying that in case of extreme cold  
20 for winter or hot for summer, we are going to have 10 to 14  
21 days of blackout, which we all know it's a lie. It's not --  
22 that's just a scare tactic you guys are giving us.

23 But let's say it's true. Let's say it's 100  
24 percent true. I think even if we have that we can -- we  
25 can -- people can plan for that 10 or 14 days to be

1 somewhere else or -- but for us, we live in that area. All  
2 year long, 12 months, 24/7 we are breathing that toxic. My  
3 daughter has been to emergency room. I have rushed her to  
4 hospital twice, once after the -- supposedly they fix this  
5 blowout. It's not a leak, it's a blowout. If only -- if  
6 you could see, if you could -- if it was visible you could  
7 see what people, not -- I know -- I know you guys know  
8 what -- what it was.

9           See, we don't trust. Unfortunately, after this we  
10 do not trust our Gas Company, my Health Department, my AQMD  
11 and -- because everything I have heard so far, you know,  
12 even if they say something they go back and they change  
13 their mind and things like that.

14           And let's see, I am very, very concerned about our  
15 health, about my health, my daughters health, my family's  
16 health. And that's -- we just what to shut it down.  
17 There's no other way. There's no other way you can operate  
18 in that place and for us to be safe in that place. And I  
19 hold all you, all of you on that panel which are getting big  
20 bucks, responsible for our health. If you had done your job  
21 right you wouldn't have this blowout.

22           And now that we do have this blowout and we have  
23 been effected by this, I'm still in hotel. You know,  
24 people, we have been living in hotel for five, six months,  
25 five months now. Who can live like this? This is awful.

1 If you just put yourself in our position you would  
2 understand, this is insult to us for Gas Company wanting to  
3 operate in that facility again. And if you would care  
4 anything about residents of that place, you would shut it  
5 down.

6 CHAIRMAN WEISENMILLER: Thank you.

7 Jason Hector.

8 MR. HECTOR: Hi. I'm a resident of Porter Ranch.  
9 And I just want to make some comments on -- well, I brought  
10 the picture up from the AQMD website, showing the two  
11 leaking wells. And I thank the AQMD. Mr. Nazemi, you're  
12 here representing them, I thank you. And, you know, a lot  
13 of the comments you made I want to talk about, because I  
14 think you asked some really good questions.

15 But, you know, as far as the well, I think we have  
16 an issue, not just -- and this goes to DOGGR, Mr. Harris.  
17 As far as the -- the issue here I'm concerned about with  
18 these two methane -- we have high levels of methane 150 feet  
19 away from the wells still. So is this still outgassing?  
20 Because I would imagine that the methane has already left  
21 the atmosphere; right?

22 MR. HARRIS: Yes.

23 MR. HECTOR: Thank you.

24 MR. HARRIS: Yes. We think it's still outgassing,  
25 given that the leak --

1 MR. HECTOR: Still outgassing? You think this is  
2 still outgassing? Really?

3 MR. HARRIS: On -- are we talking around SS025?

4 MR. HECTOR: Yeah. But now it's -- now it's  
5 showing up -- it looks like it's moving over to SS-2 and SS-  
6 1, about a week ago.

7 MR. HARRIS: Okay.

8 MR. HECTOR: It's --

9 MR. HARRIS: I don't have -- what you're looking  
10 at, I don't have in front of me.

11 MR. HECTOR: Well, Mr. Nazemi is familiar with  
12 this data; right? It's from the AQMD.

13 CHAIRMAN WEISENMILLER: Actually, why don't you  
14 finish your comments.

15 MR. HECTOR: Okay. Well, I'll submit it.

16 CHAIRMAN WEISENMILLER: We're really just in  
17 public comment stage.

18 MR. HECTOR: But, you know, I think you raised  
19 some good points about, you know, what's going on down at  
20 700 feet.

21 I wanted to bring up one thing. The Water Board  
22 has -- has done an investigation now, and there's a lot of  
23 good information here. They show here that 2 billion cubic  
24 feet a day come from Texas, Oklahoma, New Mexico into our  
25 system currently. So I believe in all of you guys to make

1 this happen and get more. You know, 2 billion cubic feet,  
2 we can build on that. You know, we can find solutions. All  
3 you people are here to help us, you know, so let's -- let's  
4 get this done. I have all the faith and confidence in you,  
5 and I hope that you can do it for us.

6 But as far as this report, it's very good to read.  
7 The soil has been contaminated. And now they're doing an  
8 investigation as far as water contamination because they  
9 believe that around 100 feet and down there's probably some  
10 active drinking water there, so we're very concerned. DOGGR  
11 is supposed to be working to bring all these facilities into  
12 compliance with the Safe Drinking Water Act. And, you know,  
13 we want to get some answers on, you know, what -- what -- is  
14 this compliant, is this facility compliant or not? Is it  
15 exempt or not? You know, I've been trying to figure this  
16 out and we need some help.

17 I applaud your rule making that you've come up  
18 with, DOGGR, very good. But we need the safety valves, like  
19 Mr. Sherman, our Congressman said. You know, we need to go  
20 a little bit further with these regulations. But I applaud  
21 you for taking that first step with the tubing, okay, but  
22 let's -- let's get some more. And, you know, there's no way  
23 the pressure is at 700 psi now. It can't go any higher. We  
24 already have leaks. How are you -- how is it going to go  
25 higher in pressure? We don't have any studies showing at,

1 you know, 1,000 psi.

2           And this is your question, Mr. Nazemi, at 1,000  
3 psi, as you ramp it up, yes, they're checking the wells, but  
4 what about the cap rock? Is the cap rock stable? That's  
5 what I'm asking, why is this still coming out? Why is the  
6 methane still emitting. It's not outgassing anymore.  
7 Methane rises quickly. It should be already done. This  
8 is --

9           CHAIRMAN WEISENMILLER: Okay. And public --

10          MR. HECTOR: This is my issue.

11          CHAIRMAN WEISENMILLER: Public comments are due  
12 the 22nd. It's certainly you submit.

13          MR. HECTOR: I will submit public comments.

14          And Mr. Nezemi --

15          CHAIRMAN WEISENMILLER: That would be good.

16          MR. HECTOR: -- if you could please return my  
17 phone call, I'd appreciate it. Thank you. I know you're  
18 busy. Thank you for being here.

19          CHAIRMAN WEISENMILLER: Okay. R. L. Miller,  
20 Climate Hawks Vote, please.

21          MS. R. L. MILLER: Good evening. I'm R. L.  
22 Miller. I am the Chairperson of the California Democratic  
23 Parties Environmental Caucus and the Cofounder of a group  
24 called Climate Hawks Vote.

25                 For those of you who do not live in this area, 22

1 years ago it was devastated by the Northridge Earthquake  
2 which hit the San Fernando Valley. It provided five years  
3 of full employment for every contractor in the valley.

4 We are now faced with a global climate crisis and  
5 you, Mr. Picker, have mentioned that it would take two years  
6 of full employment by every plumber and every electrician in  
7 the valley to solarize the valley, so when can we start?

8 PRESIDENT PICKER: I think we're talking about the  
9 entire Southwest.

10 MS. R. L. MILLER: I'm talking --

11 PRESIDENT PICKER: And as I said, if you're game,  
12 I'm game.

13 MS. R. L. MILLER: I'm talking -- I'm talking  
14 about a pilot program in zip code 912 -- 91326 or the entire  
15 San Fernando Valley for grid-enabled water -- water heaters,  
16 as the gentlewoman from Solar City has indicated, to get rid  
17 of natural gas programs -- or to get rid of natural gas and  
18 instead use solarized water heaters. Will you -- will you  
19 do this or will you listen only to the utility company  
20 people who already -- who have testified that all we want to  
21 do is go back to the status quo? We have a climate crisis.  
22 Let's not waste it. Thank you.

23 CHAIRMAN WEISENMILLER: Thank you.

24 Guillermo Lucuona, please

25 MR. LUCUONA: How you doing? Guillermo Lucuona,

1 resident of Porter Ranch.

2 I just have a simple question for Mr. Pickler --  
3 or Picker. How many days of blackouts has Aliso Canyon  
4 prevented in the last three years, Mr. Picker?

5 PRESIDENT PICKER: I'm afraid that I can't really  
6 answer that question since we haven't experienced the  
7 blackouts.

8 MR. LUCUONA: So what is your best guess as to how  
9 many days of blackout Aliso Canyon prevented in the last  
10 three years?

11 PRESIDENT PICKER: There's really not a good  
12 answer to the question.

13 MR. LUCUONA: Okay.

14 PRESIDENT PICKER: These are --

15 MR. LUCUONA: Just a rough guess at all?

16 COMMISSIONER PETERMAN: Sir -- sir, what is your  
17 implication? Please share, if you will.

18 MR. LUCUONA: My implication is --

19 CHAIRMAN WEISENMILLER: Well, I mean, I think --

20 MR. LUCUONA: -- I'm just --

21 CHAIRMAN WEISENMILLER: -- I think you could  
22 assume --

23 MR. LUCUONA: -- trying to find the value of Aliso  
24 Canyon in preventing blackouts.

25 CHAIRMAN WEISENMILLER: Well, the analysis was

1 based upon average -- the weather over the last three years.  
2 It was not worst case, which means the answer is roughly 14  
3 days a year --

4 MR. LUCUONA: Okay. All right. And then --

5 CHAIRMAN WEISENMILLER: -- for summer, summer  
6 only.

7 MR. LUCUONA: Okay. And then the next question is  
8 for Mr. Harris of DOGGR. What is the reason why we are not  
9 requesting or demanding subsurface safety valves from  
10 SoCalGas on every single well before the facility is put  
11 back into operation?

12 CHAIRMAN WEISENMILLER: Well, again, this is --  
13 this is a public comment. It's not an exchange period.

14 MR. LUCUONA: Okay.

15 CHAIRMAN WEISENMILLER: So I mean, certainly  
16 there -- there are good questions.

17 MR. LUCUONA: That is --

18 CHAIRMAN WEISENMILLER: We're happy to deal with  
19 them, but not tonight.

20 MR. LUCUONA: I think safety valves are the main  
21 question that we're talking about here, how to bring this  
22 facility back. If it's as important as we say it is to  
23 prevent blackouts, how about we do it safely with safety  
24 valves? DOGGR, it is on your court if we can add safety  
25 valves to the requirements.

1 MR. HARRIS: Subsurface safety valves are  
2 something we're -- we're looking at. We're talking to the  
3 National Labs. The National Labs and Department of Energy  
4 are going to be putting together a conference symposium that  
5 will be in Denver in July. And as part of looking at well  
6 integrity, we're also going to be reviewing the value of  
7 subsurface safety valves.

8 MR. LUCUONA: Okay. Because the value is  
9 tremendous if, in fact, there's an earthquake fault running  
10 across the whole facility. If there was such an earthquake  
11 and it ruptures a number of wells, it took four months to  
12 cap one well, how are we going to deal with that if we don't  
13 have safety valves? So let's -- let's please push for  
14 safety valves. Thank you.

15 CHAIRMAN WEISENMILLER: Okay. Thank you.

16 Matt Pakucko.

17 MR. PAKUCKO: Thank you. My name is Matt Pakucko,  
18 President and Cofounder of Save Porter Ranch, and a resident  
19 of Porter Ranch. I live close to that well that's blown out  
20 as anybody.

21 So if this facility is so gosh darn critical, why  
22 did you all sitting there right now ever let this happen in  
23 the first place? Why are we having this workshop? And why  
24 then should we trust this analysis of this facility's  
25 necessity if the same people that let it happen are now

1 telling us how badly we need it?

2           As Congressman Sherman pointed out, the Action  
3 Plan For Aliso Canyon states in part, quote, "With much of  
4 the necessary natural gas system data held solely by  
5 SoCalGas, the California ISO invited the Gas Company to join  
6 the task force" -- dot, dot, dot, end quote. The data is  
7 held by SoCalGas. I hope you certainly are of sound enough  
8 mind to realize that that data is questionable at best.

9           Since this disaster we have seen how much  
10 misinformation, disinformation and outright lies have come  
11 from SoCalGas. Now these headlines of rolling blackout is  
12 really scary. There may be blackout sometimes, maybe during  
13 peak periods, according to a model. Now we've all lived  
14 through blackouts, if they -- these alleged coming blackouts  
15 ever happen. Try being displaced from your house for five  
16 months? How's that blackout for you? Which one of you was  
17 displaced? Which one? Raise your hand. Your family? Your  
18 friends? I thought so.

19           Porter Ranch residents can't go through this long-  
20 term disaster again. We'll trade a blackout any day. And  
21 according to many area residents at many public hearings,  
22 many public comments, residents have been smelling oil and  
23 gas from this facility for years in their -- in their -- in  
24 the community. And -- and they've been reporting many of  
25 these same health problems, the short-term health problems

1 that we've all heard about, and my unusual and yet  
2 uninvestigated long-term health problems.

3           An example, just the other day SoCalGas, according  
4 to the Governor's Office of Emergency Services, released  
5 mercaptan into the air of Porter Ranch again, in the midst  
6 of the -- of this disaster. So I don't think Bret Lane and  
7 SoCalGas has just suddenly seen the light of day and decided  
8 to make Aliso Canyon safe. That had that opportunity for  
9 decades. They had their chance since the Montebello  
10 disaster and the Playa del Rey failures. Yet again, they  
11 let this happen at Aliso Canyon. That place is out of  
12 control and they have no, apparently no ability of intention  
13 of making it safe.

14           So we need the full weight of this shutdown order  
15 to be realized to its fullest extent. We need to give  
16 Senate Bill 380 its chance to be passed into law and add  
17 that all up to the tens of thousands of adjacent residents.  
18 You need to find that -- the political will to move towards  
19 the future. Keep this facility shut down for now while it's  
20 fully vetted and work on -- keep your committees going, but  
21 work on the future and how to shut it down permanently.

22           CHAIRMAN WEISENMILLER: Thank you. Let's go to  
23 the WebEx. On the WebEx, do we have any call-institutions?

24           (Whereupon a portion of Mr. Pakucko's public comment  
25 was accidentally played over the loud speaker system.)

1 CHAIRMAN WEISENMILLER: No WebEx call-in? Okay.

2 Fine. Shut down the WebEx.

3 One more speaker. Please come forward.

4 All right. So I'm Susan Gorman-Chang. I'm a  
5 resident of Porter Ranch. I had to be evacuated for about  
6 five months. And my impression is this entire discussion  
7 has been looking backwards instead of forwards, trying to go  
8 back to the way it was, trying to be in defensive mode to  
9 substantiate Aliso Canyon and how much we need it, and kind  
10 of wanting to go back to the way things were.

11 You've made it -- you've made us, the residents,  
12 choose between our imperiled health or, you know, energy,  
13 and you threaten us with blackouts. No one should have to  
14 make that choice.

15 No one but Fran Pavley has even mentioned, before  
16 some of the people here, solar power and wind power. Why  
17 aren't we looking forward to what else we can do to wean  
18 ourselves off of gas?

19 Using the solar farm near Joshua Tree National  
20 Forest, which is 4,000 acres, that solar farm powers  
21 electricity for 160,000 homes. Aliso Canyon is about 3,600  
22 acres. So just doing a simple ratio and math, that would  
23 power 144,000 homes. Why has nobody brought that up or  
24 thought of that?

25 Even if we put, you know, solar panels on every

1 home, then you all talk about, oh, what happens when the sun  
2 goes down? Some of you must have heard of Elon Musk's wall  
3 of batteries for \$3,500. I assume some of you have heard of  
4 that technology, yet you never bring it up. It's always  
5 like we need the gas, we need the gas. Again, you seem to  
6 be looking forward -- backwards instead of forward. All  
7 right.

8           So this -- this is the hard part. I'm glad you're  
9 all sitting down. A lot of scholars and religious leaders  
10 have compared our reliance on fossil fuels, gas included, to  
11 slavery, the institution of slavery, all right? Our rights  
12 have been taken away. We used to have the right to clean  
13 air. We had the right to reliable power. That's been taken  
14 away from us. We've had to move out of our homes. That was  
15 no our choice. And so using that analogy, SoCalGas would be  
16 the slave owner, the plantation owner. The regulators would  
17 be the slave traders because you're allowing it and enabling  
18 it. And I would be the slave, me and the residents and  
19 everybody, everybody who was impacted by that. And I know  
20 you find this offensive, but I'm not alone in this analogy,  
21 okay?

22           So I'm going to be a runaway slave. I'm going to  
23 go solar. My husband and I and my family have been getting  
24 quotes for solar power. I'd like to wean myself off any way  
25 that I can from gas being used to power my home.

1           And also, I forgot to mention the abolitionists.  
2 We have Food and Water Watch, Save Porter Ranch, Stand L.A.,  
3 Sierra Club. So we slaves are not alone. We have a lot of  
4 abolitionists in our corner.

5           So your days are numbered. I would recommend that  
6 you look forward instead of backwards. Thank you.

7           CHAIRMAN WEISENMILLER: Thank you. Okay.

8           So at this point -- please.

9           MS. NGUYEN: Jackie Petrola on WebEx.

10          MS. PETROLA: Can you hear me?

11          CHAIRMAN WEISENMILLER: Yes. Please go ahead.

12          MS. PETROLA: Okay. My name is Jackie. I'm a  
13 Porter Ranch resident affected by the Aliso Canyon blowout.

14           I hear an echo. I'm sorry.

15           My two small children, husband and I experienced  
16 bloody noses, headaches and other symptoms caused by the  
17 hazardous chemicals, so please take that into consideration.

18           First, it is important to mention important key  
19 points, President Obama's Climate Action Plan, the  
20 Department of Energy's Geothermal Research and Development.  
21 Bill SBR 48 introduced in April 27, 2015. The topic of  
22 California Renewable Portfolio Standard Program commitment  
23 towards meeting the state's environmental goals to reduce  
24 greenhouse gas emissions.

25           And a bill that did not pass, but one that speaks

1 volumes, SB 350, introduced in February 2014 by Senator  
2 Wesson (phonetic), requiring contracts between utility  
3 companies and geothermal power plants. The PUC opposed this  
4 bill because, I quote, "It was bad public policy to mandate  
5 preferred renewable resources." Frankly, they are doing  
6 just that with regard to natural gas.

7 I can go by an electric car if I wanted to. I can  
8 go to the market and buy organics. I should have the same  
9 option to use renewable energy in my home. And we can start  
10 today.

11 So I encourage -- I encourage Senator Wesson,  
12 along with Senator Pavley, to introduce this bill again.  
13 And I also encourage the panel to consult with renewable  
14 energy companies, such as Berkshire Hathaway Energy Company  
15 and Enno (phonetic) North America on how those companies can  
16 contribute to our short-term and long-term solutions and  
17 breakthroughs, not the same results as we -- as we've been  
18 hearing here today.

19 In conclusion, all of these bills, acts, plans,  
20 and executive orders serve a purpose, and the purpose needs  
21 to be executed with 100 percent support and commitment by  
22 all of the three branches of the United States Government.  
23 And I thank you for your support and your time.

24 CHAIRMAN WEISENMILLER: Thank you.

25 Any other WebEx? Okay. No? Yes? Okay.

1           So, Commissioners, that was the end of public  
2 comment. Does anyone have any comments they want to give at  
3 this stage?

4           PRESIDENT PICKER: I just want to briefly say that  
5 another difference between the efforts to keep the grid  
6 reliable after the loss of San Onofre, I talked a little bit  
7 about the fact that this is a summer-winter-summer.

8           And I also would point out at this time that we  
9 have a participation of the Los Angeles Department of Water  
10 and Power. And I want to just compliment the team there,  
11 the general manager, Mike Webster for their efforts and  
12 their help in trying to help us resolve these problems, so  
13 thank you.

14           CHAIRMAN WEISENMILLER: Hang on.

15           Mark Reed, please.

16           MR. REED: Yes. My name is Mark Reed. I'm a  
17 resident of the San Fernando Valley, also a congressional  
18 candidate for the San Fernando Valley. I didn't come with a  
19 prepared statement. I came with a lot of knowledge of  
20 individual residents who were very concerned with the  
21 misrepresentation of the facts, and what is being done about  
22 the past. We've heard great testimony of what to do with  
23 the canyon in the future. But what about the gross  
24 negligence of the management of this canyon? What about the  
25 known 19 wells that were leaking prior to the blowout? What

1 about the fact that a lot of the congressman and the state  
2 representatives have been getting campaign reelection  
3 contributions from the Gas Company? Where is a criminal  
4 investigation? Where is it?

5           We have people that have lived up in the -- up in  
6 the Porter Ranch Area that had to move out. They've called  
7 me and they've talked about how they've had their  
8 grandchildren there. They bring them home after the Gas  
9 Company said it was okay to move back in, and their kids get  
10 bloody noses and headaches and they can't sleep at night.  
11 What about these individuals? Because of political  
12 corruption and corporate greed of a public utilities,  
13 government-public utilities company these people have  
14 been -- their lives have been destroyed. I've known people  
15 that have moved completely out of the district because of  
16 this.

17           What are we going to do in retrospect of a company  
18 that has failed to be proactive on known leaks, known leaks  
19 to the point to where it blows out and over the largest, how  
20 would say, environmental disaster in U.S. history takes  
21 place under these people's watch? How are we supposed to  
22 believe what's coming out? How would you believe anything  
23 that comes out of the Commission, comes out of the Gas  
24 Company, comes out of any of the public officials when such  
25 a catastrophic disaster takes place, when known medical, how

1 would you say, results of the continued gas leaking from ten  
2 years prior to this blowout? How is anybody to believe and  
3 trust in the government agencies? How are we supposed to  
4 believe and trust in our public officials and the city  
5 councilman? How would you believe anybody anymore when you  
6 have the number one gas environmental disaster in the United  
7 States that was known for 15 years prior to the blowout?

8           We had the San Bruno explosion. Some of the  
9 regulations were known to be failed and not adequate at that  
10 point. What was done? Nothing. Our public officials did  
11 nothing.

12           What are doing in respect to the aftermath? The  
13 plan going forward is simple, shut it down. Shut it down or  
14 get it to the point where it's a 21st Century gas storage  
15 facility and it's guaranteed to be -- it's guaranteed to be  
16 safe, and management actually runs it properly. Because if  
17 anybody ran that company in the private sector the way that  
18 company was run, they would be in prison today. Thank you  
19 very much.

20           CHAIRMAN WEISENMILLER: Thank you.

21           PRESIDENT PICKER: Again, I just want to thank the  
22 team from -- from LADWP. The cooperation across the -- the  
23 regulated utilities and public utilities has been very  
24 important. I think it's unusual to see that kind of close  
25 working effort, and so I just want to thank you for the

1 effort and would love to continue working with you.

2 COMMISSIONER PETERMAN: I just wanted to make  
3 the -- a general comment in response to one of the things we  
4 heard a lot in the public comment -- and first of all, thank  
5 you for the public comment -- was an interest in seeing us  
6 pursue more opportunities for renewables, energy storage.

7 And I just want to mention that given the breadth  
8 of things that had to be talked about today, particularly  
9 around this situation, we didn't get into all of the work  
10 that our relative agencies, respective agencies have done in  
11 those areas. But we are number one in this country leading  
12 efforts in all of those areas. And so maybe there will be  
13 an opportunity in the future to talk to you more  
14 specifically about the work we're doing in each of those  
15 areas.

16 But it's something we're all committed to,  
17 renewable energy and energy storage. And so I did want to  
18 acknowledge that and say there's follow-up discussions we  
19 can have about those opportunities. And thank you for  
20 coming.

21 UNIDENTIFIED FEMALE: (Off mike.)

22 (Indiscernible.)

23 COMMISSIONER PETERMAN: Well, for example, and  
24 again, I know that you have organizations that are meeting  
25 regularly and things like that. So there's just basic

1 information we can provide you on what exactly has been  
2 happening in the state and those areas. So I think it's  
3 easy enough to send you some information as a starting  
4 point.

5           And I'm sure many of you are aware of a lot of  
6 things going on, so I want to be mindful of the time here.  
7 But as you're aware, we do have legislation that was passed  
8 this past year that sets the target of 50 percent renewables  
9 by 2030. We have the first in the nation energy storage  
10 targets here. We have a goal to double our energy  
11 efficiency. So those are all things that we up on the dais  
12 have been working on in other parts of our work.

13           But appreciate also your desire is seeing those  
14 opportunities come forward more in your community. And so  
15 some of the recommendations in the staff plan get to some of  
16 the immediate opportunities around efficiency and demand  
17 response. And we have different proceedings at the Public  
18 Utilities Commission and LADWP that are working on those.

19           So there's some of that detail in the plans,  
20 particularly around solar water heating. So --

21           UNIDENTIFIED FEMALE: (Off mike.)

22 (Indiscernible.)

23           COMMISSIONER PETERMAN: So our plan is 50 percent  
24 by 2030, ma'am.

25           UNIDENTIFIED FEMALE: (Off mike.)

1 (Indiscernible.)

2 COMMISSIONER PETERMAN: Well, again, I'm just  
3 reiterating a response to your point about think about  
4 renewable energy and energy --

5 UNIDENTIFIED FEMALE: (Off mike.)

6 (Indiscernible.)

7 COMMISSIONER PETERMAN: Ma'am, I'm just responding  
8 to the general comment about are we doing anything on  
9 renewable energy and energy efficiency. And I just wanted  
10 to provide some information that we are. I look forward to  
11 seeing the rest of your comments when they're filed. Thank  
12 you.

13 COMMISSIONER SANDOVAL: Thank you. So I wanted to  
14 build a little on what Commissioner Peterman was saying so  
15 that there are a number of programs that the CPUC has been  
16 leading for several years.

17 As I mentioned earlier, we are taking a number of  
18 steps to accelerate the programs to both authorize spending,  
19 to authorize marketing so that we can make sure that people  
20 know about the programs and area able to enroll in energy  
21 efficiency, and also taking a really hard look at what  
22 measures and rules are appropriate to really encourage  
23 people to be able to take advantage of these opportunities  
24 where we have in the past, and continue to do so with  
25 allocated money and program priorities to also create energy

1 efficiency. So this is something the CPUC has been doing  
2 for many years. And this body has been very committed to  
3 really accelerating that.

4           One thing I also wanted to add is that a couple of  
5 people have brought up the issue about time of use and load  
6 shifting. So I just wanted to address that briefly. We have  
7 at least two or three proceedings that are directly  
8 addressing that issue. I'm the assigned Commissioner for a  
9 proceeding that is looking at the water-energy nexus, the  
10 imbedded energy in water and the imbedded water in energy.  
11 And in that proceeding I have ordered the investor-owned  
12 utilities to basically create what we're calling matinee  
13 energy pricing pilots that are designed to help to attract  
14 large electric load, commercial, industrial, agricultural  
15 customers to shift towards the middle of the day to be able  
16 to take advantage of some of that solar and help us to be  
17 able to deal with some of the other ramping issues.

18           So we are looking at that moving forward. I'm  
19 going to be taking a harder look at that to see if there are  
20 things that could be done for this year, for 2016, in terms  
21 of matinee pricing, to accelerate that, especially in light  
22 of the particular issues with the L.A. Basin. I think  
23 refineries are a very interesting potential target for that.  
24 We have a couple of other proceedings that are looking at  
25 what we can do in terms of -- of load shifting. So we are

1 very committed to a clean energy future, and there are a  
2 number of ways that we're doing that.

3           So just in terms of engaging with the CPUC, and on  
4 our sister agencies, we all have websites. The websites  
5 have a lot of content, so it can be a little bit difficult  
6 to navigate. But we have some buttons where you can get  
7 to -- if you're interested in storage you can just type CPUC  
8 storage and find some information about some of the things  
9 that we're doing.

10           And I think -- do we have anybody here from our  
11 Public Adviser's Office for the CPUC? So we have our Public  
12 Adviser's Office. So you can also talk to them, as well,  
13 because we do have a CPUC office here in Los Angeles, and  
14 let you know -- we can let you know about events that we've  
15 having, and also other opportunities for dialogue and  
16 participation. So thank you.

17           MR. RECTHSCHAFFEN: I just want to -- I know --  
18 this is -- this panel has been limited to the energy  
19 reliability issues. It may be frustrating to folks, but  
20 it's been very important for us, all of us collectively  
21 here, to listen to the concerns you've raised about other  
22 issues. And we don't minimize the impacts for one second.

23           And I want to remind folks that we are working  
24 comprehensively to try to deal with the problem. We're  
25 working -- have agencies looking at the safety issues, water

1 quality issues that are ongoing, civil enforcement actions,  
2 civil investigations, air quality, water quality. We'll  
3 continue to do that and invite you to continue to engage  
4 with us in those other processes.

5 So thanks again for your very helpful  
6 participation and your patience through this long day today.

7 COMMISSIONER MCALLISTER: Okay.

8 CHAIRMAN WEISENMILLER: Sure. Go ahead.

9 COMMISSIONER MCALLISTER: So our -- I saw Alana  
10 Matthews here earlier. She's our Public Adviser at the  
11 Energy Commission. And I don't see her in the room right  
12 now.

13 COMMISSIONER PETERMAN: She's outside.

14 COMMISSIONER MCALLISTER: She's outside. Okay.

15 But certainly, access to our proceedings, as  
16 Commissioner Sandoval said, is not necessarily the easiest  
17 thing in the world. And so our -- that's why our Public  
18 Advisers exist, so they can help people navigate and get  
19 involved. It is incredibly important that people get  
20 involved. So your -- your -- the representatives of your  
21 organizations can provide a channel to get your input onto  
22 the record so it can inform decisions going forward.

23 And just like over in the PUC, at the Energy  
24 Commission we have an incredible quantity of activities  
25 going on, some of them in official proceedings and some --

1 some not, some more informal. But we have longstanding  
2 building energy efficiency standards. We've developed  
3 incredible, you know, nation-leading world-leading  
4 technologies that are now in common -- common use, and that  
5 continues. We have the lowest per capita energy consumption  
6 in the nation already.

7           And, you know, many of us on the dais, I would  
8 say, you know, certainly we're here to listen, and actually  
9 are incredibly sympathetic with the situation that you're  
10 in, even, you know, it may be hard to believe that. But,  
11 you know, I personally, and many of the people on the dais,  
12 have been in this -- in this business of clean energy for  
13 decades and have net-zero homes, some of us. And, you know,  
14 we're committed to at a personal level too. So you  
15 certainly do not -- there are not deaf ears up here at the  
16 dais.

17           But there are difficult problems, lots of  
18 constraints and lots of sort of differing priorities about,  
19 you know, priorities that don't necessarily all fit together  
20 in a nice package in terms of our electricity system and the  
21 ways that it's been constructed, and frankly the history of  
22 it that, you know, is 100 years and beyond in the past. So  
23 we do have legacy issues that we need to move forward. And  
24 I think all of us, certainly I do, appreciate that challenge  
25 and that we do need to move forward quickly. We have

1 aggressive goals, the most aggressive in the country,  
2 certainly in the Lower 48, and are absolutely committed.  
3 This governor is completely committed to -- to reaching  
4 those goals and figuring out pathways that markets for clean  
5 energy can scale, and as quickly as possible.

6           So you know, big words, but we're all duking it  
7 out every day, rolling up our sleeves, trying to make it  
8 happen. And your -- your participation is incredibly  
9 helpful to inform that process so that it's as equitable and  
10 as beneficial as possible.

11           CHAIRMAN WEISENMILLER: Well, what I want to do is  
12 first thank the staff for organizing this. It's been an  
13 awful lot of work. I certainly want to thank the other  
14 agencies for participation. And certainly, again, want to  
15 thank LADWP for being a partner in the analysis.

16           I think it's been said, and just again, I don't,  
17 frankly, don't -- we don't need to be defensive on the dais  
18 about what we're doing on energy policy in California. As I  
19 go around the rest of the country, we are seen as the poster  
20 child of what you should do to be sustainable. As I go  
21 around the world, as I go to Germany, as I go to China, as I  
22 go to Mexico, same story.

23           So again, I think we're -- we are moving fast. We  
24 may not be moving as fast as you might like in a specific  
25 area, but we are moving.

1           And so again, thanks for your participation today  
2 and I think it's certainly, again, for all us to understand  
3 the trauma here, you know, and moving forward. And again,  
4 we're going to be back later, talking about the longer-term  
5 issues of winter which, frankly, could be more challenging  
6 than where we are now.

7           So anyway, thanks again.

8       (Whereupon the Aliso Canyon Action Plan For Local Energy  
9           Reliability In Summer 2016 Joint Agency,  
10           Integrated Energy Policy Report Workshop  
11                           adjourned at 7:35 p.m.)

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## CERTIFICATE OF REPORTER

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 22nd day of April, 2016.



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MARTHA L. NELSON

## CERTIFICATE OF TRANSCRIBER

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 transcribed by me, a certified transcriber 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.

I certify that the foregoing is a correct transcript, to the best of my ability, from the electronic sound recording of the proceedings in the above-entitled matter.



MARTHA L. NELSON, CERT\*\*367

April 22, 2016