

PG&E DIABLO CANYON DECOMMISSIONING ENGAGEMENT PANEL

PUBLIC MEETING

ZOOM VIDEOCONFERENCE

WEDNESDAY, OCTOBER 28, 2020

6:00 P.M. - 9:31 P.M.

REPORTED BY MELISSA PLOOY, CSR NO. 13068

ORIGINAL

1 MR. ANDERS: Thank you, Bob. I want to express
2 our appreciation to Bob and his team for producing this
3 webinar tonight. My name is Chuck Anders. I am the
4 facilitator for the Diablo Canyon Decommissioning
5 Engagement Panel, and if you're an attendee to this
6 webinar, you should be seeing the pictures of many of
7 the panelists right now. I would like to welcome those
8 in the panel, the community members that are
9 participating, the PG&E staff and many of the
10 governmental agencies, state and local governmental
11 agency staff that are supporting this panel meeting
12 tonight. This is the 17th public panel meeting or
13 workshop since the panel inaugural meeting in 2018 and
14 the topic of tonight's meeting is water resources at
15 Diablo Canyon. This is a webinar format. So the
16 attendees should be able to view all the panel members
17 and speakers during each individual agenda item. You'll
18 also see the PowerPoint presentations.

19 The agenda, the PowerPoint presentations and a
20 number of the resource documents are currently available
21 on the panel's website at DiabloCanyonPanel.org and I
22 want to indicate that the public members, the attendees
23 can submit questions through the questions or chat
24 feature on the webinar and the panel members can view
25 those questions as they are participating in the meeting

1 and interacting with the speakers. The panel members
2 will not necessarily ask all the questions that are
3 asked or typed in; however, they will review those
4 questions and see them streaming across their screen and
5 they can pick up on any ideas or concepts that they want
6 to pursue with the individual speakers or other panel
7 members of PG&E staff.

8 We also will have a comment period around 9:00
9 tonight in the agenda, which will provide opportunity
10 for public members or attendees to make public comment
11 and I would ask you -- I think we had about ten people
12 indicate that they wanted to make public comment and any
13 others who would like to do so will also be afforded to
14 at that time.

15 The meeting is being recorded and a written
16 transcript will also be available on the website after
17 this meeting. I would -- before we begin, I would like
18 to recognize the panel members, Dena Bellman, who is
19 chair of the Water Resources Meeting Committee, and the
20 committee members Kara Woodruff, Patrick Lemieux and
21 Sherri Danoff. Since the inauguration of the panel, the
22 panel has become more and more actively involved in
23 managing their own meetings to the point now where the
24 individual panel members have taken the lead, including
25 putting these meetings together on topics that they are

1 particularly interested in. So tonight, Dena, thank you
2 for all your efforts.

3 To kick off the meeting, we always have a
4 safety discussion or briefing and I'd like to welcome a
5 new panel member, Dr. Timothy Auran, to provide that
6 briefing. And, Bob, if we could have the slide
7 presentation, also.

8 MR. AURAN: Thank you very much, Chuck. I'd
9 just like to take a couple minutes to go over some
10 basics of COVID-19 and the particular masks that people
11 have been asked to wear out in public and many times in
12 public/private settings. This should take a minute or
13 two.

14 The most common masks that everybody is aware
15 of are these ear loop masks, which you can buy in bulk
16 or many times just make on your own or buy on Amazon.
17 These are primarily source control masks meaning that
18 the point of this mask is to largely catch particulates
19 that you are exhaling or coughing out when you breathe.
20 These masks provide a little bit of protection to the
21 wearer, very much depends on how they're made, the
22 material they're made out of and how well they fit, but
23 the protection to the wearer can vary quite a bit,
24 filter anywhere from 10 to only 80 percent of the air
25 you're breathing in. Most of the point of this is to

1 have everybody wearing these so that if we have
2 asymptomatic protected individuals that could be
3 spreading the virus without knowing it, everybody
4 wearing a mask should catch those particles and
5 significantly reduce risk of transmission to everybody
6 around them.

7 The next kind of mask many people will wear are
8 these N95 masks or KN95 masks. These are respiratory
9 protection masks. They're very different from the ear
10 loop masks. These typically have two very tough rubber
11 straps on them, and when worn properly, they should form
12 a very tight seal around your mouth and nose so that all
13 the air you inhale passes through the mask entirely.
14 These masks are made out of very well-defined material
15 that's actually certified by the National Institute of
16 Occupational Safety and Health. If this is a truly N95
17 mask, it can be worn in a health care setting, for
18 example. This actually will have the NIOSH symbol
19 somewhere stamped onto the mask itself. This is much
20 better protection, but this is usually only intended or
21 necessary for people who are actively involved in the
22 care of people who are known to have COVID. So this is
23 primarily what health care providers or first responders
24 would be wearing. Generally, this is not necessary for
25 the general public. It's also generally thought to not

1 be a good idea to have the public buying these up.
2 These are more difficult to make and more expensive and
3 this is -- we have heard more about the runs on hospital
4 equipment. This is one of the items hospitals simply
5 ran out of and no hospitals could find because people
6 were buying all of them off of Amazon and health care
7 providers had a hard time getting ahold of them.

8 Go to the next slide. The third mask type I
9 would like to discuss is one that unfortunately many
10 people are still wearing, which is kind of why I brought
11 this up. I'll still go around and shop in Costco and
12 see people wearing valved masks. These are virtually
13 entirely worthless. The valve on these masks allows
14 exhaled air to bypass the mask entirely. So you are
15 completely losing the entire benefit of wearing the mask
16 if you have these on. The mask on the top that you can
17 see is actually an N95 mask with the NIOSH stamp with
18 the valve on it and these have a use to them. If you're
19 cutting and hanging drywall and there's a lot of very
20 fine particulate matter in the air, this is what you
21 want to wear. This will take all the drywall particles
22 out of the air before you inhale it. But since we
23 aren't concerned about you being infected, all the air
24 that you breathe is allowed to pass out of the mask
25 without a problem. The issue is that this kind of N95

1 mask should not be worn in public with the intent of
2 trying to protect the public.

3 The mask at the bottom is probably the most
4 worthless mask. This is a ear loop mask. So as I
5 mentioned before, when you inhale, a lot of the air that
6 you're actually inhaling comes around the mask and
7 doesn't get filtered. So the air that you're breathing
8 in really doesn't get filtered very much. And it has
9 valves. So the air that you exhale that was getting
10 filtered virtually not at all. So you may as well not
11 wear a mask at all if you wear this kind of mask. So,
12 again, generally, an ear loop mask without a valve is
13 what everybody should be wearing.

14 Go to the next slide. Just a couple general
15 words on COVID-19. The best way to avoid it is to
16 simply avoid exposure. So keeping six feet of distance
17 as recommended by the public health professionals, as
18 well as staying home when you're sick. Simply not being
19 exposed is the best way to avoid getting the virus.

20 One thing that we have noticed in particular in
21 the health care setting in the entire country, but also
22 in town, is people are showing up to the hospitals with
23 much more advanced disease states than they had before
24 COVID, which we largely are attributing to people being
25 afraid to the come to the hospital. The hospitals are

1 safe. From the very start of the pandemic, all the
2 hospitals in town have always had adequate isolation
3 rooms and been able to take care of COVID patients.
4 Currently, we have not had a single case of COVID
5 transmission between a patient and a health care
6 professional in the hospital or between patients in the
7 hospital in San Luis Obispo County. It is a very good
8 idea to seek the care that you need when you think you
9 need it. Don't delay care because you're afraid of
10 getting COVID. Emergency rooms are -- all of them are
11 completely prepared to handle all patients and place
12 them in isolation immediately upon their arrival. COVID
13 is going to be with us for a while. We kind of all just
14 need to get used to how we need to adapt to live in kind
15 of this new world. The vaccine is not going to be the
16 golden bullet that takes care of all our problems. I'm
17 sure we've seen on the news vaccines are probably not
18 going to be 100 percent effective, probably not going to
19 offer lifelong immunity and will take a long time to
20 generate hundreds of millions of vaccines to get to
21 everybody. So general precautions we've been saying the
22 past several months, the best thing to do if you are
23 sick, try to get medical care that you need and then
24 stay isolated.

25 Thanks for the time, Chuck. I appreciate it.

1 MR. ANDERS: That's a good reminder. Everyone
2 should mute your microphones, but you have to turn them
3 on when you want to speak again. So please do that.

4 The next slide. I just want to give a quick
5 overview of the agenda for tonight before I turn it over
6 to Dena Bellman. Next slide. All right. The -- we're
7 going to have the opportunity to officially recognize
8 our new panel members to the panel and then we're going
9 to have a discussion of the breakwater and marina. As I
10 said, this particular meeting focuses on water resources
11 at Diablo Canyon. So we're going to talk about the
12 breakwater and marina, also have a discussion about the
13 intertidal area, take a quick break, have a discussion
14 about seawater desalinization. We'll have the
15 opportunity for an update from PG&E on decommissioning
16 activities, then we'll have public comment, introduction
17 of the next meeting topic, which is going to be the
18 NDCTP ruling, hopefully, and at that time adjourn and we
19 want to do all this by 9:30. So I'm going to remind all
20 of the speakers and presenters to please stay on time,
21 and if it looks like we're getting a little bit behind,
22 I will remind everyone about keeping on time so we can
23 honor our commitment to adjourn by 9:30.

24 So with that, I'd like to turn it over to Dena
25 Bellman for introduction of the new panel members.

1 Dena.

2 MS. BELLMAN: Thank you, Chuck. I do have the
3 pleasure to introduce our new panel members. You've
4 already met Dr. Timothy Auran. He is an interventional
5 radiologist at Radiology Associates in San Luis Obispo
6 with an interest in radiation therapy and the nuclear
7 industry. He grew up outside of Cleveland, Ohio and has
8 lived on the Central Coast for 11 years. He has served
9 in several medical staff positions at local hospitals,
10 including chief of staff at Sierra Vista Regional
11 Medical Center and is currently the CEO of Radiology
12 Associates. Thank you so much, Timothy, and especially
13 for your great COVID reminders.

14 Next we have Patrick Lemieux. Patrick
15 currently works at Cal Poly as a professor of mechanical
16 engineering. He began his career in 1999 as an engineer
17 at Allied Signal Aerospace, now Honeywell International,
18 and at Exponent Incorporated for Failure Analysis
19 Associates. Patrick has been in this area for nearly 14
20 years and is an active member of the American Society of
21 Mechanical Engineers, Distributed Wind Energy
22 Association and the Aircraft Owners of Pilots
23 Association. Welcome, Patrick.

24 And, lastly, Charlene Rosales, she's a 35-year
25 resident of San Luis Obispo and currently the deputy

1 director, COVID manager for Mission Community Services
2 Corporation, the Women's Business Centers in San Luis
3 Obispo and Monterey Counties. Charlene previously held
4 positions as COO for United Way of San Luis County,
5 director of governmental affairs for the San Luis Obispo
6 Chamber of Commerce and economic development manager for
7 the City of San Luis Obispo. She currently serves as a
8 board member with Rotary of San Luis Obispo Daybreak,
9 SESLOC Federal Credit Union, Woods Humane Society and is
10 a member of the Community Benefits Committee for Dignity
11 Health. You can find more on their bios at the
12 DiabloCanyonPanel.org website. We welcome our new panel
13 members. They have each jumped in with great passion
14 and diligence. So we are very excited to have them
15 engaged with us as we look at the future of Diablo
16 Canyon lands and decommissioning.

17 As excited as we are to introduce our new panel
18 members, it is with a deep sense of gratitude and
19 respect that we announce the panel member retirement of
20 a true community leader, Dr. Nancy O'Malley. Nancy
21 continues to do great work in the community with the
22 north clinic, and particularly in this time of COVID, we
23 are so appreciative for all of her efforts and
24 leadership both on this panel and in our community. We
25 are presenting Dr. O'Malley with a Diablo Canyon

1 Decommissioning Engagement Panel inaugural panel member
2 plaque that can be seen in the PowerPoint here. It
3 holds the inscription the decisions I make are not for
4 me, but for generations to come. This is what the panel
5 will do, try to do what is best for the future
6 generations. This sentiment is inspired by retired
7 panel member Frank Meham and is embraced by each of us
8 committed to the work of this panel. Our thanks to
9 Nancy for all that you do.

10 So I think we can move to Item Number Five,
11 Chuck. Is that our...

12 MR. ANDERS: Yeah. Go with it.

13 MS. BELLMAN: Okay. We will move to breakwater
14 and marina resources. A little bit about this, the
15 panel developed and continues to update our strategic
16 vision for the decommissioning of Diablo Canyon.
17 Through these vision statements, goals and
18 recommendations is the intent of Diablo Canyon
19 Decommissioning Engagement Panel to offer repurposing of
20 Diablo Canyon facilities as an alternative to
21 demolition. The repurposing of these facilities can
22 allow for the creation of new jobs to replace those lost
23 through the closure of Diablo Canyon Power Plant,
24 decrease the volume of dismantled facility debris being
25 transported and create opportunities to minimize the

1 cost of decommissioning by limiting the amount of
2 dismantling and removal. Specifically in the vision
3 statement, it's recommended that the breakwaters and
4 associated harbor marine facilities be retained and that
5 PG&E explore opportunities for repurposing the harbor
6 consistent with the environmental quality and safety of
7 the region. So we're very pleased to introduce our
8 speakers on this subject tonight who will further
9 understand the potential opportunities and constraints
10 of the subjective.

11 First will be Trevor Rebel. He's been with
12 PG&E for 23 years and is currently the decommissioning
13 planning environmental supervisor and leader of the PG&E
14 scientific dive team. Once Trevor is completed, we have
15 the team from California State Lands Commission. We're
16 very glad to have you here this evening. We have Cheryl
17 Hudson, the public lands management's specialist, and
18 Lucinda Calvo, the stateland's staff attorney.

19 Trevor, I will turn it over to you.

20 MR. REBEL: Thank you. Next slide, please.
21 This side sets the stage for what we're talking about.
22 This came from the Society of Civil Engineers in 1982.
23 The original breakwater was constructed for planning
24 water to protect large water pumps and other intake
25 structure from excessive waste surge. Also serves

1 protective cove for small boats and harbors and for
2 outgoing environmental studies by both Department of
3 Fish and Game and PG&E, which are still occurring to
4 this day.

5 Next slide. This is early construction.

6 Next slide. This rates us to the breakwater
7 itself. The site is unique in that the mouth of the
8 breakwater is facing south and north is towards the
9 contained domes in the background. We call them the
10 east and west breakwaters.

11 Next slide. Early years of performance was
12 actually completed in 1972 and suffered very little
13 damage except for some minor storm damage in 1974.
14 Unfortunately, down came the storms of 1981 and caused
15 significant damage to the west tip of the breakwater,
16 actually tore out a couple hundred feet of the west
17 terminal end. We learned later that the storm exceeded
18 the modeling by about 39 percent. So it was a pretty
19 significant event.

20 Next slide. So we learn from this the
21 historical meteorological analysis, they did a hydraulic
22 modeling of the area and we determined a need for
23 real-time monitoring going forward to assess performance
24 of breakwater.

25 Next slide. So when it was redesigned and

1 reconstructed, essentially, the 37-ton tribars and 21
2 tribars don't need a lot, but very large tribars were
3 placed on the outside edges and smaller but still
4 significant tribars were placed on the inside edges of
5 both breakwaters, added rim concrete to shallow areas,
6 We added a block or crest to the top of it. We had a
7 third party engineering review and it was reviewed by
8 the Nuclear Regulatory Commission for nuclear safety
9 persons.

10 Next slide. This image provides a better
11 picture. It's kind of like an iceberg. The dark blue
12 what you see typically if you were to go in and out of
13 the marina, but all the lighter black circles are all
14 underwater, just the enormity of the structure itself.

15 Next slide. Here's a time line of the
16 breakwater construction damage and where we are today.
17 So again, it was completed in '72. Significant damage
18 in 1981. We completed repairs in 1984, and since then,
19 we've had 30 years of essentially nothing to do with the
20 breakwater, including the 2003 San Simeon earthquake.
21 We have civil engineers come out every year and take a
22 look at the breakwater see how much smooth. It's kind
23 of boring for them because the thing doesn't move. It
24 moves by .001 or 1,000ths a year approximately.

25 Next slide. So if it were to be removed, we're

1 talking 684,00 tons of material. We'll put that in
2 perspective in the next couple slides, but -- and then a
3 third of a million dollars to remove the thing.

4 Next slide. This is a perspective. Like I
5 said, 684,000 tons of concrete to remove the breakwater.
6 That's actually more than all the other the wastes
7 combined that will have to be DCPD during
8 decommissioning. That's indicated by the big green
9 upside down pyramid there.

10 Next slide, please. So we spent about 5,000
11 bucks a year annually to have it inspected. We have to
12 maintain a buoy we have by regulation. Costs about
13 \$10,000 a year to do that and repairs since 1984 have
14 been exactly zero dollars.

15 Next slide. So the current future marina,
16 the -- it's currently protecting our power plant, our
17 intake system as designed. It provides a safe harbor
18 for marine traffic of all sizes. If we were to remove
19 the breakwater, we're jeopardizing, impacting protecting
20 endangered species that currently live there and have a
21 happy home there, the California sea otter and more
22 recently black abalone that were found on the breakwater
23 structure. In the future, we anticipate it to be a
24 great protective boat anchorage up and down the coast.

25 Next slide, please. We transition a little bit

1 into barging here. So historically, we've had two
2 recent events. The electrical transform moves of 1994
3 were barged, brought in for us.

4 Next slide. Another view of the barge coming
5 into the marina area.

6 Next slide. And more recently, when we brought
7 in the new steam generators in 2007, barging was used in
8 the form of two different barge sets to bring in these
9 successfully.

10 Next slide. This is showing how it was
11 unloaded. Essentially, they pulled the barge up to the
12 shoreline, up the ramp cable and tie it off in place.
13 It's a very safe way of moving large amounts of
14 material, heavy material.

15 Next slide. So a case for barging is we know
16 that barges carry about 200 times the capacity of any
17 truck. The infrastructure is already in place. It's a
18 calm marina and we've proven it in 1994 and again in
19 2007. The environmental impact of barging will be
20 analyzed as part of the coastal development permit
21 process along with the California Coastal Commission.
22 From when we have barged, we have marine mammal
23 observers in place to make sure that marine mammals are
24 protected. We noticed when we bring the barge, it tends
25 to move sand around the bottom, but no damage to any

1 infrastructure or wildlife.

2 Next slide. So next steps for barging, PG&E
3 has contracted with a transportation expert and what
4 they're doing is evaluating all the modes of transport
5 by both truck, barge and rail to see, you know, what
6 options are available to us, what makes sense for both
7 the ratepayer and the decommission project itself. We
8 expect to have preliminary data in November 2020. So
9 coming up soon. And then that evaluation will help us
10 inform the transportation modes for the 2021 NDTCP
11 filing. More perspective on the 684,000 tons of
12 material, that equates to about 34,000 front loads to be
13 saved and not be in the site.

14 Next slide. And that's what I have. I'll turn
15 it over to Ms. Cheryl Hudson.

16 MS. HUDSON: Hi. Thank you. Can we please
17 start with the second slide? Thank you. Good evening.
18 The California Statelands are made up of three members,
19 the lieutenant governor, the state controller and the
20 governor's appointed director of finance.

21 Next slide. Commission has been given the
22 responsibility to manage California sovereign tide and
23 submerged lands and the beds of navigable waterways on
24 behalf of the public acting as trustee under the public
25 trust. The commission's trustee role obligates the

1 commission to protect public rights, values and needs
2 associated with the navigable waters.

3 Next slide. Generally, the landward boundary
4 of sovereign lands is the ordinary high watermark for
5 tidal waterways and the ordinary low watermark for
6 navigable non-tidal waterways. On the coast, California
7 sovereign lands extend from the high watermark to three
8 nautical miles into the Pacific Ocean. The ordinary
9 high watermark is generally measured by the mean time
10 line except in locations where there is spill and
11 artificial accretion.

12 Next slide. The public's right to use
13 California sovereign lands for navigation, fishing,
14 natural habitat protection and other water-oriented
15 activities is protected by the public trust doctrine.
16 The public trust also requires that sovereign lands be
17 used to benefit statewide public and not only residents.

18 Next slide. The commission determines what
19 uses are to be made on sovereign lands on a case-by-case
20 basis. The commission has discretion to approve or deny
21 any proposed use of sovereign land and makes decisions
22 based on the public trust doctrine and the best interest
23 of the state. The commission is also required by
24 statute to receive a fair market rental rate when
25 leasing sovereign lands.

1 Next slide. Some sovereign lands have been
2 granted by the legislature to local governments to
3 manage. The commission retains residual and review
4 oversight authority for these grants of lands and this
5 is Public Resources Code 6301 and 6306. Both the state
6 constitution and California statutory framework prohibit
7 the sale of public trust lands.

8 Next slide. As a landowner, the commission has
9 broad leasing authority for the statelands under its
10 jurisdiction. Anyone interested in using or occupying
11 land under the commission's jurisdiction must submit an
12 application for a lease. When considering, the
13 commission analyzes the proposed uses for consistency
14 with the public trust doctrine and the best interest of
15 the state. In August 2016, the commission adopted a
16 tribal policy in collaboration with the governor's
17 Tribal Advisor Executive Order B1011. Commission staff
18 is committed to consulting with tribal representatives
19 regarding project activities within its jurisdiction.
20 The commission also considers the environmental of
21 justice impacts of the proposed use under its
22 environmental justice policy. All cost associated with
23 the analyses are to be fully reimbursed by the
24 applicant.

25 Next slide. Commission staff also makes

1 determinations about what level of environmental review
2 is necessary under the California Environmental Quality
3 Act and ensures all requirements of CEQA have been met
4 before the new application and related CEQA documents
5 may be considered by the commission. Commission staff
6 prepares the staff report recommending that the
7 commission approve or deny the lease application at a
8 public meeting. Staff also negotiates with the
9 applicant. While the commission considers staff's
10 recommendation and the negotiated lease terms, the
11 commission exercises its independent discretion to
12 accept or reject staff's recommendation or required
13 different lease terms as part of its approval. The
14 commission holds approximately six public meetings each
15 year with the occasional special meeting.

16 Next slide. PG&E has an existing lease, Lease
17 9347 for the Diablo Canyon facilities on statelands.
18 The lease is set to expire on August 26, 2025. The
19 lease facilities include cooling water discharge
20 channel, water intake structure, breakwaters, boat dock,
21 storage facility, office facility, intake electrical
22 room, intake maintenance shop, equipment storage pad and
23 a spare tribar storage. The lease requires that PG&E
24 submit a decommissioning and restoration plan. On April
25 29th, 2020, the commission authorized an amendment to

1 Section 2 of the lease to change the submittal date for
2 the restoration plan from August 26, 2020, to August 26,
3 2023. Lessee requested the date extension to ensure it
4 had significant time to consult with government agencies
5 and interested parties to develop a comprehensive
6 restoration plan, including additional time for the lead
7 agency to prepare the environmental impact report for
8 the plant's decommissioning activities.

9 What's next? The preparation of the EIR for
10 the proposed decommissioning project. On August 20th,
11 2019, the County of San Luis Obispo Board of Supervisors
12 voted unanimously to service lead agency. Therefore, a
13 commission will serve as a responsible agency. A
14 responsible agency complies with CEQA by considering the
15 environmental document prepared by the lead agency and
16 by reaching its own conclusions on whether and how to
17 approve the project involved. Commission staff is
18 collaborating with the county in preparation of the EIR.
19 Secondly, lessee must submit an application for the
20 proposed decommissioning activities for the leased
21 premises.

22 Next slide. PG&E is exploring options for the
23 reuse of the leased premises, which include the intake
24 structure and breakwaters. The County of San Luis
25 Obispo, Cal Poly San Luis Obispo and the Port of San

1 Luis Harbor District have expressed interest for reuse.
2 The public has also expressed support for reuse of the
3 facilities. The following options have been expressed
4 to the commission staff as examples for reuse of the
5 existing leased premises. The county could lease the
6 facilities and sublease to other entities. The Port of
7 San Luis Harbor District could expand their existing
8 uses into the leased premises using the existing
9 breakwaters, boat docks and associated facilities. The
10 California State university or University of California
11 system could reuse the leased premises for educational
12 and marine research. Cal Poly could expand their marine
13 science program using the existing facilities. These
14 are just a few examples of the potential reuse.
15 Commission staff is open to discussing and exploring new
16 opportunities to -- and concepts for repurposing the
17 lease -- the existing lease facilities at Diablo Canyon.
18 In general, commission staff supports uses that enhance
19 access to sovereign lands for navigation, recreation,
20 environmental preservation and other public trust
21 consistent uses. Constraints depend on the proposed
22 plan for decommissioning, which at this time are unknown
23 as it has not been submitted. Staff will
24 comprehensively engage with all stakeholders, gain
25 insight, suggestions and priorities, conduct meaningful

1 justice outreach and tribal consultation consistent with
2 our policies, analyze public trust consistencies and
3 inconsistencies of alternatives, along with the best
4 interest of the state and assess the environmental
5 impacts of alternatives before making a recommendation
6 for a commission authorization.

7 Next slide. This concludes my presentation.
8 Thank you.

9 MR. ANDERS: Thank you very much, Cheryl.
10 Dena, do you have anything else that you would
11 like to add before we open it up to questions amongst
12 the panel?

13 MS. BELLMAN: No. I think I just want to thank
14 everyone so much for their information. Cheryl, that
15 was really helpful as we consider the future. So thank
16 you both for your presentations and I would open it up
17 to the panel for their questions.

18 MR. ANDERS: Okay, Panel. This is your
19 opportunity to ask questions. If any of the public
20 attendees would like to have a question or comment,
21 please put it on the Q and A list and the panel will see
22 that and they may choose to relay that. So Panel
23 Members, any questions of the presenters, of Trevor and
24 Cheryl?

25 MS. WOODRUFF: Chuck, I know we talked about

1 raising our hands when we want to ask a question, but I
2 don't see that available.

3 MR. ANDERS: It got it. And Scott has a
4 question and then Sherri. Go ahead, Scott.

5 MR. LATHROP: Thanks, Chuck. This question is
6 actually for Trevor. I was interested in the fact that
7 the maintenance of the breakwater's kind of low right
8 now, but if the breakwater was going to continue to
9 exist, I'm assuming there's some kind of deferred
10 maintenance plan. Has PG&E thought of that as far as it
11 went into the future or would that be totally left up to
12 whoever might be the new lessor of the breakwater?

13 MR. REBEL: Thanks, Scott. Based on
14 performance and that's why we do the annual measurements
15 with the civil engineers. There's no maintenance
16 plan -- full maintenance plan right now because there's
17 essentially no damage and no movement. If there were to
18 be, it would be into our corrective action program. So
19 right now there is no plan moving forward. So it would
20 be up to the DC in the future.

21 MR. LATHROP: Okay. Thank you.

22 MR. ANDERS: Okay. Sherri, did you have a
23 question?

24 MS. DANOFF: Yes, I do. This is a question for
25 Cheryl, what the components would be for a restoration

1 plan and does it fit into a restoration plan?

2 MS. HUDSON: So, basically, it could be any
3 portion of the facilities that are located within the
4 state's jurisdiction. So the -- everything that I had
5 mentioned -- I've got to go back to my slides real
6 quickly. Everything that I've mentioned -- well,
7 including the -- all the uplands. So, basically,
8 everything in the state's jurisdiction, we -- well, the
9 commission -- depending on the environmental document,
10 anything and everything actually can be repurposed.
11 It's just up to the lessee and the environmental
12 document and the public and, you know, like I mentioned,
13 the tribal -- you know, when we consult with the tribal
14 and justice policy, all that is incorporated into the
15 repurposing, but at this time, you know, in just my own
16 opinion as just being me, you know, it would be nice to
17 see it being repurposed instead of, you know, torn out,
18 but the long-term goal is to satisfy the public and
19 whichever is the best interest of the state.

20 MS. DANOFF: Very helpful. Thank you.

21 MR. ANDERS: Thank you. Kara, you have a
22 question and then Lauren.

23 MS. WOODRUFF: Thank you, Chuck. Thank you,
24 everybody, for the presentations. That was really
25 informative.

1 So this is a question again for Cheryl. You
2 laid out a process whereby a third party after the
3 decommissioning of the plant could apply to be the
4 successor lease of the breakwater and marina and other
5 facilities and my question is what happens if nobody
6 steps up, nobody has the wherewithal, their financial
7 capacity to step into PG&E's shoes? What happens then?

8 MS. HUDSON: I believe PG&E can stay on the
9 hook as the lessee and sublease it, the facilities,
10 whatever -- you know, whatever repurposing portion they
11 do.

12 For instance, if absolutely no one steps up and
13 wants to repurpose and PG&E does not want to take on
14 that liability as the lessee, our lease states that the
15 land under lease goes to restore the land back to its
16 natural state. So for removal, yes. And for some
17 reason -- oh, sorry. Go ahead.

18 MS. WOODRUFF: Oh, no. That's actually
19 helpful. So if you don't find a third party, PG&E may
20 very well likely have to then take down the breakwater,
21 remove all the facilities, bring it to its natural
22 state.

23 And so I guess my next question is directed to
24 PG&E. In that scenario, the cost of removal and the
25 hassle and the impact to surrounding communities is

1 quite profound and I think what really stands in the way
2 of a third party being able to step into the shoes of
3 PG&E is the financial burden and liability behind it and
4 I'm wondering if there's any chance that those funds
5 that are in the decommissioning trust fund which are
6 strictly limited to decommissioning costs could somehow
7 by federal legislation or otherwise be redirected so
8 that some of those funds could be transferred to a third
9 party that might enable the transfer of the lease rather
10 than just the tearing down of the facilities. Is that a
11 reasonable question for you, Maureen and Tom?

12 MS. ZAWALICK: Yeah, I was going to let Tom
13 take that first.

14 MR. JONES: Thanks for the question, Kara. Tom
15 Jones with PG&E. Yeah, we have studied that scenario
16 and we don't see it as a binary function of either
17 there's 100 percent cost savings or someone takes it on.
18 It would be subject to negotiation and I think we've
19 shared with this panel and statelands and others in the
20 past at our workshops in Atascadero that a good example
21 very nearby and that was the Unocal, slash, Chevron pier
22 going to Cal Poly and that came with some fund to
23 address those very liability issues that you suggest
24 could exist. The other mechanism actually is state
25 legislation and I believe the panel's posted on its

1 website the white paper that we've authored in
2 cooperation with statelands and the county and the other
3 option if not through the lease mechanism is the
4 legislature can grant those intertidal areas, including
5 the breakwater and the assets, to a local government.
6 So it's all the subject to negotiation and so we'll be
7 pursuing that in the next couple of years, but again we
8 have limited interest from folks, but they tend to be
9 institutions that would have the wherewithal to operate
10 it and then again subject to negotiation.

11 MS. WOODRUFF: I'll just follow up. I think
12 the major challenge is everybody recognizes that the
13 breakwater has a lot of benefit, possibly to people most
14 likely to wildlife. The removal is a complete hassle,
15 extraordinarily expensive, super burdensome on Avila
16 communities and others that are in the path of the
17 debris removal and I think everybody's very interested
18 in a third party like the county being able to step up
19 and assume management of the breakwater, but unless they
20 have a funding mechanism that goes along with that, it
21 makes it pretty impossible and so the real challenge is
22 how do we get the money to a third party to be able to
23 carry on the operation of the breakwater.

24 MR. JONES: I think it's in two parts like I
25 mentioned, partial negotiation, but there is also a

1 revenue generator once you have that facility. I
2 wouldn't assume it would always be a free asset in that
3 case if there's ongoing obligations outside of the
4 liability for the maintenance of the structure. So for
5 our reuse, we also don't see the breakwater by itself as
6 a valuable asset. It would need the adjacent parking
7 lot, some buildings and infrastructure to support it.
8 If you think about any port you've been to, the marina
9 itself is useless without access to port facilities. So
10 we're putting together little components that would
11 complement that and make it more viable for third party
12 use.

13 MS. WOODRUFF: That's good. And as we know,
14 the tricky part is when you have a lease on these public
15 trust lands, all the revenues generated have to be put
16 back into that public trust lands, but maybe you have a
17 work-around with facilities that are adjacent to those.

18 MR. JONES: Yeah. Everything above the high
19 tide line is on land currently owned by Eureka Energy
20 and not in the -- it's in the state's jurisdiction for
21 permitting, but certainly not -- there's a clear
22 boundary there between where those jurisdictions and the
23 ownership changes.

24 MS. WOODRUFF: Thank you.

25 MR. ANDERS: Thank you, Kara. Last question on

1 this segment from Lauren.

2 MR. BROWN: Yes. This is a question for
3 Cheryl. I'm wondering if there were any particular
4 lessons learned from the decommissioning of the Humboldt
5 Nuclear Power Plant that might be applicable to the
6 current situation here.

7 MS. HUDSON: Actually, that would be a question
8 for Tom Jones because I believe the statelands was not
9 involved in that because it was on -- I believe a
10 portion, I think, was on granted lands, but Statelands
11 Commission itself did not play a role in that
12 decommissioning.

13 MR. JONES: That's correct, Cheryl. Very
14 different setting there and we had a local harbor
15 district in that case that we worked with and there were
16 some dredging issues and other things subject to coastal
17 development permit.

18 Lauren, I would suggest to you, and Cheryl
19 might be familiar with this, that statelands did play a
20 prominent role in how San Onofre retired some of its
21 assets inside of the intertidal area in the state's
22 sovereign lands. They did some abandon in place of
23 facilities where -- and then also some removal of
24 facilities are part of the plan. So there's flexibility
25 there and, again, as Cheryl mentioned earlier, the

1 ultimate authority rests with the three commissioners on
2 the Statelands Commission and they have very broad
3 powers on behalf of the public.

4 Cheryl, did you want to augment that answer?

5 MS. HUDSON: Yes, that is correct. Yeah, the
6 commission has a say over everything and usually --
7 usually it has a lot to do -- you know, the public and
8 the environmental document with San Onofre, the
9 environmental document for the unit one actually stated
10 that it would be more harm to fully remove it than to
11 leave it in place. So the commission took that into
12 consideration, but everything is up in the air until the
13 commission has the chance to hear the proposed project
14 at a public meeting.

15 MR. ANDERS: Thank you very much. It's time to
16 move on to our next agenda topic. I would like to thank
17 Dena, Trevor and Cheryl for your presentations and for
18 pulling together this topic.

19 The next topic is on intertidal area and this
20 is led by panel member Kara Woodruff. So Kara.

21 MS. WOODRUFF: All right. Can you hear me
22 okay?

23 MR. ANDERS: Yes, I can.

24 MS. WOODRUFF: Okay. So the second of three
25 major topics tonight related to water resources around

1 Diablo Canyon is the intertidal area. I'm sure many of
2 you know the intertidal area or intertidal zone is the
3 place where the ocean meets the land and it's the area
4 between low and high tides. In the case of Diablo
5 Canyon Power Plant, it is surrounded by 14 miles of
6 coastline, which means 14 miles of intertidal zone.
7 Within that zone, the most important part ecologically
8 speaking are the tide pools themselves, and today with
9 our presentations, you'll see how beautiful and fragile
10 and how incredibly ecologically rich the tide pools are
11 surrounding the power plant.

12 I did a quick Google search of the county's
13 best tide pools and the Diablo Canyon tide pools weren't
14 even listed and the reason why is because they have been
15 off limits to people for the most part since the
16 operation of the power plant. They've been studied
17 extensively by PG&E and their contractors, but they've
18 mostly been left alone, and as a result, they're really
19 in quite pristine shape.

20 So the challenge we have with the
21 decommissioning of the plant is how do we appreciate,
22 enjoy and learn from those tide pools, but not destroy
23 them in the process, and we've got a couple of really
24 great speakers tonight who are going to tell you more
25 about this really incredible rich biological area in our

1 county. The first is Steven Pengilley. Steven is a Cal
2 Poly graduate with a dual degree in ecology and
3 systematic biology and marine biology. He has 25 years
4 of work experience in marine research and has extensive
5 experience in the field of taxonomy of marine algae and
6 invertebrates. Most of that research was focused around
7 Diablo Canyon Power Plant in support of their receiving
8 water monitoring program. He currently serves as the
9 Diablo Canyon project manager for Tenera Environmental.
10 He's responsible for scheduling and implementation of
11 all intertidal and subtidal surveys, as well as field
12 instrumentation, storm water IGP compliance -- and maybe
13 he can tell us what that means -- and recent additional
14 marine studies for decommissioning projects.

15 Our second speaker is Sally Krenn. I know many
16 of you know Sally. She's a long-time resident of the
17 Central Coast, graduated from Cal Poly, as well, with a
18 BS in biology in 1976. She served in many scientific
19 capacities in the region. Sally started her
20 professional career with the California Department of
21 Fish and Wildlife in 1976 and was a naturalist for the
22 Kern County Environmental Education Program before
23 becoming a biologist for PG&E. Sally's work with PG&E
24 included subtidal and intertidal surveys to monitor the
25 thermal impact from the power plant outball on marine

1 floor and fauna and impingement studies at Diablo's
2 intake. In addition to her position as a board member
3 for the Bay Foundation of Morro Bay, she's currently
4 retired, but volunteers her time with California State
5 Park and the Land Conservancy of San Luis Obispo and as
6 a caretaker for the Point Buchon Headland. In 2018, she
7 received the ocean ambassador of the year award for her
8 lifetime commitment to marine science education program.

9 So with that, I'll turn this over to you, Steve
10 and Sally. Thank you.

11 MR. ANDERS: Kara, just a second because the
12 slides are for Sally to speak first and then Steve and I
13 just wanted to indicate that we need to go to Steve's
14 slides first and Steve's first slide has a blue
15 background and it says DCPD marine studies. So Bob, can
16 you do that for us?

17 BOB: Do you know what number it is? Never
18 mind. I'm just going to go and click forward.

19 MR. PENGILLEY: It's Number 70.

20 MR. ANDERS: So we get a preview of Sally's
21 presentation.

22 BOB: Just tell me when to stop.

23 MS. KRENN: Do you like my presentation so far?

24 MR. Pengilley: You have a lot better pictures
25 than I do.

1 MR. ANDERS: Sorry about the miscommunication
2 here.

3 MR. PENGILLEY: No problem. Thanks everybody
4 for inviting me here. Thank you, Kara, thank you to the
5 panel for inviting me to speak about the intertidal
6 areas in and around the Diablo Canyon. That's a subject
7 I'm very fond of speaking of and very near and dear to
8 me. I spent two and a half decades out there on various
9 studies. So I always appreciate the opportunity to show
10 some data and try to describe for people the process and
11 nature of that little stretch of coastline and how
12 pristine it is and to emphasize that we need to preserve
13 and protect it and I'm sure Sally feels the same way.

14 Like you mentioned, tonight we're going to
15 split our talk up. I'm going to go first and talk about
16 the receiving water mostly and then Sally is going to
17 talk about some of the studies we did up at north ranch
18 and some other intertidal studies involving public
19 access.

20 So I'll get started. We're on the first slide
21 here. We've done a lot of studies out there at Diablo,
22 clean water discharge studies, which is what we're
23 mainly talking about tonight. Biological monitoring,
24 physical oceanography, instrumentation, effects on
25 intake systems, such as entrainment, impingement,

1 technology assessments, traveling screen, testing the
2 water flows, things like that. We've done endangered
3 species monitoring, land management. There's been over
4 340 reports and papers by scientists and engineers from
5 PG&E, also PG&E consultants, resource agencies and
6 academia.

7 Next slide. So the start of commercial
8 operations March 1985, a discharge of 2.5 billion
9 gallons a day at 20 degrees of discharge. Discharge
10 plume is a thin layer outside where the effects are
11 limited.

12 Next slide. Sampling began in 1976 to assess
13 the effects of the discharge. I was eight years old for
14 a perspective. So I didn't really care about the
15 effects of discharge. Most comprehensive sampling done
16 on the shoreline and intertidal areas, which Diablo Cove
17 had the largest impacts due to the discharge. Total of
18 14 intertidal stations, 12 with two 30 mini-transects
19 and the other two are on the headlands. So there's not
20 really room for two transects. So we only have one and
21 you can see most of those sites, it's kind of hard to
22 see on that picture, but they're focused around the
23 discharge cove inside with a couple control sites north
24 and south.

25 Next slide, please. Here's a typical

1 intertidal setup. We have the two .9 meters, which is
2 basically the plus three and then the .3 meter, which is
3 basically the .1 horizontal band transects or we just
4 call them HBT quadrats with permanent anchors on either
5 end. Basically, we're sampling the same exact quad
6 every quarter that we go out there, quarterly sampling,
7 counts of invertebrates, percentage of cover of algae
8 and substrates.

9 Next slide. The intertidal areas along Diablo
10 Canyon, the shoreline are dominated by rocky habitat
11 with intermittent sand and cobble beaches, and due to
12 the long shore occurrence and upblowing of rocky
13 intertidal areas characterized by lush coverage of
14 algae, also they get a lot of wave action, which helps
15 nutrients up to the intertidal zone.

16 Next slide. Effects of discharge are detected
17 by comparing data from the stations affected by the
18 discharge with data from stations in areas not contacted
19 by the discharge of control stations. Most dramatic
20 effects are discharge or decreases in algae cover and
21 changes in species at Diablo Cove. The previous photos
22 were from control stations with the dense -- this is
23 hard to read on all the species, but basically the
24 take-home on this you can see the algae cover on the
25 top, full algae cover is pretty -- stays the same all

1 the way across throughout the operation of the plant,
2 preoperation and then operation of plant, and in the
3 Diablo Cove, it drops off dramatically after the plant
4 fires up and then in the next slide till 2017.

5 Next slide. There's been -- like I said,
6 there's been a lot of studies out there besides this.
7 Just the intertidal zone, there's intertidal fishes, the
8 small invertebrate communities, which we're doing
9 scrapes of small patches and IDing everything that was
10 in there, different algae and also black abalone studies
11 of intertidal areas on the north property that were
12 opened up for patrolled public access on black abalone
13 and owl limpets and that's something that Sally is going
14 to go into more detail about as you saw on her slide.
15 Also, effects on trampling on intertidal areas on the
16 north property due to public access in collaboration
17 with Cal Poly and state parks due to SLO sea.

18 Next slide. As I mentioned, we did black
19 abalone studies out there. They included population
20 assessments in Diabale Cove and thermal effects studies
21 in the laboratory in the biolab out there on adults and
22 larvae. Population of Diablo Cove was estimated over
23 9,000 after operation began in 1985 and is still almost
24 about exactly the same in 1988 prior to the onset of
25 withering syndrome and that resulted in a decline to

1 less than a thousand by 1998. Similar populations
2 declined in other coastal areas in California due to
3 disease, and as a result, the black abalone is listed as
4 a threat under the Federal Endangered Species Act in
5 2009 and all rocky intertidal habitat around Diablo
6 Canyon Power Plant is listed as critical habitat for
7 these species.

8 Next slide. Some of the other studies we've
9 done recently is for preparation for decommissioning.
10 We need some baseline studies and we had never studied
11 the breakwaters and intake zone around the power plant.
12 So characterize the area not included in previous
13 studies, such as intake cove, breakwaters, rock around
14 the intake cove and shoreline. These areas have not
15 been surveyed previously since natural area's not
16 affected by the plant operation and, primarily,
17 interested in effective of the power plant thermal
18 discharge. Survey showed the biological communities in
19 the area similar to other areas not affected by the
20 discharge, which is kind of, you know, what you would
21 imagine.

22 Next slide, please. Decommissioning studies
23 similar to areas outside the intake cove breakwater
24 exposed to the wave surge and diverse biological
25 communities, the rocky habitat surrounding the intake

1 cove which are not exposed to waves and generally less
2 diverse, same thing that you would see in a port. The
3 sections -- remember Trevor's slides, those breakwaters
4 are massive underwater structures and they really -- all
5 we could do is just kind of tip toe around and sample
6 what we could and just kind of get an idea what was
7 there and get a small swath around the breakwaters, but
8 they ended up being very diverse and mimicked basically
9 our control stations.

10 Next slide. We had intertidal breakwater
11 transects, 63 taxa of algae, 49 taxa of invertebrates
12 including four black abalone we found on the
13 breakwaters. The intake cove shoreline transects, not
14 including the area of the west breakwater, 18 taxa of
15 algae and 37 taxa invertebrates. It just doesn't give
16 the wave action and the nutrients that the outside of
17 the breakwaters would have. And as you can see from the
18 slide, we had to access most of the areas with swimmers
19 because the breakwater is such a hard area to traverse
20 for -- safely anyway.

21 So next slide. I think we're going to reserve
22 questions until the end of Sally's talk, but this is one
23 of the inhabitants of the Diablo Cove that really likes
24 the warmer water and has moved in the last ten years.

25 Sally, I'll go ahead and let you talk about the

1 north ranch.

2 MR. ANDERS: Steve, thank you very much. We
3 need to go back to kind of where we started at the
4 beginning of the segment for Sally's slides.

5 BOB: I'm going to stop share and bring it to
6 that point. Just a moment. I would just punch in the
7 numbers, but the way this was put together, each item
8 has its own numbers and it doesn't really work that way.

9 MR. ANDERS: You can just go back to the
10 introduction slide for this topic. It says intertidal
11 area. Okay. Next slide. There you go, Sally.

12 MS. KRENN: You already saw the presentation,
13 but I really appreciate you all giving me the
14 opportunity to give a presentation on one of my favorite
15 topics and it's on the beauty of the Diablo Canyon lands
16 intertidal and why I strongly believe they should
17 continue to be protected from unmanaged human impact.
18 Throughout my years of working along the Diablo Canyon
19 coastline, I've come to appreciate and really respect
20 the biodiversity and ruggedness of this pristine area
21 just like Steve and, also, it's historically known as
22 the Pecho Coast. I personally believe that this
23 coastline includes some of the most secluded and
24 undisturbed natural areas in this region of the state
25 and this undisturbed reinhabitat supports a wide variety

1 of native plants and animal species.

2 Next slide. Next slide. Thank you. This is
3 an aerial view of the properties north of Diablo Canyon
4 and to your left there's the beach known as Coon Creek
5 Beach. So this aerial goes from Coon Creek Beach to the
6 power plant and includes the majestic headland of Point
7 Buchon. There is currently a deed restriction on the
8 Pecho Ranch and it allows hikers to access the coastal
9 bluff for about 3.6 miles and then they come back the
10 same way they exited. This area has a rock formation
11 called the Monterey formation, and if you look in the
12 lower left corner, there's a big circle there, a hole,
13 that's a sinkhole, and due to the fragility of the
14 Monterey shale formation, this coastline is incredibly
15 rugged and there's lots of caves and buckling and
16 periodically the trail has to be moved back because of
17 erosion problems along the existing trail.

18 Next slide. This is a view of the property
19 south of Diablo Canyon and, again, you can see the
20 fragility of the coastline. There's lots of alluvial
21 fan material and consolidated sediments and Steve can
22 attest to this. The majority of the beaches are not
23 easily accessible and oftentimes -- next slide --
24 biologists have to repel down to their sites and
25 predominantly there's a northwest swell that when the

1 breakwater was torn down, we had records up to 30-foot
2 waves and so the biologists often have to have a wave
3 watcher while they're doing their surveys in case
4 there's a wave that comes through.

5 Next slide. I had mentioned before there's
6 majestic caves along this coastline and a fun fact is in
7 the mid '70s Disney asked the previous landowner if they
8 could film Pete's Dragon on the property and they needed
9 an area with lots of caves so the cartoon dragon could
10 hang out in the caves. Probably more on the north
11 ranch, the caves are really interesting and when you
12 enter them -- next slide -- you're heading into the
13 Point Buchon marine protected area, or an MPA.

14 Fortunately, the area from Point Buchon to about four
15 miles down the coast to an offshore rocky pinnacle known
16 as Lion Rock is strictest of all the MPAs. It's a state
17 marine reserve. So there's no take of anything marine
18 or cultural. So we're fortunate we have an MP along a
19 section of the coastline. And then there's a de facto
20 MPA because the southern border of the Point Buchon SMR
21 butts into the security zone that PG&E had to establish
22 after 9/11. So there's been a de facto MPA a mile north
23 and a mile south of the outfall since 2001.

24 Next slide. The majestic Point Buchon
25 headland, it provides just for extraordinarily huge

1 diversity of marine life. The reefs are home to more
2 than 700 species of invertebrates, as well as 120 fish
3 species. It's an area of California Central Coast.
4 It's just very important for its biological diversity.

5 Next slide. As I mentioned before, when you
6 enter the caves, you come onto these marine intertidals.
7 The slide on the right has a formation of -- they're
8 called honeycomb worms, very fragile. If this area was
9 open to the public, they would not be able to exist.
10 Stepping and touching them crushes the animals. They're
11 little worms that build casks out of sand. And as you
12 can see, it's very high diversity known as trampling or
13 stepping on the algae.

14 Next slide. As Steve mentioned before, our
15 section of the coastline at Diablo Canyon is a critical
16 habitat for the black abalone and they're difficult to
17 find in tide pools that are accessible to the public
18 such as this Montana De Oro State Park. Along the
19 Diablo coastline, they're making a comeback after the
20 disease known as the withering foot syndrome create a
21 loss of over 90 percent of their population and so it's
22 fortunate now that they are protected along the rocky
23 intertidals.

24 Next slide. Another species that's uncommon in
25 public access tide pools, but actually with a sport

1 fishing license, you can collect 35, is the owl limpet
2 that can reach a length up to three and a half inches
3 and it's on the left side of the slide in the middle
4 right above the word owl limpet. It's a snail and it is
5 commonly called poor man's abalone and at one time in
6 the mid '70s there were so many owl limpets along the
7 Diablo Canyon coastline that fishermen were harvesting
8 them, and with a commercial license, there was no limit
9 and they're actually selling them at Avila Beach. I've
10 never eaten one, but I guess they're tasty. And Tenera
11 actually used the owl limpet as an indicative species
12 and studied them at the Coon Creek Beach where public
13 had access to determine if they were being harvested.
14 Fortunately, because of the managed access program, none
15 of the owl limpets were disturbed on PG&E's property.

16 Next slide. Diablo Canyon coastline also has
17 the southernmost distribution of the protected sea palm,
18 one of my favorite sea weeds. It's one of the few
19 seaweeds that can survive and remain intact out of the
20 water. In fact, it spends most of its life cycle
21 exposed to the air. It's an annual and edible; though,
22 harvesting only allowed with a special permit due to the
23 species' sensitivity to over-harvesting and you often
24 find sea palms in areas that are difficult to access.
25 They love the wave's swept coastline.

1 Next slide. Surf bass is a protected marine
2 plant because it provides habitat for large juvenile
3 fish and invertebrates and it's also fairly common along
4 this coastline.

5 Next slide. Here's a photo of Corralina Cove
6 in Montana de Oro. A school bus dropped off 50, 60
7 children and tide pooling has become a very popular
8 activity in California. This impact of loving our tide
9 pools to death, it really has impacted the flora and
10 fauna that thrive in these areas. Sometimes the
11 students aren't trained properly on how to walk in a
12 tide pool or the fact that you should not turn rocks
13 over unless you place them back the way you found them
14 because this contributes to the desiccation of many
15 invertebrates.

16 Next slide. I went online and I googled for
17 articles that pertain to human impact at tide pools from
18 Northern California to Southern California newspapers
19 and this is just one example that I found. At the top,
20 too much love harming San Diego tide pools. Most of
21 them are from 2020. Desperate people poach starfish,
22 mussels from California tide pool. That's our local
23 paper. Loved to death, crusader says people are killing
24 local tide pools. And then the last one says 45 charged
25 with poaching marine life.

1 Next slide. Doug Wall, who is a game warden
2 from the California Department of Fish and Wildlife,
3 recently led a six-month investigation to the poaching
4 of marine life from fragile tide pools at White Point
5 Beach San Pedro. It accumulated charges against 45
6 people and he seized over 500 pounds of illegally taken
7 mussels since May, including hundreds of pounds of
8 turban snails and purple sea urchin. Harvesting has
9 decimated the fragile ecosystem along the coast and he's
10 uncertain if it can recover. State wardens were
11 actually notified in May of crowds, some using garden
12 tools, screwdrivers, crowbars who were digging and
13 dislodging enormous amounts of sea creatures from the
14 tide pools and this activity obviously triggered
15 numerous edging counters between the residents that live
16 near the tide pools and the harvester. They appeared to
17 be motivated by social media posts encouraging the
18 practice to enjoy life outdoors during a time of
19 coronavirus restrictions and high unemployment, but
20 under California law, it is legal to take invertebrate
21 animals from tide pools with a sport fishing license,
22 unless the pools are located in a state marine reserve
23 like Point Buchon or there's a special enclosure. Also,
24 once common sea stars now rarely seen in local coastal
25 waters. Fortunately, they're protected now. They can't

1 be taken at all.

2 Next slide. These are two slides of Corralina
3 Cove. It's a very popular place in Montana De Oro State
4 Park. Faylla Chapman, a state park volunteer, a
5 professional marine biologist who actually worked on the
6 Diablo Canyon studies saw an opportunity to conduct an
7 intertidal study in Corralina Cove and the one to the
8 left is a slide of Corralina Cove and was allowed to
9 rest and it was allowed to rest because it steps down to
10 this intertidal where damaged by winter storms of 2011.
11 So it was inaccessible. Then from 2011 to 2015, she
12 surveyed the area to the right and you can see the
13 difference between the algal assemblage. She's
14 convinced though that waves and sand storm can be just
15 as damaging as trampled by the public, but since 2014, a
16 number of people in the intertidal has increased so
17 dramatically that walking on the algae and organisms
18 have not allowed the intertidal to recover to the point
19 it was in 2011 and she's convinced that repeated foot
20 pressure smashes organisms and tears algae from the
21 rocks.

22 Next slide. Hazard Canyon, which is a rugged
23 intertidal north of Corralina Cove in Montana De Oro
24 State Park, Faylla observed that the numbers of owl
25 limpets have decreased due to legal and illegal

1 harvesting. All of the number of people visiting the
2 intertidal in this specific area in comparison to
3 Corralina Cove is quite reduced. The area is just not
4 as supervised and many species are illegally harvested.
5 I had a conversation with Faylla, who I really respect.
6 She strongly believes that the coastline from Montana De
7 Oro down to the Point San Luis Lighthouse is really one
8 of the most pristine intertidal habitats along our coast
9 and within the last 12 years of her leading many
10 intertidal trips for the public, she has seen changes to
11 the area due to increased public interaction in tide
12 pools, and this is a quote from Faylla. "I'm firmly
13 against opening up the intertidal from Coon Creek to
14 Point San Luis to the public. It would be nice to have
15 an area that is unspoiled and protected from the public
16 where a species could continue to thrive or not
17 depending upon climate rather than unnatural courses.
18 If open to the public, it would be difficult to monitor
19 this extensive area to protect sensitive species and
20 prevent illegal collecting. There are few places on
21 earth today where there are no people. Let this be one
22 of them."

23 Next slide. Resource management is directed by
24 mission statements of resource agencies such as the
25 Coastal Commission in California State Parks. It's a

1 difficult -- there's been several trampling studies to
2 determine how really to comply to that. How do you
3 protect the resources and allow public access? So I'll
4 be presenting the results from a publication that was
5 published in Ocean and Coastal Management by two Tenera
6 biologists, Scott Kimura and John Steinbeck, Cal Poly
7 graduate Grant Walls, and the dean of Cal Poly science
8 department, Dean Wendt, regarding human impact to the
9 intertidals.

10 Next slide. This study was sponsored by SLO
11 Sea and the Packard Foundation.

12 Next slide. From 2000 to 2009, a trampling
13 experiment was sponsored by Cal Poly and local
14 researchers. Their work involved examining the impacts
15 of trampling from foot traffic using a field study and
16 visitor counts at three intertidal sites in the Hazard
17 Canyon area and a controlled field experiment known on
18 PG&E's property known as Tom's Pond, which is located
19 about two and a half miles down the coast from Coon
20 Creek. It is not accessible to the public.

21 Next slide. So the studies were primarily done
22 until the rockweed zone, which is the top -- at the top
23 of the page. This is all the rockweed that provides
24 great habitat for invertebrates and fishes. Before the
25 withering foot syndrome, you could lift up these

1 rockweed seaweeds and find abalone. I could collect 50
2 in probably 15 minutes, it was covered in abalone, but
3 they are very susceptible to trampling.

4 Next slide. When one steps on rockweed, the
5 left-hand side of the slide shows a holdfast, which
6 holds the alga to the rocks, and it's very fragile and
7 when they're stepped on they break and the rockweed gets
8 washed out to shore.

9 Next slide. This study identified that the
10 abundance of rockweed and two other species of algae,
11 limpets, and what's known as a kite were significantly
12 reduced at a popular rocky intertidal site relative to
13 adjacent and less visited sites. That's at Hazard
14 Canyon. The controlled site, which is Tom's Pond,
15 detected decrease in alga cover approximately 20 percent
16 due to trampling, which was equivalent to the difference
17 15 percent decreasing cover and total alga cover
18 detected in our study of Hazard read in the other two
19 MDO study sites. So the top slide or the top section
20 shows a lot of rockweed in the area before trampling and
21 at the end of the study after ten sampling exposures,
22 there was a 20 percent decrease of the rockweed
23 population.

24 Unfortunately, even though there are studies
25 that show the communities can be impacted by visitor

1 traffic, currently there's little guidance and there's
2 no interested protocols and few criteria to help
3 resource managers decide when intervention measures
4 should be implemented to minimize or reverse the impacts
5 of visitor trampling.

6 Next slide. A friend of mine who worked for
7 U.S. Fish and Wildlife in Humboldt County as a marine
8 biologist shared with me an intertidal study that was
9 conducted in Northern California near Mendocino.
10 Biologists who surveyed this site called it the tragic
11 tale of the intertidal abalone of the Stornetta Ranch.
12 Since 1917, the Stornetta family allowed only minimal
13 take of intertidal abalone and in this sense that it's
14 served as a de facto marine reserve for nearly 90 years
15 despite having no specific legal protections. That's
16 kind of similar to the Diablo Canyon coastline. It
17 hasn't had access for hundreds of years. So especially
18 the seaweed assemblage is fantastic, but in early 2004,
19 a partnership between both public and private
20 organizations purchased the land and was open to public
21 access. The -- this lure of a new location with
22 abundant intertidal and subtidal abalone was strong and
23 it drew people from all around to catch their daily
24 allotment of abalone.

25 Next slide. The problem was that it attracted

1 too much attention similar to what I think would happen
2 if we opened up the intertidals of the Diablo lands. A
3 professor, Dr. Rogers Bennett, and her survey crew
4 surveyed the rocky intertidals Stornetta before and
5 after the opening to the public and found a 65 percent
6 drop in abalone population in a period of just three
7 years. There's also a lot of evidence of poaching and
8 unintentional immortality in abalone too small to
9 legally take. Dr. Rogers Bennett estimated that illegal
10 take of abalone was 2.5 times higher than legal take.
11 This serves kind of as a cautionary tale of what can
12 happen when you temporarily open up a marine reserve to
13 the public. These areas serve as valuable and reliable
14 baselines for current marine protected areas and are
15 metric for abalone recovery. The more critical lands
16 obviously needs to be applied when opening privately
17 owned lands to the public so as to maintain the
18 integrity of the unique ecology of these areas.

19 Next slide. Visitation to tide pools isn't
20 necessarily a bad thing. My children were brought up in
21 tide pools. We are very thankful to live so close to
22 the ocean, but over-loving these areas and too many
23 people coming to the tide pools and taking critters,
24 poking or prodding, it's just not a sustainable way to
25 engage with our tide pools. As the human population

1 increases, the strain on all our resources increase.
2 These natural areas are no exception and the fascinating
3 tide pools are especially threatened by overuse and
4 appropriate use. Many populated areas for tide pooling
5 are in danger again of being loved to death. A school
6 or family trip to the coast should provide everyone with
7 opportunities to increase their appreciation for the
8 plants and animals inhabiting the intertidal zone, but
9 the public needs to be educated on how to use what's
10 called tide pool etiquette.

11 Next slide. I strongly believe that this
12 section of the coastline should continue to have limited
13 access to the intertidals as there's so many numerous
14 tide pools along the Central Coast that are currently
15 open to the public. The Diablo lands' tide pools are
16 protected from trampling and collection by humans. The
17 rocky shores allows scientists from local universities
18 to study how these marine-affected areas of de facto
19 reserves help to conserve the web of life among these
20 shores.

21 Next slide. I believe strongly that managed
22 access is critical to saving the biodiversity of our
23 intertidal flora and fauna. Now, this is what a tide
24 pool should look like. I'm fearful, though, that wide
25 open access to Diablo Canyon coastline will result in

1 degradation of the hands and the feet of the public. If
2 not managed, I strongly believe the coastal bluff should
3 continue to have a managed access program similar to the
4 current management of the existing Point Buchon and
5 Pecho Coast Trails. This section of the coastline is
6 one of the most pristine marine areas in California. As
7 development in tourism only increase in California, the
8 communities along the Central Coast must achieve a
9 delicate balance between using and protecting this
10 unique and valuable resource. To achieve this balance,
11 we really need to develop solutions that keep our
12 coastlines pristine and accessible at the same time for
13 generations to come. Thank you.

14 MR. ANDERS: Thank you, Sally, and thank you,
15 Steve.

16 Kara, do you have any comments before we open
17 it up to questions?

18 MS. WOODRUFF: No comments, except to say thank
19 you, Sally and Steve. I'm convinced in going forward we
20 have to be very careful of making sure that moving
21 beyond PG&E's ownership of these lands that whoever
22 takes that place is prepared to protect the ecology of
23 the tide pools. It's obviously a pretty compelling
24 story to me. Thank you, both.

25 MR. ANDERS: Okay. Panel, any questions, any

1 comments? I do want to make an observation. We have
2 had some questions come in from attendees and if they're
3 not addressed here, they will be posted on the public
4 comment record for the panel. So it will become part of
5 the official record.

6 Panelists, any comments or questions? Remember
7 to raise your hands.

8 Okay. Next on the agenda, it is time for a
9 break. It is now 7:30. So we are a little ahead of
10 time. Let's take a five-minute break and we'll come
11 back and have a discussion about seawater
12 desalinization. So we will take a break and be back at
13 7:35.

14 (Recess.)

15 MR. BALDWIN: I wanted to say I think maybe
16 some of the rest of the panelists felt like I did, but
17 the presentation was so educationally and visually
18 complete and the points were so well made, I think
19 that's why there wasn't a lot of discussion to be had.
20 That was a great presentation and I think the points
21 that Ms. Krenn were making are well-taken, I'm sure, by
22 the rest of the panelists, I know by me, and I think
23 that's why there wasn't a lot of discussion to be had.
24 I don't know how the rest of the panelists felt, but I
25 enjoyed that presentation. Thank you.

1 MR. ANDERS: Thank you, David. All right.

2 Let's move to our next agenda item, which is seawater
3 desalinization and Patrick Lemieux, one of our new panel
4 members, is going to lead this discussion. So if we
5 could have our slides and, Patrick, please go ahead.

6 MR. LEMIEUX: Thank you, Chuck. Evidently, I
7 didn't get the -- yeah, I didn't get the template for
8 the PowerPoint presentation. So you'll have to forgive
9 me here for being a little bit eclectic, but I've --
10 next slide. I've been in this community for 14 years in
11 San Luis Obispo and California for 28 years, so more
12 than half of my life, and I thought I would introduce
13 the segment here by telling you a little bit about my
14 journey to this panel for the Diablo Canyon
15 decommissioning. Before these roughly 28 years in
16 California, I grew up in Canada and that did not prepare
17 me for what I saw living here in San Luis Obispo County
18 between 2011 to 2016 in this area. Since I've been
19 living in San Luis Obispo around the mid-2000s, I really
20 enjoyed going with my family to the local parks, like
21 probably many of you, specifically Lopez Lake and Santa
22 Margarita Lake, and I remember during that time when
23 Santa Margarita Lake reached an all-time high and
24 flooded the marina, which was quite an event and that
25 was memorable, but things got worse after this rapidly.

1 Next slide. By roughly mid-2015, the entire
2 Lopez Lake area completely changed with water level in
3 the low tens. I don't remember the exact level. I
4 tried to look it up in the county reservoir lake level
5 database and didn't go that far back, five years, but it
6 was around there, 10 percent, and the picture you see
7 there is definitely not what the lake looked like when I
8 first got here where it was close to 100 percent.

9 Next slide. At that time, we were in what the
10 State of California declared was an extreme drought
11 condition and rural community, I'm sure you can
12 remember, was very much in a bit of a panic mode as to
13 what to do at that time, including myself because,
14 again, this was a very, very new experience for me that
15 a lake could possibly go from, you know, looking like a
16 lake to looking like this in such a short period of
17 time. I was very relieved and very excited when I found
18 out that there was a plan to actually connect the
19 desalinization plan here at Diablo Canyon with Lopez
20 Lake with the goal presumably of maintaining the lake
21 level hopefully and close to 100 percent all the time by
22 pumping water on demand and the desalinization plan that
23 we have at Diablo Canyon is capable of producing up to
24 one and a half million gallons per day, my
25 understanding, which presumably would have been enough

1 to sustain the lake at that time.

2 And the proposal was moving forward. Again, I
3 found out subsequently that the main infrastructure
4 requirement to make that happen at the time was eight
5 miles of pipeline. Eight miles of one pipe would have
6 connected desalinization plan at Diablo Canyon to Lopez.
7 Obviously, the distance between those two spots is
8 larger than that, but because of what already exists
9 there, that's all that was needed, eight miles.

10 Unfortunately, however, we got lucky, quote,
11 unquote -- next slide -- and it started to rain and, in
12 fact, we got one of the strongest El Nino events on
13 record in the winter of 2016 through 2017 and this is
14 what it looked like by early 2017. That's 62 percent at
15 capacity for the same lake, roughly the same viewpoint
16 as the previous slide. So still not 100 percent or so
17 that it was when I first arrived in the area, but very
18 respectable and very acceptable. So problem solved,
19 right? There was no need to think about this, nothing
20 to see here anymore and that is certainly what we sort
21 of appeared to have done as a community here.
22 Certainly, there's been discussions about desalinization
23 plant, et cetera, providing water weighing around that
24 area to my understanding the whole project fell apart,
25 especially since right around that time Diablo Canyon or

1 PG&E decided to decommission Diablo Canyon. So,
2 therefore, it wasn't very clear where the entire system
3 was going to go in the future, but there was lessons
4 learned, I think, in this whole event of the past five
5 or ten years.

6 Next slide. Most of the lessons learned is
7 what not to do. Those of you that were paying attention
8 to this or were particularly sensitive to these water
9 issues might have remembered what happened in Cambria as
10 to what not to do. So for a variety of reasons, that
11 particular community very close to us, of course, was
12 stressed more than others, more than the City of San
13 Luis Obispo, but perhaps not uniquely and they started
14 to run out of water right during the drought, you know,
15 very rapidly and they panicked.

16 Next slide. Their panic was really
17 understandable I think. As a community, you see your
18 water reserves evaluated in days and hours, I think it's
19 substance to panic. So they decided in what appeared to
20 be a fits and spurts method to try and address it
21 whichever way that they could and so, therefore, they
22 commissioned a very extensive desalinization plan to be
23 rushed and built to solve their immediate problem.

24 Next slide. But like the rest of us, they got
25 hit by the same event in 2017 when the -- 2016-2017 when

1 El Nino came and all of a sudden they did not face the
2 very same water shortages that they did just a year or
3 two earlier than that. Now, all the corners that they
4 cut to fast track this project really came back to haunt
5 them and to my understanding they were fined hundreds of
6 thousands of dollars to all kinds of environmental
7 violations they did in this process and to my
8 understanding, again, there's nothing left of this desal
9 plan into which they sunk a lot of money.

10 So I view this as a lessons learned and an
11 example of how not to react to these water shortages and
12 I view the desalinization plan at Diablo Canyon as sort
13 of a long-term part of the solution element to help us
14 navigate through these difficult waters -- no pun
15 intended -- if we ever got into that situation again.
16 And let's face it. How many of us think right now that
17 the event that happened in the mid-2010s is unique and
18 will not happen again in our near future or at least in
19 our lifetime?

20 Before I introduce the speakers who are going
21 to talk more about all this, I want you to keep in mind
22 three costs when you think about evaluating these stacks
23 of problems, these severe droughts that are going to --
24 in our approach to solving them if and when they come
25 back in the future. The first one I think is one that

1 we're very sensitive to right now with COVID and that's
2 the personal stress level and the stress level that we
3 experience in the community when faced with these types
4 of problems. How would you feel if it was a major
5 decision for you to take a shower in the morning that
6 you really couldn't because of a water shortage? This
7 is not far-fetched. I knew people who lived outside of
8 the City of San Luis Obispo with the county building on
9 wells who did face that around the same period. So it
10 could happen again. Imagine that stress level.

11 The second one, of course, is the ecological
12 cost of solving a problem when it's too late or when
13 you're right in the middle of it and, again, Cambria has
14 a great example of what happened there, and the third,
15 of course, is the financial costs of throwing money at a
16 problem when you're in the middle of a crisis, it is
17 never the cheap option.

18 So what you're going to hear about now is not
19 going to be a free solution. Bear in mind that there
20 are many costs involved in what to do to address these
21 water issues that I believe we are not out of the woods
22 in the future to face. So to talk about this and
23 specifically about the desalinization plan in the
24 future, we have two speakers. Tim Juarez. Tim worked
25 for PG&E as their water management lead in the Diablo

1 Canyon decommissioning project. Here's worked at Diablo
2 Canyon as a system engineer managing the plant's water
3 system since 2003, which includes providing technical
4 impact -- sorry -- input into the operation, maintenance
5 and testing of plant equipment. In addition, Tim has
6 served as a technical lead in various projects at the
7 plant, including participating as PG&E technical lead in
8 2016, Diablo Canyon Power Plant desalinization pipe
9 feasibility. This is the project I was talking about
10 earlier. Tim's current efforts are to retain a
11 freshwater source supporting the decommissioning project
12 , which is currently centered around the
13 continued operation of the desalinization plant.

14 Along with Tim, we have Guy Savage speaking
15 with us and Guy currently serves as the assistant county
16 administrative officer for the County of San Luis Obispo
17 where he oversees the office of emergency services,
18 administrative office and clerk of the board functions.
19 Guy discovered his fashion for public service when he
20 created a non-profit organization designed to preserve
21 and maintain a small privately owned parcel that serves
22 as the only community park in Los Olivos. He is
23 currently helping our region solve problems related to
24 the closure of Diablo Canyon, economic development,
25 mental illness, aging infrastructure and more. Guy

1 started with the County of San Luis Obispo in 2003 after
2 spending many years in the information technology
3 start-up arena, and Guy will introduce additional people
4 from the county office where he works. So with this, I
5 yield to Tim Juarez.

6 MR. JUAREZ: Thank you. There's a next set of
7 slides. Hopefully you can hear me. Next slide. Oh,
8 yeah, you can. All right. So thank you for providing
9 how desalinization works, as you can see on the agenda,
10 and with that, I present how desalinization is
11 configured at the power plant, where the assets are
12 located on the site, kind of talk a little bit about the
13 flow pass, how the water gets -- travels across the
14 property, and then finally discuss a little bit about
15 the regulations we need to address as part of
16 decommissioning, the plant's assets going to get removed
17 based on our current plan. So talk a little bit about
18 that, talk a little bit about the issues we'll need to
19 address moving forward decommissioning.

20 Thank you. Next slide. So trying to be as a
21 high level schematic in how the desal is configured at
22 Diablo Canyon. Generally speaking, this is how most
23 desal plants are configured. I know there's a lot going
24 on here. What you need to walk away from the slide is
25 keeping your focus on the gray box labeled desal plant

1 or desalinization plant and just notice that we have
2 water coming and two water streams coming out labeled
3 feed water going in, fresh water going out and brine
4 going out. I'll talk about the cycle real quick going
5 left and working clockwise going through each of the
6 stages.

7 So first it starts at the Pacific Ocean so
8 water we convert to fresh water that needs to be
9 delivered to desalinization plant. The way it's done at
10 the Diablo Canyon is that we have a pair of pumps
11 located in our intake structure specifically within our
12 intake room, I'll show that in the next few slides, and
13 those pumps deliver that ocean water to the
14 desalinization plant and that flow path is depicted on
15 the schematic as an arrow entitled feed water. Our
16 desalinization plant at Diablo Canyon can process up to
17 a thousand gallons per minute of this ocean water coming
18 in, and when it receives that water, it goes through a
19 stage of pretreatment filtration, which is two series of
20 sand filters, passes through another filter before it's
21 sent to reverse osmosis membranes and that's where --
22 and it's at that point where the ocean water that's
23 incoming is then separated into two other water streams,
24 fresh water depicted by the arrow above the gray box and
25 then the brine off to the right.

1 Talking about the fresh water, it can produce
2 up to 450 gallons per minute or 45 percent of the
3 incoming feed water to produce fresh water. For Diablo
4 Canyon, that fresh water is delivered to one of our two
5 reservoirs, each of which are 2.5 million gallons each.
6 From the reservoirs, that water is either used as is for
7 dust suppression, fire protection, things of that
8 nature, or it can be treated even further for plant
9 operations and there's a third treatment where we can
10 treat it for drinking water for the personnel on the
11 site.

12 As far as the other stream that's coming out of
13 desalinization plant, that's the brine. That's your
14 filter concentrated ocean water. That runs about twice
15 the salinity of your -- of normal or natural ocean
16 water, I should say, and that brine is sent over to once
17 through cooling loop. So the brine comes out at about
18 up to 550 gallons per minute. So 55 percent of the
19 incoming feed water becomes brine. That brine is then,
20 as I mentioned before, sent to our once through cooling
21 loop where it is mixed with ocean water that is cycled
22 through the plant, then it mixes in with that before
23 it's discharged to the outfall.

24 Next slide, please. Up to 1,000 gallons can be
25 processed by the desalinization plant and with that you

1 have 45 percent fresh water 450 gallons per minute and
2 remaining 55 percent becomes brine. I mentioned before
3 it gets sent to the once through cooling loop to get
4 diluted and the goal with that dilution is to make sure
5 that by the time the combination of the brine in the
6 once through cooling loop hits the outfall, the salinity
7 of that combination of flow is supposed to be within two
8 parts per thousand of ambient ocean salinity. The
9 minimum amount flowing in through the once through
10 cooling loop is about 7,000 gallons per minute and
11 normally full power operations will process at about 1.7
12 million gallons per minute, or as Steve mentioned, he
13 said 2.5 billion gallons per day. So certainly more
14 than 7,000 gallons per unit. With both units shut down,
15 we have about 22,000 gallons per minute going through
16 that once through pool. So still way more than 7,000
17 gallons per minute.

18 So that's the big picture for how the desal
19 works. Now we'll talk a little bit about components on
20 site. So next slide, please. All right. So this is an
21 overhead view of the site. I've only pointed out the
22 four main structures, but I'll talk about this a little
23 bit. So the intake structure, which is labeled in the
24 lower left part of the picture is where our feed water
25 pumps are located and that's where the pumps take the

1 ocean water and send it over to the right towards the
2 desalinization plant, which is labeled there to the
3 right, and that incoming ocean water gets filtered and
4 then separated into fresh water and then brine. The
5 fresh water gets sent to the reservoirs, which is upper
6 middle of the slide. As you can see, it's labeled
7 there. I only pointed to one reservoir. There's a
8 second one and that's where we store our fresh water.
9 Going back to the desal plant, brine gets sent back to
10 the intake structure where it gets sent to the suction
11 of once through cooling pumps and then that's where we
12 get mixing for making sure by the time that combined
13 effluent reaches the discharge structure, the salinity
14 of that discharge effluent is within two parts of 1,000
15 of ocean salinity.

16 So that's how it operates. For
17 decommissioning, the question it talks about we have
18 that addresses where do we get our freshwater source.
19 For current plant operations, our main freshwater source
20 is the desalinization plant and then we also have a
21 creek that we have on site, as well.

22 Next slide, please. So this is -- there's a
23 lot going on here. I will point out what to look at on
24 this slide. This is taken out of our testimony for the
25 2018 decommissioning cost estimates. We can find this

1 publicly and what you're seeing here is a graph of water
2 usage for 2024, 2040. Those years are the long
3 horizontal axis down below and there's four different
4 lines. The one that you need to be concerned about is
5 really the upper line. That's total fresh water or
6 provides a gauge for how much desal water or well water
7 we're going to need. To the left is million gallons per
8 year. So it goes from 0, 5, 10, 15, 20. And as you can
9 see, that upper line hovers around five million gallons
10 per year to about 2032, 2033 and jumps up to about 26
11 million gallons per year.

12 Now, the assumption -- this is made out of 2018
13 decommissioning cost estimate. So the assumption was
14 fuel will stay in the spent fuel pool for about seven
15 years, and then once we got all the fuel out, we could
16 begin demo activities. Once demo activities started, it
17 would start needing water for dust suppression, for soil
18 compaction and replanting.

19 So we've made some estimates for water usage
20 for those times and you can see that the water usage
21 jumped up quite a bit, up to 26 million gallons per year
22 or about, if I do my math right, 5,500,000 gallons per
23 week.

24 So, anyhow, looking back at what we need for
25 fresh water, we do have a well; however, we did have it

1 go dry around mid-2010 time frame, which Patrick had
2 mentioned those were drought years. So that was a risk
3 we didn't think we could take, specifically that could
4 delay our schedule. So we looked back at desal. We
5 found that it could fit really well, at least for
6 decommissioning.

7 Next slide. Oh, and just to go back on the
8 assumptions, I had mentioned water assumptions were for
9 2018. So those moved -- the amount of water we need is
10 probably going to stay the same, except that whole curve
11 could shift to the left. So that 26 million gallons per
12 year could come up sooner. Hopefully it doesn't come in
13 later. We don't want that to happen.

14 Okay. Going back to decommissioning. So the
15 purpose for 2018 DCE is all the buildings and structures
16 located on the site. The two key structures on site
17 that support desal is the intake structure because that
18 provides access to our -- access to the ocean, then our
19 discharge structure, which that's where we discharge our
20 brine. So with that, to develop some plans that -- so
21 taking a step back, the intake structure is currently
22 scheduled to be removed about two years into the project
23 and then the discharge structure is going to get removed
24 before we're really done with all of our big water
25 usage. So with that, I think I'm up to a few other

1 plants that come up to alternate intake and alternate
2 means to construct a new discharge point.

3 Next slide. So with that, it triggers a review
4 agency for our intake and our discharge. You'll see the
5 slide again. We'll talk about discharge then, but right
6 now we'll talk about intake. With the intake, you're
7 worried about entrainment and impingement. You heard
8 about that earlier and really what you're worried about
9 is making sure that you have -- so the new intake
10 requirement's basically designed to make sure our
11 screens are fine enough to make sure that we don't
12 entrain too much sea life and then the through screen
13 velocity with the speed of the water, we need to make
14 sure the screen is large enough so that we don't have
15 too high of velocity passing across the stream where it
16 traps sea life against the face of the screen. So we'll
17 talk about the next few slides.

18 So next slide, please. First I want to talk
19 about screen openings. This is currently a close-up
20 picture of one of our traveling screens. So this is the
21 last level of physical protection before we get to the
22 section of the pumps. And so if you see the silver part
23 of this picture, which is generally the middle part of
24 the picture, you'll see the squares and those squares
25 are stainless steel screens that are about -- and they

1 have an opening of about three-eighths of an inch or
2 .375 inches. I don't have a good scale for this. The
3 best I can do is if you stack seven times, they would
4 stack up to be about .35 inches or almost three-eighths
5 inches. So why is that such a good example?

6 Next slide, please. That will release it down
7 to about .04 inches or about the width of one dime. So
8 we have to install screens that are about one-seventh of
9 what they are now.

10 The other things I want to point out on this
11 slide are some options for -- these are pictures that
12 are similar to the options that we're currently
13 exploring for our alternate intake. If you look at the
14 top two pictures, the one on the left that are blue,
15 it's a float with the screen below it. Plan on either
16 something similar to that where we have a screen below a
17 float. In our case, we actually want to put the pumps
18 on top of the float, as well. So slightly different,
19 but that's really -- when we talk about an alternate
20 intake, it's similar to that. The other intake design
21 is something more to the upper right, that grayer
22 picture where there's an anchor to the bottom of the
23 ocean floor and that could be another option we explore,
24 as well.

25 We talked about the second part of the intake

1 that has to do with size. With that, we have to keep in
2 mind that we need to make sure we get this overall
3 screen size large enough to make sure that velocity
4 coming into those screens isn't too high to where it
5 traps fish into the screen.

6 Next slide. And then finally discharge design
7 requirements, it reads here the preferred -- and I'm
8 paraphrasing here. Preferred technology is to commingle
9 brine with wastewater, which includes applicable to us
10 industrial or plank cooling water. So commingling
11 wastewater that would otherwise be discharged to the
12 ocean. So with that, we're currently undergoing further
13 engineering and figure out how to address that. The
14 2015 gives us an option. So we're currently exploring
15 that to explore that further.

16 But with that -- next slide -- we do have other
17 inputs coming in, reuse, talking with state ports.
18 Plans are changing specifically when you talk about --
19 especially we're waiting on a decision on our 2018 DCE.
20 You look at that and then you look at the settlement
21 that comes along with that, we're going to have to
22 reevaluate our plans, but where do we go from here?
23 We're going to continue those efforts to maintain
24 compliance for regulations, and then with that, make
25 sure that our project plan continues to be the most

1 efficient plan for our customers since decommissioning
2 is passed on to our customers and then we're
3 participating in regulatory desalinization events to
4 make sure we stay informed on regulations and
5 operational best practices.

6 Additionally, but for this would be for future
7 reuse of the site. Once we secure agreement with the
8 tenant or terminate the community once we incorporate
9 desalinization water supply, that that allows us what
10 assets we can reuse on site to help support those types
11 of efforts. So that's where we're at right now. That
12 concludes my presentation. Thank you.

13 MR. SAVAGE: Patrick, should I just jump in?
14 It's Guy Savage with the county.

15 MR. LEMIEUX: Yes. Go ahead, Guy.

16 MR. SAVAGE: Okay. If you could move to the
17 next slide, that would be terrific.

18 First of all, Panelists, thank you for having
19 us once again. Guy Savage with the County of San Luis
20 Obispo. Always a pleasure to come in front of your
21 panel and provide information and more information where
22 we can. With me tonight is another repeat panelist
23 presenter, John Waddell. Most recently, I think you saw
24 John when he came as part of the discussion around
25 transportation risk analysis. John is one of the deputy

1 directors with county public works in charge of
2 transportation and development. John will do the bulk
3 of the presentation, as he led the county's 2015-'16
4 drought considerations in the feasibility studies
5 related to the Diablo Canyon Power Plant desal system.
6 I'll note that, as Patrick's mentioned earlier, back in
7 2015-'16 things were quite a bit different, folks that
8 relied on Lopez Lake water for some 90 days being
9 without that water and as we've -- one of the
10 presentations I've given to this panel previously had to
11 do with Senate Bill 1090. One of the things that the
12 Board of Supervisors did was consider how best to expend
13 those funds and one of the things still on the table is
14 potential reexamination of desal possibilities using
15 Diablo Canyon system. So while we haven't been focused
16 on it publicly or had a project any time recently, just
17 know that's certainly not off the table. John will talk
18 about some of the details of the 2015-'16 plan, and with
19 that, I'll hand it over to John. John.

20 MR. WADDELL: Okay. Thank you, Panel. I'm
21 going to jump in right here, if I can go to the next
22 slide.

23 So just as an overview of my part of the
24 presentation, I'm going to focus on our 2016 analysis
25 where we reviewed a proposal to jointly use the Diablo

1 Canyon desal system with PG&E and, again, that study was
2 completed at the height of the drought with -- which was
3 threatening the Lopez Lake water system that serves
4 coastal communities from Avila to Oceano and, again,
5 this was done in -- the study and proposal was done
6 prior to PG&E's announcement of decommissioning the
7 power plant.

8 Next slide. This is an overview of the area of
9 the Lopez system. The Lopez Lake and the water
10 treatment system serves communities of Arroyo Grande,
11 Grover Beach, Oceano, Pismo Beach, Avila area, including
12 Avila Valley and Avenue Beach, and as well as Port San
13 Luis and those would be -- as the Lopez system
14 participants and customers, those would be the primary
15 recipients of water from Diablo Canyon.

16 Next slide. During the review due to the
17 drought, we also recognize a potential to include
18 regional partners and that's through exchanges of water
19 allocations. The Lopez system is also connected to
20 state water and then in the San Luis Obispo area there's
21 either intertidals or close proximity to several other
22 water systems, which are also state water, Nacimiento
23 water, Salinas Reservoir, Whale Rock Reservoir, all come
24 together in that area and so that theoretically provides
25 exchange options throughout SLO County communities, as

1 well as Northern Santa Barbara County, which is also
2 connected to state water. This was identified as a
3 potential opportunity. We did not get anywhere as far
4 as along in developing any potential partnerships with
5 those regional partners. It was a concept that was
6 recognized at the time.

7 So next slide, just looking at the physical
8 improvements associated with bringing the desal water
9 from Diablo Canyon. It's about seven miles from the
10 power plant to Port San Luis where our Lopez system is.
11 Assuming you follow the road, there is a 400-foot
12 elevation to pump over as you get closer to Port San
13 Luis and then goes back downhill to connect to our
14 system.

15 Next slide. This is a simple map of our
16 infrastructure. So the line in black would be the new
17 pipeline, but in our analysis we also determined that
18 approximately seven miles of existing Lopez pipe would
19 need to be upgraded, most in the Avila Beach area and
20 then a short segment in Pismo Beach and, really, the
21 basic concept behind that is the water comes from Lopez
22 Lake, it serves Arroyo Grande, Grover Beach, and as it
23 gets to Avila and Port San Luis, you need -- a lot less
24 water is served in that area. So pipes are smaller and
25 you get down to around six inch size. And so to pump

1 1.1 million gallons of water from Diablo Canyon the
2 other way and have the capacity to deliver that water
3 back into the system to the City of Arroyo Grande area,
4 we would need to upsize pipes in certain areas. So that
5 was something that was identified in the hydraulic
6 analysis and would, you know, have them have some cost
7 impacts in our cost estimates.

8 Next slide, please. Here's kind of the
9 overview of three scenarios. Scenario one was a much
10 smaller amount of water, 500 acre feet a year, smaller
11 capital cost. On an acre foot a year is actually more
12 expensive. Alternative 2-B as going -- before I get to
13 that, so Alternative 2-A and 2-B at 1,300 acre feet a
14 year, which is about 1.1 MGD, a million gallons a day.
15 What are the other two that were analyzed. So Alternate
16 2-A, next slide, please. 2-A was lowest cost per acre
17 foot at 2,800 to 3,300 acre foot. These cost
18 assumptions were based on assumptions of PG&E's cost for
19 operating the desalinization plant during their power
20 plant operations and the current situation with
21 decommissioning would need to revisit those. We're
22 looking at cost of permitting, cost of support
23 infrastructure if the power plant isn't operating and
24 then also what changes to the long-term O&M if it was
25 being operated solely for -- primarily for the Lopez

1 water system.

2 Next slide, please. So we also developed a
3 very basic project delivery project development strategy
4 and this flow chart showing some major parts. And so on
5 the left, CEQA scope, smolten selection, water supply
6 agreements and conditional reimbursement agreements.
7 The first one, the CEQA scope, that would really involve
8 scoping in environmental impact report and then putting
9 out a request for proposals, selecting a consultant to
10 do that CEQA process. That would include alternatives
11 analysis, and, again, not being in an emergency
12 situation anymore, you know, we would have to
13 alternative -- evaluate other water supply alternatives
14 like recycled wastewater or potentially a new
15 desalinization plant in another location closer to the
16 end-users somewhere within the service area or somewhere
17 other than Diablo Canyon, but also need to consider the
18 2015 California ocean plan as it addresses new
19 requirements for intake screens, as well as BRINE
20 discharge. The water supply agreements, those were
21 envisioned as being negotiated with PG&E to be using the
22 desalinization system in conjunction with their
23 operations and then the conditional reimbursement
24 agreements would be with the project partners of the
25 communities that would be needing this water delivered

1 and then ultimately bringing all those pieces to our
2 Board of Supervisors for approval to then start the
3 environmental and permitting process.

4 Next slide, please. This is a very simple time
5 line. This was prior to the announcement of
6 decommissioning of Diablo Canyon and during an
7 emergency, a drought emergency. So it was a highly
8 accelerated time line because of the drought and all the
9 items on the previous slide, CEQA, scoping, water supply
10 agreements, conditional reimbursement agreements, all
11 take place in this first CEQA scope bar before the Board
12 approve agreement part. So it was envisioned to do all
13 that within less than six months, again, due to a
14 drought emergency. In a non-emergency process, this
15 would likely take much longer, repermitting of the
16 intakes of discharge, but also increase the time line
17 and then, of course, there's the environmental impact
18 and coastal development process. So two-plus year time
19 line is what would be anticipated, significantly much
20 more than two years.

21 So that is essentially where we left our
22 analysis and we're ready to embark on this and two
23 things happened. We started getting some rain later in
24 that year and then there was the announcement by PG&E
25 that they will be decommissioning the plant. So this is

1 where we left the process and I did not initiate those
2 actions in the prior slides as far as getting agreements
3 and scoping the environmental impact report.

4 MR. SAVAGE: So if I can pick it up right
5 there, a couple quick notes before we hand it back over
6 to the panel, first of all, in Tim's presentation, he
7 emphasized the importance of the intake and the
8 discharge. We've not talked about those a whole lot as
9 far as presentation, but certainly those two pieces of
10 infrastructure that are existing today would do a lot --
11 if those were maintained would do a lot to minimize
12 costs should we attempt to reuse existing desal
13 facilities.

14 And then to Patrick's point, there's a lot to
15 be said about a broader portfolio as it relates to water
16 in the region, projects like Central Coast Blue and
17 others that will expand that portfolio and make us rely
18 on individual and unique water sources I think would be
19 a good thing for the community and that's certainly a
20 role that the county and other local jurisdictions can
21 apply.

22 So with that, back to you, Chuck. And I
23 just -- one quick note because I may not get to say it
24 later. A special thank you to all you panel members. I
25 know this is a long time out of your evenings on a

1 regular basis, and on behalf of the community, thank you
2 for everything you're doing. Appreciate it very much.

3 MR. LEMIEUX: Thank you so much, Guy, John and
4 Tim for an excellent technical presentation. Really
5 enjoyed it. Had a couple questions, as well, from the
6 audience, from the attendees and one specifically is
7 asking about the possibility of a private/public
8 collaboration to manage the desalinization plant after
9 decommissioning. And I'm wondering if especially from
10 the PG&E standpoint, Tim, do you have any thoughts about
11 a game plan for achieving something like that, if you
12 guys are thinking of approaching various groups or if
13 that's something on your radar?

14 MR. JUAREZ: I don't think that's something I
15 can necessarily speak to. I will leave that to Maureen
16 or to Tom if they're exploring those options. Currently
17 we have a private entity operating our plant, but that's
18 mostly to support plant operations, but with regards to
19 the public, I'm not sure I can speak to that.

20 MR. SAVAGE: Maybe I can speak to that ever so
21 slightly. As we examine desal opportunities at Diablo
22 Canyon, we did reach out to other water purveyors in the
23 broader Southern California region to see if there were
24 partners to make this a more feasible approach. By and
25 large, there wasn't a lot of interest primarily because

1 of our location here along the Central Coast and the
2 distance you would have to move water or do some sort of
3 water wheeling or other approaches to make it happen in
4 a cost-effective manner, but we did do some outreach
5 early on along those lines.

6 MR. ANDERS: Great. Thank you very much.
7 Panelists, please raise your hands to ask any questions.
8 I see Linda has her hand raised. Linda, what is your
9 question?

10 MS. SEELEY: Can you hear me?

11 MR. ANDERS: Yes, we can.

12 MS. SEELEY: Okay. Thank you. Extremely
13 interesting. Thank you so much for the presentation.

14 Tim, I'd like to ask you a couple of questions.
15 How are the pumps for the desal plant, how does the
16 power get there? Where does the power come from?

17 MR. JUAREZ: It comes from our -- the -- what
18 we call the underground power loop. So we have an
19 electrical system that powers each of our different
20 structures and ultimately they come from the switch
21 yard, generally speaking.

22 MS. SEELEY: From outside -- it comes from the
23 grid, right?

24 MR. JUAREZ: Right. The grid that's located
25 over on the eastern property that we've shown aerial

1 pictures of before.

2 MS. SEELEY: But it doesn't come from Diablo
3 Canyon, right?

4 MR. JUAREZ: Some of it does, yeah. Not
5 directly tied into it, no. It's tied to the grids
6 technically, yeah.

7 MS. SEELEY: Right. Okay. I was just -- I
8 didn't know how it was supplied.

9 And so you were talking about how now the water
10 comes into the pipe into the once through cooling
11 pipeline, the brine, and it's mixed with the water
12 that's coming out, the cooling water that's coming out,
13 and when it goes back into the ocean, it's just about
14 the same salinity as the water was when it came in
15 from -- not from the desal, but from the ocean, right?

16 MR. JUAREZ: Right.

17 MS. SEELEY: It's very dilute, but what about
18 when the plant -- when the operation cease and they
19 don't have to operate the once through cooling anymore,
20 then won't the salinity increase a lot then because it
21 will be mixed with a lot less water?

22 MR. JUAREZ: Yeah. So our limit is two parts
23 per thousandth of ambient salinity. So if you're to go
24 down to the ocean, take a gallon jug of -- empty gallon
25 jug and dip it into the ocean, pull it out, you can add

1 about -- our limit -- so what am I trying to describe
2 here? I'm trying to describe how much salty it can be.
3 You can only add a teaspoon and a quarter extra salt to
4 that gallon of ocean water. That's our upper limit for
5 additional salinity.

6 So at -- during decommissioning, we're going to
7 process other wastewater affluent and discharge other
8 industrial waste processes. So we need to look at the
9 discharge for the period of decommissioning. So that
10 minimum flow that we need is 7,000 gallons per minute to
11 ensure that by the time it reaches the ocean, it's
12 really only a teaspoon and a quarter saltier than ocean
13 conditions. Does that answer your question?

14 MS. SEELEY: Yeah. So then that's during
15 decommissioning. And then after decommissioning, then
16 do you just bring water up into it to make it less
17 salty?

18 MR. JUAREZ: I think you're referring to
19 augmented -- there's other ways you can do it, augmented
20 flow, which is not allowed, basically picking up the
21 ocean water, mixing it with the brine. You can mix it
22 in with wastewater, commingle with that before you
23 discharge it. Then there's another option. You're able
24 to diffuse that brine out to the ocean and then the
25 ocean plans criteria for what's acceptable to make sure

1 it's not too salty and -- yeah.

2 MS. SEELEY: So that would be something that
3 would be dealt with down the road, say, after the
4 decommissioning is finished, say, 14 years from now?

5 MR. JUAREZ: Yeah. That's something we're
6 currently working on.

7 MS. SEELEY: Not 18 years from now?

8 MR. JUAREZ: Yeah. Hopefully not that long.

9 MS. SEELEY: And one other. On Slide 10 -- out
10 of curiosity, Slide 10 where you showed the pipes that
11 are going down into the ocean to suck up water, the new
12 system, how big is that pipe? How big around is the
13 pipe?

14 MR. JUAREZ: Oh, I don't know. I think it's
15 going to be four to six inches in diameter.

16 MS. SEELEY: Oh, it's little.

17 MR. JUAREZ: Yeah. It's a small plant. I have
18 to qualify that. I don't have that technical
19 information. It might actually be six to eight. We're
20 not talking large pipes, no. Maybe the size of your --
21 this big. Like that. The size of my head.

22 MS. SEELEY: Okay. All right. Thank you very
23 much.

24 MR. ANDERS: Thank you, Linda. We have a
25 number of panelists who would like to ask questions.

1 I'd really like to keep the questions and the answers
2 focused and concise. We have Sherri, Kara, Tim, Patrick
3 and Scott. So, Sherri, what is your question?

4 MS. DANOFF: Yes. I actually have three
5 questions. First one is for Tim and I'm wondering how
6 the energy consumption of the desal plant at Diablo
7 compares with newer plants, if you would know that.

8 MR. JUAREZ: So our plant is around 12 and a
9 half kilowatts per thousand gallons. So I tried to do
10 some research and the range is somewhere between 10 to
11 15,000 kilowatts per thousand gallons. There's factors
12 that play into that, how high the water, how much -- how
13 salty is the water and things to that effect.

14 So from my benchmarking, we're about middle of
15 the range, but I haven't been keeping track of
16 technology to see if it's improved much more than 12, if
17 not more than 10 kilowatts per gallon.

18 MS. DANOFF: Okay. Thank you very much.

19 And then the other questions are probably for
20 Tom Jones with PG&E. So, Tom, are you still there?

21 MR. JONES: No, I am not.

22 MS. DANOFF: This is for when you get back.

23 MR. JONES: Okay.

24 MS. DANOFF: PG&E has mentioned to the panel
25 that they lease the desal facility. So what is the

1 entity that owns it?

2 MR. JONES: It's a company called SUEZ.

3 They're a successor to General Electric. We're on our
4 third or fourth provider. They keep getting assumed or
5 traded, kind of like your cell phone provider might have
6 changed over time. We are on contract with SUEZ right
7 now. We have recently entered into a new contract with
8 them. As Tim mentioned, while our plant's about 12
9 years old, there are significant upgrades underway right
10 now that will keep us under contract and in ample
11 service for the next 15 years.

12 MS. DANOFF: Okay. Thank you. And then what's
13 happened with PG&E's proposal for trucking water in
14 during decommissioning? Has that changed?

15 MR. JONES: It has not. It's still part of our
16 bounding analysis. What we're doing is we're including
17 all of those possible outcomes from the environmental
18 impact reports consideration by the county. We still
19 could use groundwater or other sources; however, our
20 groundwater, while we don't draw on it significantly
21 compared to other groundwater users, we were not immune
22 from the drought effects. Tim can speak in more detail
23 to it, but we monitor the wells on a regular basis. And
24 even while not a major source of water at Diablo Canyon,
25 they were significantly impacted in the 2014, '15, '16

1 time period.

2 MS. DANOFF: Okay. Thank you.

3 MR. ANDERS: Thank you, Sherri. Our next
4 question's from -- are you done, Sherri?

5 MS. DANOFF: Yes, I am. Thank you.

6 MR. ANDERS: Okay. Thank you. Next question's
7 from Kara and then Tim, Patrick and Scott.

8 MS. WOODRUFF: Thank you. So my question is
9 for John Waddell. When the county did the analysis of
10 whether the desal plant could be a good backup plan for
11 drought, as you mentioned, it was done before we knew
12 PG&E would be closing by 2025, and so if you were to do
13 the analysis today, I guess my question has two parts,
14 number one, do you have any idea what those cost figures
15 do? Do they triple? Do they double? What is the
16 outcome now that PG&E is not part of the solution?

17 And then I guess the second bigger question is
18 is this really doable? Is there the political will? Is
19 there the means to gather the financing necessary to
20 really make this desal project viable for the County of
21 San Luis Obispo or is this sort of a pie in the sky
22 theoretical idea that sounds good on paper, but can't
23 realistically ever happen? Do you have a feel for that?

24 MR. WADDELL: Yeah. I'll start with the cost
25 questions. The assumptions were based on some costs we

1 received from PG&E for operating the system and I don't
2 know if those would go up or not, but I wouldn't expect
3 they'd go up significantly. The operation costs are
4 what they are. I remember there was discussion of
5 electricity rates. They'd be based on in different
6 formulas, but, again, a lot of the cost is capital cost
7 to construct the pipelines and so that would not really
8 change and so I would not foresee it would be anything
9 in the significance like you mentioned of doubling or
10 tripling. While the costs could increase, we did have a
11 range to begin with. So it did factor in a lot of those
12 unknowns.

13 We did have a step of a water supply agreement
14 with PG&E. In that step, we had talked about assumed
15 they were going to be operating for a long period, but
16 knew that decommissioning could come in the future. So
17 there was talk about having to incorporate that into an
18 agreement, obviously current situation that would have
19 to be part of the scenario from the start, but we have
20 not got into any of those details yet.

21 As far as political will, I don't know. You
22 know, the south county communities are the participants
23 or potential participants and so each of those are their
24 own entity, the different cities and community services
25 districts. Some like Pismo Beach have moved forward

1 with recycled wastewater and certainly anything like
2 this would take an environmental process, EIR and
3 alternatives analysis in order to move forward. So that
4 would be the process to see what was feasible and what
5 was the proper alternative.

6 MS. WOODRUFF: Thank you, John. What about
7 Guy? What do you think? Do you think the county is
8 going to dive into this and pursue this option? What
9 does the future look like?

10 MR. SAVAGE: Thanks, Kara. I think John
11 probably answered it best. It's not just the county on
12 this one. There are all those other participants. As I
13 noted when we started, the county did set aside some
14 funding to be able to pursue and evaluate what this
15 might look like, clearly not enough to construct a full
16 desal plant if that's the direction it's headed, but at
17 least enough to be able to do some more examination if
18 the board and the other participants is there.

19 MR. ANDERS: Okay. Thank you, Kara. Our next
20 question is from Tim and then Patrick and Scott.

21 MR. AURAN: I think mine was largely on the
22 same grain as Kara's, but it didn't really seem like a
23 whole lot of water that was being produced, maybe 1,500
24 acre feed or so. If that's the case, then if we're
25 really looking at options that would replace the Lopez

1 Lake for say a month -- time range of months of time
2 before another drought, I can't imagine that's going to
3 feed all of the coastal communities there. Is this
4 actually something that's worthwhile doing. If we need
5 more water than that can produce, might be better to
6 kind of start over with a new plan to a better location
7 where you don't have to dig new pipelines and basically
8 not salvage something already on the coastline in an
9 area that is going to be kind of brought back to nature.

10 I guess my question is do we know how much --
11 how much of the water output with this replace for
12 coastal communities that are served by Lopez Lake?

13 MR. WADDELL: Yeah. I can answer that. The
14 annual entitlement or yield of the Lopez system is about
15 4,500 acre feet. So this would supplement that to the
16 tune of about somewhere around 30 percent.

17 MR. JONES: This is Tom, if I could add on.
18 Where it gets really challenging in times of drought,
19 and John can expand upon this, other water allocation
20 sources actually get reduced, as well. So if you think
21 of a pie chart, the available water shrinks. One of the
22 advantages in those severe times is the desal's kind of
23 static. So by percentage, it can't grow. So state
24 water allocations, when you need them the most, they're
25 typically dramatically reduced and not available to the

1 consumer. So that's part of the discussion in 2014,
2 '15, '16, is that valuable stop gap measure and have
3 some local independence from other water source.

4 MR. ANDERS: Thank you, Tim. Two quick
5 questions left. We've only got about four or five
6 minutes left of this segment. So Patrick and then
7 Scott.

8 MR. LEMIEUX: Thanks. Tim -- sorry. No. I
9 think this was from Tim. The three scenarios that you
10 presented, Scenario 2-A at 1,300 annual acre feet and
11 the operating cost of roughly 600,000 a year, did that
12 include the cost of electricity?

13 MR. WADDELL: This is John. That was part of
14 my presentation. That was assuming the cost of
15 electricity, yes.

16 MR. LEMIEUX: I'm wondering if the county --
17 because I'm aware the county is currently reviewing a
18 bunch of permitting issues for offshore wind farm that's
19 been going on for several years now. There's many
20 official applications for these permits going on. Has
21 there been any discussion of teaming up the experiment
22 for these offshore wind farms with a project such as
23 this?

24 In other words, during times of curtailment of
25 these farms, which is going to be inevitable that they

1 be required as part of their permit to provide power for
2 desalinization, does the county not have the power to
3 build this into a permit, sort of killing two birds with
4 one stone?

5 MR. WADDELL: I'm not involved in those
6 permitting. It would be our planning department or Guy
7 might be able to chime in on this.

8 MR. SAVAGE: Patrick, I don't think we have a
9 good answer for you here tonight. I can certainly
10 research that a little bit. I don't know of any
11 permitting for offshore wind that's coming through the
12 county at this point in time. There might be other
13 agencies and jurisdictions dealing with that, but I
14 don't know if it would come through the county. The
15 only one I heard of is within the city limits of Morro
16 Bay. So that's outside of county territory.

17 MR. ANDERS: Thank you, Patrick. Scott, last
18 question.

19 MR. LATHROP: Yes. Hopefully two quick
20 questions. I just want to revisit ownership of the
21 plant, but what I understood it to be is that there is a
22 landowner, there's an operator -- contractor that's
23 operating the desal plant, but who actually owns the
24 physical plant? Is that PG&E or another third party?
25 Who owns the actual physical plant?

1 MR. JUAREZ: So I'll speak to that. So, yes,
2 PG&E owns half the equipment, specifically intake and
3 the discharge structure, as well as the pipes that go to
4 and from the desal facility, and including with that, we
5 also include -- own the concrete that's below all the
6 equipment. So you can think from melting bolts up from
7 where the desal plant is attached, that with the
8 exception of the building, all that equipment belongs to
9 the contractor.

10 MR. JONES: The landowner is Eureka Energy, as
11 well. So you have Eureka for the soil, PG&E for the
12 infrastructure and SUEZ for the black bottom.

13 MR. LATHROP: So if the contractor operator
14 owns the physical plant and not the infrastructure to
15 the plant, wouldn't they be the biggest player in any
16 deal in the future?

17 MR. JUAREZ: I think the value is not the desal
18 equipment. I think the value is in the intake structure
19 and the fact it's existing in its location right now.
20 So if you're looking to where the big bang in the buck
21 is, it's really the location. Since the 2015 California
22 OSHA plan came out, I don't think a plan has been
23 permitted yet to operate. I think it's fairly difficult
24 from my observations. I say that with a grain of salt.
25 So I think, really, the value is the location of our

1 intake with the fact that it's there right now. Don't
2 think in a black box limited to whatever the capacity of
3 that desal plant is. Think bigger. Can you make it
4 bigger and what the obstacles are for that to make it
5 more cost-effective.

6 MR. LATHROP: So the infrastructure that
7 supports the equipment, let's say, is owned by PG&E
8 Utility or PG&E Corporation?

9 MR. JUAREZ: I don't know the difference.

10 MR. JONES: Utility. All of the
11 infrastructures' owned by the utility. The land is --

12 MR. LATHROP: So any use of that would be under
13 the control of CPUC?

14 MR. JONES: Require an 851 proceeding, yes.
15 All of the repurposing will require that. We'll be
16 putting that in our future NDTCPs.

17 MR. LATHROP: And the last question real quick.
18 When would actually PG&E no longer have the need for the
19 desal?

20 MR. JUAREZ: So qualitatively speaking, when
21 all site restoration activities are complete, we can
22 walk away from the Par 50. From a time line perspective
23 based on the 2018 Diablo Canyon cost estimate, the
24 year's around 2038, but, again, those plans can change.
25 It might move up beyond that date.

1 MR. LATHROP: Okay. Thank you.

2 MR. ANDERS: Thank you to Scott and thank you
3 to Patrick, Tim, John and Guy for excellent
4 presentations.

5 Our next agenda item is the PG&E update. So,
6 Maureen, I'll turn it over to you.

7 MS. ZAWALICK: Sounds good, Chuck. I'll just
8 do a sound check real quick. How do I sound, Chuck?

9 MR. ANDERS: You sound good. Thank you.

10 MS. ZAWALICK: Thumbs up there. Good. All
11 right. So first and foremost, I just want to take a
12 moment again to welcome the new panel members, Tim and
13 Patrick and Charlene, just kind of reflecting back on
14 how much we at PG&E value the engagement panel's diverse
15 perspectives and input and everything that they've done
16 to help us in our decommissioning preplanning to make
17 sure that we're going to have a smooth transition into
18 2024, 2025 time frame, very much appreciate it.

19 And just thinking about 2020 and it makes me
20 think about Dr. Nancy O'Malley and incredible
21 opportunity to be able to work with her and the benefits
22 that we have all had the opportunity to have from her
23 contributions and expertise at the beginning of COVID
24 and how much she helped with that very first meeting in
25 March. I think probably we were one of the first public

1 meeting venues that had to have the remote aspect of it
2 with the public and kind of navigate through, you know,
3 all those different challenges in March, then in June
4 and here we are again end of October. So appreciate
5 that leadership by Nancy and we're going to miss you and
6 we appreciate all that you contributed. So just wanted
7 to open up with that and welcome in the new members and
8 thanking Nancy for her contributions.

9 With that, let me go into our update from PG&E.
10 I'm going to touch upon some highlights of the
11 decommissioning project update. I'm going to then talk
12 about some of our ongoing activities and I'll look at
13 our schedule known as the swim lanes, as Tom likes to
14 call it, and talk about key activities we have going on.

15 So, you know, we had a lot of great public
16 interest during an on-boarding our three new members.
17 As I mentioned, over 50 applicants all during a pandemic
18 again in August time frame. So that was very
19 competitive. So we appreciate everyone in that effort
20 to our Engagement Panel and getting through all that.
21 Also with the challenges of COVID and we've been unique
22 with our checking and adjusting and alternatives and
23 innovation, we've been able to keep the project on
24 schedule and that's really important.

25 And I also wanted to highlight some of our

1 upcoming regulatory activities and actions in the next
2 couple quarters. We have the pending decision on a
3 nuclear decommissioning triennial cost proceedings. We
4 expect that by mid-November. In July, the California
5 Public Utility Commission leveraged their ability to add
6 on six more months to that. So we are in the
7 mid-November to get a proposed decision and enter into a
8 30-day comment zone, if you will.

9 We've also been working on submitting our
10 coastal development permit to the County of San Luis
11 Obispo in the first quarter next year and I'll talk
12 about that a little bit more, and then we are
13 beginning -- not beginning, but we have been working on
14 the discussions around our license renewal of Diablo
15 Canyon's independent spent fuel storage installation and
16 that is just to remind folks that that's a 20-year
17 license that we originally got back in 2004 and the
18 renewal will be for 40 years. So we're working on that
19 and we'll talk about that a little bit.

20 Next slide, if you will. So as I mentioned,
21 those are some of the highlights, but, also, we have a
22 lot of ongoing work in this preplanning phase. You
23 know, can't drain all the stuff on here, but, you know,
24 you see the list here. We're working on a lot of
25 Nuclear Regulatory Commission submittals. Folks have

1 asked about why we make so many license requests and so
2 forth. Those are really key. Those take time,
3 collaboration and working with our regulator. We've
4 been working on the contracting strategy, public
5 engagements, looking at our procedures and processes of
6 things we can be doing in advance and then making sure
7 we're ready in the 2024-2025 time frame. We continue to
8 always look at what the industry has going on and
9 benchmarking and participating in different symposiums
10 and forms, talking with our peers in the industry and so
11 forth. So just highlighting a list there of everything
12 that we have going on.

13 So our next slide. Here is the famous swim
14 lanes that Tom calls them. As a reminder, the black
15 circles means things we have completed, and it's kind of
16 hard to see, I know, and maybe folks can expand it on
17 their screens, but we have different displays, and I
18 know when we were in person, we had big posters outside
19 the meeting room and so forth outside the county
20 offices, but a lot of great activity has been going on.
21 Like I said, we continue to work in the cadence and stay
22 on schedule for all the planning activities. This was
23 key to the NRC approving last year our preplanning
24 funding of 187 million dollars so we can have this so we
25 don't get into a situation like San Onofre and have to

1 delay the decommissioning activities and can go right
2 into decommissioning in the 2024-2025 time frame.

3 So wanted to just share some background for
4 maybe members of the public that aren't familiar with
5 the nuclear decommissioning cost triennial proceedings
6 or new members to the panel. The nuclear
7 decommissioning cost triennial proceedings was
8 established by the California -- sorry. There's some
9 background noise. I'm just pausing -- to examine
10 nuclear decommissioning in the state. We filed the last
11 proceeding in December of 2018 and that's the one I just
12 talked about that we are awaiting a proposed decision in
13 mid-November. The proceedings include our
14 decommissioning cost estimates and also just is a
15 process in which that we look at our rate of return and
16 our assumptions that we make and every three years we
17 can be refining those and adding more to those
18 assumptions and the funding requirements needed to
19 successfully decommission Diablo Canyon.

20 Next slide. So a recap -- sorry. One more back. There
21 you go. So recap the settlement agreement with the
22 parties that we announced in January is now we have 2020
23 dollars there. Some folks may have seen -- or be
24 familiar with 2017 dollars at 3.9 billion, now at 4.3
25 billion because we assume that three percent escalation

1 per year. Currently, the fund is at the end of June is
2 at 3.6 billion dollars. So at any rate, as I mentioned,
3 the proposed decision is needed by November 13th and
4 we'll have more granularity on the settlement agreement
5 with the parties and then we can start moving forward
6 with all of the actions that we have in place and
7 outlined in there, including, you know, some of the
8 contracting strategies and other things that I'll talk
9 about on the next slides.

10 Let's go to the next one. So this is finishing
11 up the nuclear decommissioning cost triennial
12 proceedings process. It's showing every three years how
13 we get to go back. So 2018, I talked about 2021. Some
14 key items there will be refining that proceeding to
15 include some of the results from our licensing and
16 permitting and repurposing efforts. Also, we'll include
17 where we are with our new dry cask storage system and
18 our decisions on contracting strategy and then some
19 things that we call indicative bids or also referred to
20 as settlement bids. Those are for things like the spent
21 fuel pool islanding, the cold and dark power and some of
22 the large component removal that is contained in our
23 settlement that we're going out for bid for actively
24 now. So that 2021 will contain all that information, if
25 you will.

1 And then, finally, we'll, again, three more
2 years later, 2024, that will be our last update prior to
3 our licenses expiring and those will include more
4 information on our permit statuses and licensing
5 approvals from NRC and other regulatory agencies.

6 All right. So now getting into more detail on
7 some of our regulatory submittals from a federal and
8 state perspective, the permanently defueled technical
9 specifications we plan to submit in the fourth quarter
10 over the next month or so. That will prompt a public
11 meeting hosted by the Nuclear Regulatory Commission and
12 what that submittal does is it removes the requirements
13 or relieves the requirements to maintain systems that
14 are no longer needed to operate the plant and so that
15 will outline all the systems that are not needed and
16 then what that looks like.

17 And the next area to highlight is the -- we've
18 got to go to the next slide. I just noticed that.
19 Thank you -- is the -- on the state level, the coastal
20 development permit that I highlighted earlier when I
21 started this presentation and so we have the -- you
22 know, the working group between the County of San Luis
23 Obispo, California Coastal Commission, the California
24 Statelands Commission and PG&E working on this and also
25 coordinating the environmental impact report and so we

1 plan to submit the coastal development permit in the
2 first quarter of 2021 for the county. As you heard from
3 Cheryl, also, this year we have extended the lease
4 update for the California Statelands Commission to
5 August of 2023. So that was another key action that we
6 took this year as far as our preplanning and so forth.

7 Next slide so I won't forget to say that. Now
8 I want to pivot to our expedited spent fuel offload, our
9 status of our request for proposal for that. So earlier
10 this year, we -- I'm off a slide. I apologize, folks.
11 Contracting strategy. Talk about that first, then I'll
12 get to spent fuel.

13 So on the contracting strategy, in August of
14 this year, we decided to issue a request for information
15 versus a request for proposal for our contracting
16 strategy. It's important to note that we have to
17 evaluate and vet and show and demonstrate from the CPUC
18 that we have looked at all options for contracting
19 strategy. They're listed there from self-perform to
20 self-manage to contractor strategy to a hybrid to
21 license stewardship to license transfer. What we're
22 doing now is issuing out a request for information to
23 the industry, gathering all that back so that we can
24 best inform our 2021 filing to the CPUC on what
25 contracting strategy will work for Diablo Canyon.

1 That's quite a process. That's going to take us about a
2 year. So about third quarter of next year, we will have
3 the evaluations completed and the approval so that we
4 can put that into the 2021 filing around November or
5 December of 2021.

6 Next slide, onto the status of request for
7 proposal. So our expedited spent fuel offload request
8 for proposal we issued in the first quarter of this year
9 and what was really important was the input that we
10 received from the engagement panel and from the
11 strategic vision and aspects of that are listed on the
12 recommendations from the strategic vision and, you know,
13 the other key aspect of this is the operating experience
14 out in the industry on this to help inform the request
15 for proposal and, in addition, the coordination with the
16 California Energy Commission and their input. And as
17 the panel is very familiar with or the -- you know, and
18 others, we reviewed this with UCLA risk assessment,
19 the -- I'm sorry -- the California Energy Commission
20 did. We've had meetings with the panel on the UCLA risk
21 assessment findings and so forth and that's been really
22 important in our technical evaluation of the proposals
23 that we have received and we're in the middle of
24 evaluating those and those take some time, and up to
25 this point, we have resolved all of the input from the

1 California Energy Commission and we'll be able to
2 provide additional information, you know, to the panel
3 as we're able to.

4 You can go to the next slide. So a lot of the
5 details of the proposals and our evaluation criteria are
6 business confidential and with the making sure that we
7 stay on a competitive strategy and so forth and don't
8 compromise anything there on a project that's so
9 important to our customers and our communities.

10 So the next major milestone will be site
11 evaluations or site walk-downs by those that have
12 provided their input to the request for proposal and
13 those site evaluations will help them form the proposals
14 some more and then will enter into negotiations, you
15 know, for the next about two to three, four quarters and
16 then making a decision on that next year.

17 Next slide. And then just to show a broader
18 time line for the expedited spent fuel offload request
19 for proposal, you can see that we've kind of expanded
20 the 2020 so you can see how we're evaluating the vendor
21 proposals and so forth, taking input from the California
22 Energy Commission, taking input from the engagement
23 panel's strategic vision and from the results of the
24 UCLA risk study and informing all that into evaluating
25 the proposals and then we will, you know, enter into,

1 you know, issuing the purchase order and all that after
2 we submit to the 2021 nuclear decommissioning cost
3 triennial proceedings.

4 So you can see that it's a lot of steps that we
5 need to take going forward and things that we need to be
6 focusing on right now is the bid evaluations and the
7 site walk-downs and making sure that we have fully
8 vetted all of the technical evaluations and all of the
9 input that we have gotten from the vendors that have
10 submitted their proposals.

11 And that kind of wraps up our update that we
12 have from PG&E and open it up for questions or any
13 follow-ups right now.

14 MR. ANDERS: Thank you, Maureen. Before we get
15 into any questions, and we only have a couple of
16 minutes, I would like to ask any of the public attendees
17 to raise your hand if you would like to speak during the
18 public comment period, which is our next agenda item.
19 We received about ten people who during the
20 preregistration indicated they would like to speak. So
21 if you would, if you do intend to speak, please raise
22 your hand and you'll be called on during the public
23 comment period. So, Panel, questions.

24 MR. JONES: Chuck, we had two quick follow-up
25 items. One was an agenda item. Specifically listed was

1 the update on 1,200-acre deed restriction. So I wanted
2 to give the panel an update on that real quick.

3 All of the documents are final and with coastal
4 for final review and execution. So we think everything
5 is resolved. They signed and send to PG&E. We will
6 execute the documents and record with the county, expect
7 that to be concluded before the end of the year.

8 And second item was just a follow-up on the
9 panel's update to the DCISC when Dr. Lauren Brown gave
10 an update, there was some miscommunication from PG&E and
11 the follow-up from the last public meeting, but we did
12 receive panel direction to further investigate concerns
13 about transportation routes and that is part of our
14 further research that's being informed on the update
15 Trevor gave earlier this evening. So nothing was lost
16 and it was put into the queue at the panel direction and
17 we also gave update to the panel on that at the admin
18 meeting in September. So I wanted members of the public
19 that might have heard the DCISC update to understand
20 that that was, in fact, captured and action was taken,
21 and end of the updates. Thank you.

22 MS. ZAWALICK: Thank you, Tom. Thanks for that
23 follow-up.

24 MR. ANDERS: Okay. Lauren, you had a question.

25 MR. BROWN: Yes. Maureen, when would PG&E have

1 to take delivery of the first new casks in order to stay
2 on your schedule?

3 MS. ZAWALICK: Yeah. Good question, Lauren.
4 Tom, do you want to give some perspective on that?

5 MR. JONES: The problem was my telephone rang,
6 which is connected to my iMac, which automatically muted
7 to try to accept the telephone call. So I will tell my
8 wife through public comment I will call you in a few
9 minutes.

10 So, Lauren, on your question, we need to start
11 mobilizing and receiving casks around 2020 -- late 2025,
12 early 2026. The loading campaign will take likely over
13 a year or maybe two years, but remember the settlement
14 and the bounding analysis, we try to have everything
15 done within four years of the succession of operations.
16 There's my son, Brock. This is all falling apart.

17 MS. ZAWALICK: You're doing great, Tom.

18 MR. JONES: We will hope to have everything
19 wrapped up by the process you saw by 2024 or '5 and then
20 the lead time for casks is typically 18 months and it
21 typically takes about a week or a little longer to load
22 each cask.

23 MR. ANDERS: Thank you, Tom. One last question
24 from Kara and then we'll go on to public comment. We
25 have six people who have raised their hand so far.

1 MS. WOODRUFF: Thank you. I just wanted to
2 clarify something following up on what Tom said and then
3 I have a quick question for Maureen.

4 The issue about the unresolved issue talking
5 about real transportation was brought to our attention
6 by the Alliance For Nuclear Responsibility. The
7 question whether the use of rail to transport away
8 debris during decommissioning wasn't as available as we
9 might hope it to be and so I just wanted to provide a
10 little more update to them that the panel was curious
11 about the concerns brought up by the Alliance For
12 Nuclear Responsibility. We have asked PG&E to
13 investigate that further. So when we get some input on
14 that, we'll provide it to the community.

15 And then here's my question. I know that in
16 the course of informing the next triennial report, PG&E
17 had to investigate whether it could use contractors to
18 carry out very significant or insignificant, I guess,
19 portions of decommissioning and part of that analysis
20 involves looking to see whether you even sell the plant
21 and just walk away from decommissioning and have some
22 third party take it over and I understand you had to go
23 through that process to inform the next triennial
24 report, but my question is what are the odds that PG&E
25 will actually do it? Just to try to pin you down, is

1 this something that is a reasonable likelihood depending
2 on what you find out there or is it something that you
3 really don't plan on doing, you intend to see the plant
4 through decommissioning, but you have to go through this
5 process as more of a regulatory requirement. So in
6 other words, I'm really trying to get a handle on
7 whether this is just something that's purely procedural
8 or whether it truly is a viable option for PG&E to
9 really walk away from decommissioning in favor of some
10 third party. And, Maureen, maybe you can touch on that.

11 MS. ZAWALICK: Absolutely, Kara, and I
12 appreciate the question and I want to anchor back to our
13 decommissioning guiding principles. We've heard Jim
14 Welsch talk about it in previous forums and venues and
15 that's, you know, making sure, you know, we listen to
16 the community, you know, it's all about the
17 shareholders, the ratepayers and local community and I
18 offer that it is a proceeding and it's regulatory
19 required in a due diligence that we do that every
20 option. We need to do that in our regulated market,
21 right? You know, but we are -- PG&E is a community
22 72,000 square miles. They are well-involved in San Luis
23 Obispo County providing, you know, essential power and
24 essential assets to essential services to the community.
25 So, you know, we don't have any intention to walk away

1 from anything. You know, we are committed to the safe
2 and reliable operations of Diablo Canyon and the smooth
3 transition to decommissioning, but, you know, I do offer
4 that we have to as a regulated entity have to adhere to
5 and look at every possible aspect. So I don't feel like
6 you're pinning me down. I'm just trying to share a
7 perspective there's no decision made and we will go
8 through a full evaluation and make sure we get the
9 engagement panel's input on all of it and know that PG&E
10 plays a major role in the State of California and the
11 County of San Luis Obispo for various -- for all
12 essential services and that's a key aspect than other
13 plants that have licensed transfer -- licensed
14 stewardship and have made decisions elsewhere. The
15 energy plants, they just don't want to be in the
16 decommissioning business. You know, there are merchant
17 markets and it's very different. So it's not an apples
18 to apples comparison of what's going on out there, it's
19 more about being able to vet all the various options.
20 Does that answer your question?

21 MS. WOODRUFF: More or less. I mean, I -- I
22 appreciate your answer and I think in some ways the
23 engagement panel and the strategic vision have already
24 spoken on this issue. Our latest revision made it clear
25 that our preference was for PG&E to carry this out

1 through the completion of decommissioning because you
2 have this outstanding relationship and long-lived
3 relationship with the community. So I don't think a
4 proposal that would bring in an unknown third party will
5 probably be well-received by the engagement panel or
6 this community in general. So it sounds like you're
7 hearing what we're saying and that's a good thing and
8 we'll see what happens. Thank you.

9 MS. ZAWALICK: You bet. I just wanted --

10 MR. ANDERS: Thank you Maureen and Kara.

11 MS. ZAWALICK: Chuck, just real quick, I'll
12 turn it over to Tom if he wanted to add anything.

13 MR. JONES: Thanks, Maureen. Brock's not
14 joining us on this answer.

15 Kara, the other parts are it's also simply not
16 simply up to PG&E by itself. While we will make
17 application of something, there are two additional
18 regulatory procedures. One would be the NRC oversees
19 license transfer, that's something that utility can act
20 on unilaterally, and the second is the Utilities
21 Commission, any asset encumbered by customer rates like
22 the power plant itself is subject to that 851
23 proceeding, as are the lands and things like that. So
24 Utilities Commission has authority to block that
25 transaction, as well. So it's not up to the utility, as

1 well. There would be parallel regulatory paths even if
2 what would be a community or panel least desirable
3 outcome came to fruition, it wouldn't be up to the
4 utility by ourselves.

5 MS. WOODRUFF: I hadn't thought about that
6 before, but that's good news. Thank you.

7 MR. ANDERS: Thank you, Tom.

8 Linda, I see you have your hand up; however, we
9 need to move on to public comment, and if there's time
10 at the end, we can ask any additional questions.

11 So I see we have six members from the public
12 that would like to speak. I'm going to start at the top
13 and we're going to allow three minutes for speaking, and
14 if you can do it in shorter than three minutes and it's
15 late, I'm sure the panel will appreciate it. David.

16 MR. WEISSMAN: Am I unmuted now? Hello?

17 UNKNOWN SPEAKER: Yes, we can hear you.

18 MR. WEISSMAN: I don't see an unmute button
19 here. David Weissman, Alliance For Nuclear
20 Responsibility, and in the short time since 9:00, last
21 ten minutes, I'm frankly more confused on the chronology
22 of what was simply a request for some additional
23 information and questions I put in back on the 6th of
24 July, which was over 90 days ago. Mr. Jones says he
25 admits there was some form of miscommunication. What I

1 know, as I heard Lauren Brown remark, that he had no
2 idea about the questions that I'd asked regarding the
3 future of rail transportation. I got an email from
4 Chuck Anders saying that PG&E has conducted an
5 investigation and will be providing an update at the
6 upcoming public engagement meeting on Wednesday, the
7 28th. I didn't see that analysis or -- what's the
8 phrase here -- an investigation tonight. I didn't see
9 it on the agenda, I didn't hear it, and then we do hear
10 Kara saying that somehow they were informed about this
11 at some point and, you know, I'm just confused about the
12 chronology of who knew what and when. All I know is you
13 did receive it July 6th, you told me such, it was placed
14 up on your comment bulletin board and I'd like to know
15 exactly how many more days, week, months we'll have to
16 wait to get an answer; although, again, according,
17 Mr. Anders, to your thing, the email you sent me last
18 week, PG&E has conducted and will address my concerns
19 tonight. So maybe you could straighten that out for me
20 and just let me know when we can expect this.

21 Second thing, to the questions that
22 Ms. Woodruff was asking recently of Maureen about
23 knowing what PG&E's intents could be, might I remind the
24 committee and the listeners her question is kind of
25 valid because we don't actually know what corporation or

1 company PG&E will be even five years from now when the
2 plant ostensibly closes. Remember, they've only just
3 emerged from bankruptcy, but their securitization plan
4 to finance to climb out of bankruptcy has not been
5 approved by the Public Utilities Commission yet and
6 there's no way of knowing that the potential for future
7 catastrophic wildfires, the inability to ensure
8 securitization or adequate funding or possible
9 subsequent guilt in any of the current fires could drive
10 them back into bankruptcy any time, one year, two years,
11 four years from now. So I think Ms. Woodruff's question
12 is certainly well-placed in that no idea of knowing
13 exactly what company this will be when the plant is
14 ready to retire, and I will leave it at that. Thank you
15 very much.

16 MR. ANDERS: Thank you, David. Our next
17 speaker is Matt Downing. Mat, you're available to
18 speak.

19 MR. DOWNING: All right. Thank you, everyone.
20 Matt Downing. I'm the community development director
21 for the City of Pismo Beach. I wanted to touch on a
22 couple of things. Thank you all very much for your time
23 this evening. The first, the desal -- idea for desal
24 that was a great idea in 2015-'16. Since that time, the
25 City of Pismo Beach and our partner agencies have moved

1 forward with the Central Coast Blue Project. That will
2 provide all the water that we need for south county. So
3 really the desal idea isn't totally necessary anymore.
4 In terms of the marina, it would be a really unfortunate
5 and costly thing to have that torn out. Seeing that
6 stay and turned into some kind of commercial marina use,
7 maybe even looking at the long-term use of the land
8 itself in terms of an eco tourism opportunity would be a
9 fantastic opportunity, but whatever we look at in the
10 future in terms of the land, one thing we wanted to keep
11 in mind is that Avila Beach Drive is really the only way
12 in and out of that area and I know that we are severely
13 impacted by large events and large heavy uses
14 specifically on Shell Beach Road in our community. So
15 just wanted to put those ideas out there. Thank you all
16 again for your time and I'll end it there.

17 MR. ANDERS: Thank you, Matt. I would like to
18 remind everyone when you do speak, please provide your
19 name and your residence and affiliation for our court
20 reporter and the panel.

21 Next speaker is Andrea will you determine.

22 MS. LUEKER: Can you hear me now?

23 MR. ANDERS: Yes, we can.

24 MS. LUEKER: Excellent. Thank you. Good
25 evening. Andrea Lueker. I am the harbor manager at

1 Port San Luis Harbor District. A very interesting
2 meeting this evening. As you know, we're a very near
3 neighbor to Diablo Canyon Power Plant. Port San Luis is
4 the largest special district in the county with our
5 district boundaries including a large portion of the
6 City of San Luis Obispo, south to the county line and
7 deep into the eastern portion of our county.

8 Property-wise, we have approximately 100 acres of land
9 and we also have 8,400 acres of tidelands. Those
10 tidelands were granted to us by the state legislature in
11 1955. The original goal of the Harbor District and our
12 mission still today is to serve the public with an array
13 of commercial and recreational boating, fishing and
14 coastal-related opportunities while ensuring
15 environmentally responsible, safe, well-managed harbor
16 that preserves our marine heritage and character.

17 Since 1955, the harbor has been an exemplary
18 steward of the state tidelands, as well as the other
19 marine resources we have received. This evening the
20 panelists heard presentations regarding the marine
21 resources, including the breakwater and marina at Diablo
22 Canyon Power Plant. Beginning in August 2018 and
23 several times since then, the Harbor Commission has
24 discussed their interest in Diablo Canyon and PG&E
25 assets that have a nexus to the Harbor District

1 operations, services and functions. Related to this
2 evening's meeting, the marina, the breakwater, the
3 adjacent infrastructure and the associated tidelands are
4 all of significant interest to the Harbor District.
5 Preliminarily, discussions with my board of
6 commissioners for reuse and repurpose of these areas
7 include, but are not limited to, the Harbor of Refuge
8 For Mariners, Coast Guard Satellite Station, Slips and
9 Transient Docs, Cooperative Programming with University
10 of Research Organizations, Interpretive Center,
11 boatyard, vessel storage, hoists, day use sailing.

12 The purpose of my public comment this evening
13 is just to make sure that the harbor district -- to keep
14 the harbor district's interest and intent in the
15 forefront and to make sure that we're kept apprised and
16 are aware and included in discussions and any
17 decision-making during this complex decommissioning
18 process. Thank you for the opportunity to speak this
19 evening and have a good rest of your evening.

20 MR. ANDERS: Thank you, Andrea. Our next
21 speaker is Don Chartrand. Don, you should be able to
22 speak if you unmute.

23 MR. CHARTRAND: Hello. Thank you. Thank you
24 to the commission for your service and it's late so I'll
25 try and keep it brief.

1 I'm Don Chartrand. I live in Los Osos. I'm
2 the executive director of Creek Lands Conservation.
3 Some of you may know us by our prior name, Central Coast
4 Salmon Enhancement, and I mention that mainly because my
5 comment tonight has to do with aqua culture, which is
6 how we found our roots years ago growing salmon for
7 fishermen. Now we're more of a conservation group and
8 in that capacity we are focused on a variety of
9 different species important to the Central Coast. My
10 topic tonight focuses on abalone. We're working with
11 Noah Fisheries and the Nature Conservancy and Cal Poly
12 to try and come up with a plan to save white abalone,
13 which is an endangered species like black abalone.
14 They're not native to the rocks in the near tidal in
15 this immediate area, but the water is cold here and they
16 live in deep cold water a little bit further south. So
17 the thought here is to use, you know, an idea to
18 repurpose some of the infrastructure at Diablo Canyon
19 for the purpose of what we're calling conservation aqua
20 culture, which would be to raise large numbers of
21 immature organisms of a variety of types from shellfish
22 to seaweed and maybe even fin fish of some type down the
23 road for the purpose of rewilding California's coast
24 that has been depleted by climate change and human use
25 and disease like we've heard about from the black

1 abalone. So Conservation Aqua Culture is a use that has
2 not been formally put forward to the decommissioning
3 panel. I just want to put on the record I think that
4 would be a very interesting and novel and job-producing
5 use of the facilities at Parcel P. Thank you.

6 MR. ANDERS: Thank you very much, John. Our
7 next speaker is Coleman Miller.

8 MR. MILLER: Hello. Can you hear me?

9 MR. ANDERS: Yes, we can.

10 MR. MILLER: I'd like to thank the panel and
11 the presentations. I had one question that might be
12 updated in the future on the desal and the large amount
13 of water that's needed for decommissioning. If the
14 large buildings were repurposed such as the warehouse,
15 admin building, training building, would the amount of
16 water needed for decommissioning be reduced, and if so,
17 by how much? 25 percent, 50 percent, et cetera.

18 Another comment would be if desal is seemed to
19 be viable going forward and those who are concerned
20 about releasing brine to the ocean, I would think it is
21 possible to send the brine to solar evaporation ponds.
22 They originally got sea salt. And if I'm not mistaken,
23 that's how Mahatma Gandhi broke the British empire in
24 salt. That's my comments. Thank you very much.

25 MR. ANDERS: Thank you very much, Mr. Coleman.

1 As I mentioned, all of the comments whether
2 written or provided verbally will be part of the
3 official transcript. Last speaker is Eric Miller. If
4 there's anyone else who would like to speak, now is the
5 time to raise your hand.

6 Eric, you should be able to speak to the panel.

7 MR. MILLER: Thank you. I just wanted to add a
8 couple notes -- I'm sorry. Eric Miller. I'm actually
9 a consultant with Miller Marine Science and Consulting.
10 I've been working extensively in the seawater
11 desalinization space, especially down here in Southern
12 California. I just wanted to follow up with some of
13 Mr. Juarez's comments and to some of the other questions
14 I've heard.

15 He was correct in saying -- Mr. Juarez is
16 correct in saying there have not been a -- there has not
17 been a seawater desalinization plant that has been fully
18 permitted under the ocean plan amendment that was
19 adopted in 2015. The closest was Carlsbad facility, but
20 that had some special situations because it was an
21 existing facility at the time. It was more than 80
22 percent constructed by the time the new regulation was
23 passed, but I did want to note I heard a couple of
24 questions about the capacity of the facility and how
25 much water would be available in relation to after the

1 power plant did what it needed to maintain its
2 operations through decommissioning. There was one
3 important point to keep in mind. Desalinization of
4 facilities can be expanded as is the case with the
5 Charles Meyers facility in Santa Barbara. That's one
6 that's probably going to be expanded in the near future
7 as additional local water districts choose to start
8 taking water from that facility and I believe the same
9 would occur here -- would be available here for the
10 Diablo Canyon facility. In the end, the critical items
11 that are probably of most importance to consider when
12 thinking about whether or not another entity such as the
13 county to take over the operation and title, if you
14 will, of the desalinization facility is more located in
15 the existing infrastructure that's there that would not
16 need to be replaced or created with a new facility, as
17 well as the opportunity to utilize an existing MPDS
18 permit through the Regional Water Board and build upon
19 existing permitting rather than starting from ground
20 zero.

21 So I think those are two couple very distinct
22 advantages that this facility does present to the county
23 if they are able to gather up additional partners to be
24 involved in the project. That concludes my comment.
25 Thank you.

1 MR. ANDERS: Thank you, Eric. That concludes
2 the public comment. We are very fast approaching on our
3 agenda time for 9:30. Do the panel have -- any members
4 of the panel have any burning questions or comments they
5 would like to offer before we introduce our next meeting
6 topic and adjourn the meeting?

7 Okay. I really want to express our
8 appreciation to the panel --

9 MS. WOODRUFF: Hey, Chuck. I feel like I have
10 a burning comment if you don't mind.

11 MR. ANDERS: Okay. You got it. Go.

12 MS. WOODRUFF: First of all, I just want to say
13 thanks to Don Chartrand. I think his idea of
14 Conservation Aqua Culture is really intriguing and I
15 hope that's part of our future.

16 Secondly, I feel like we owe David Weissman a
17 response to his query and here's what I would say, and
18 if anybody disagrees with my summary of the situation,
19 please chime in. We did receive your comments, David.
20 It was sometime during the summer. I can't remember the
21 exact date. We discussed it during an administrative
22 meeting and there was a few e-mails that went back and
23 forth. Members of the panel asked PG&E to kind of look
24 into this and respond to some of the concerns about real
25 transport. I think our initially casual response we

1 heard from PG&E was real -- was perhaps more available
2 for the future than feared by the Alliance Nuclear
3 Responsible letter, but that ultimately when the
4 decisions about how debris is removed from the plant are
5 made, it was a decision that's not going to be really
6 undertaken for a number of years still, and as I
7 understood it, because of the time frame involved, there
8 is not any urgency in looking at the rail issues with
9 any particularity at this point, but as those
10 investigations proceeded, the panel would be informed.
11 I don't think anything was supposed to be covered today
12 at the meeting. I think what Chuck was meaning to say
13 is that we would respond with an update on the process
14 involving our receipt of David's comments, but I don't
15 think any of us expected that we would have any
16 substantive discussions about rail today simply because
17 those decisions are rather still far off down the road.

18 And then the last comment I would make is Matt
19 Downing mentioned the Central Coast Blue Project and he
20 specifically said that maybe with this new project
21 coming online in future years, the desal is really
22 rendered almost superfluous and I was wondering if, Guy
23 Savage, if you're still on the line, presumably the
24 county has thought about our desal issue relative to
25 Central Coast Blue or if you or anybody else has

1 comments, I think it would be interesting to hear.

2 Thank you.

3 MR. SAVAGE: Kara, I'm still here, but no
4 comments at this time. That project is still kind of in
5 its infancy and we need to see how it all pans out.

6 MR. ANDERS: Thank you, Kara. And this is
7 Chuck. And your observation is absolutely correct. It
8 was my intention to indicate to David that the status of
9 his request to investigate would be addressed at this
10 meeting.

11 We are almost at our agenda time. Just want to
12 mention that the next engagement panel meeting is
13 scheduled for late November, early December and we'll
14 address the CPUC preliminary ruling on the nuclear
15 decommissioning cost triennial proceeding, NDTCP.

16 As Maureen indicated, they anticipate a ruling
17 by November 13th. The panel would like to immediately
18 within ten days or so host a public meeting to discuss
19 at PG&E debrief the panel on the CPUC ruling and also
20 discuss the implications of that ruling on the
21 community. So we are waiting for that ruling to
22 schedule the next meeting. So that will be the last
23 meeting in 2020.

24 So any panelists have any final comments or
25 statement they would like to make before we adjourn?

1 Thanks to the panelists, thank you to all the speakers
2 and many thanks to the almost 60 public participants and
3 attendees that we had during this meeting. Hope you all
4 have a -- you are all healthy and we normally say travel
5 safely home, but we don't have to do that anymore, at
6 least on this meeting. So wish you all well. Thank you
7 for your participation and the engagement panel meeting
8 is adjourned.

9 (The proceedings adjourned at 9:31 p.m.)

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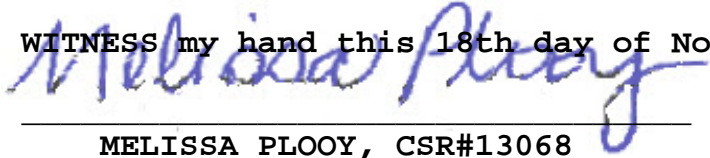
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