Official Transcript of Proceedings NUCLEAR REGULATORY COMMISSION

Title: Public Hearing on the Nuclear Energy

Innovation and Modernization Act

Docket Number: (n/a)

Location: Eureka, California

Date: Monday, August 26, 2019

Work Order No.: NRC-0502 Pages 1-73

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NUCLEAR REGULATORY COMMISSION

HUMBOLD BAY NUCLEAR POWER PLANT

PUBLIC HEARING

ON THE NUCLEAR ENERGY INNOVATION AND

MODERNIZATION ACT

(NEIMA) SECTION 108

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MONDAY, AUGUST 26, 2019

6:00 P.M.

Eureka, CA 95501

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The Public Meeting was convened in the Great Room of the Wharfinger Building, 1 Marina Way, Eureka,

California 95501 at 6:06 p.m., Bruce Watson, Facilitator, presiding.

APPEARANCES

BRUCE WATSON, Facilitator; NRC Chief, Reactor

Decommissioning Branch

JOHN HICKMAN, Humboldt Bay Power Plant project manager

ANGEL MORENO, Office of Congressional Affairs

P+R-O-C-E-E-D-I-N-G-S

6:06 p.m.

MR. WATSON: As you came in there was some brochures. This is the questionnaire which we got the OMB clearance on in order to get the government's permission to ask you those questions. So it's very important that we get those back from you if you haven't filled them out online. Also there's a variety of brochures, again, out there.

I want to remind everybody that Connie over here is transcribing the meeting. So once we get the transcription from her and we review it, we'll put it on the website also so you can review it for the future.

I have a brief presentation. So I'll just go ahead and begin with this. This is an NRC category 3 public meeting. We're here to get comments from you on the best practices for community advisory boards and decommissioning of nuclear power plants.

This is a law, Nuclear Energy Innovation Modernization Act. And section 108 has this requirement in it that we hold these meetings.

So as I said, this is a Category 3 meeting. As far as meeting safety procedures, we all

know the exits, there and there. So if the fire alarm goes off you can all leave quickly. So if there's any emergency, please let us know. We'll call the local 911 number.

With me tonight are John Hickman. He's the project manager for Humboldt Bay for decommissioning. And so he's been taking care of the licensing activities for the site for probably the last, 10, 15 years, yeah. So John's fairly knowledgeable with the site.

Angel Moreno is over here from our office of congressional affairs. Think that's it for NRC attendees tonight.

After the presentation, I'll go through the ground rules for the meeting. And we have a few chosen speakers from the CAB to talk. And then we'll close the meeting by 9:00. Hopefully we'll be done before then.

When you signed in, I will be going through this list and asking if you want to speak.

Okay?

UNIDENTIFIED SPEAKER: So I didn't sign in.

MR. WATSON: Do you want to speak?

UNIDENTIFIED SPEAKER: Yes, I do?

MR. WATSON: So on page 3 here.

UNIDENTIFIED SPEAKER: Perfect. Okay.

MR. WATSON: On the next slide, I just want to let you know that we have -- the NRC has lots decommissioning of experience. The regulations went in to effect in 1997. And during that time, we have overseen the decommissioning - safe decommissioning at almost 80 sites including 10 nuclear power plants. So we're hoping Humboldt Bay becomes number 11. We also have three other sites that are -- two other sites and three reactors that are also going to be terminated under our license hopefully within the next year.

In California we already have some experience with Rancho Seco which is near Sacramento. This is what the site looks like. They removed all the radioactive material but left all the buildings standing. So even the containment building, which had the reactors, is still there. It's really up to the utility or the site restoration whatever they want to -- however they -- what other arrangements they have in the stated agreement.

The NEIMA law went into effect January 14th of this last year. It requires us to hold a minimum of 10 public meetings in the geographical

diversity of the United States.

So this is our second meeting. We have eleven scheduled. There will be two more in California and it is -- and it's quoted here: The Commission, meaning the NRC, shall submit to the congress a report identifying best practices with respect to the establishment and operation of a local community board -- community advisory board to foster communication and information exchange between a licensee planning for and involved in decommissioning activities and members of the community that that decommissioning may effect, including lessons learned from such boards in existence.

So we are asking comments -- we will be accepting comments through November 15th of this year. So there's still some time left, quite a bit of time. And you can submit those comments through the website regulations.gov. We have a specific NEIMA website. You can send in a letter or email. I'll provide some information on that in the coming slides.

What is a community advisory board?

Well, it's an organized group of citizens interested in safety decommissioning practices and special management at a decommissioning facility.

The sponsor is usually the local licensee or mandated by a legislature. There's a new one. There's a voluntary one that's been formed in New York for the upcoming decommissioning shut down of Indian Point. So we'll be visiting them also. The composition typically includes local community leaders, elected officials, state representatives, residents and members of the licensing staff. Most CABs have a governing charter to establish rules and responsibilities. So --

So typical responsibilities of the CAB plans review the licensees are they for decommissioning. They provide insight into potential impact on the local community. opportunity for public education on decommissioning. They can make recommendations to the state officials and provide input on site restoration, plans for future use of the site and also economic development.

The report that we're going to be providing to the congress is a description of the CAB discussion topics, what you brought up in meetings, CAB recommendations to inform the decision-making process, how the public influence those decisions that the utility make or the licensee make,

So their plans are all diverse.

interactions with the NRC and other federal regulatory bodies to support board members and overall understanding of the judiciary process and promote dialogue between the affected stakeholders and the licensee involved in the decommissioning communities.

And lastly, how a CAB could offer opportunities for public engagement through all phases of the decommissioning process.

All these are pretty much out of the law. So they're not something we made up.

The CAB report will be to the Congress. We'll also have the CAB best practices for membership composition -- membership composition, selection process and the terms of those members, when the CAB was established, and the frequency of their meetings, specifically logistics required support of the CAB and other identified best practices or activities.

So how do you submit your comments?

You can do that through our website listed there in yellow. You can submit your comments electronically to regulatory -- regulations.gov. You can scan your completed questionnaires and email them to NEIMA108.resource@nrc.gov. Or you can mail them to a member of my staff, Kim Conway. And that's

the address for our offices in Rockville, Maryland.

If you have questions you can refer them also to our office of public affairs, fellow by the name of Dave McIntyre. That's his phone number. He's in Rockville, Maryland also. You can also email to our email address there at NEIMA108.resource.gov.

In summary, we are here to obtain public comments on the best practices for community advisory boards at decommissioning sites. So that is our sole purpose here. We're not here to talk about technical issues, other issues that you may have on your mind about decommissioning. But that's our real reason for being here. And so we're going to try and keep on target with that particular subject matter. That's what we've been tasked to do by holding this meeting.

I have a list of people who attended, page three. Anybody else that wants to sign up and talk? Okay.

So I will go to -- but we'd like for each speaker to come up after we have our CAB representation presentations. And we'll give you about five minutes to talk. Should be plenty of time. We have about three pages of eight or ten people on it and may -- they may or may not want to

talk.

So with that I'll turn the mic over to Loren Sharp.

MR. SHARP: My name is Loren Sharp. I'm the senior director for nuclear decommissioning for Pacific Gas and Electric. I'm responsible for the decommissioning at Humboldt Bay as well as Diablo Canyon.

So just run through a couple of quick background items associated with the CAB here at Humboldt Bay.

This is a time line of Humboldt Bay. You can see that we have listed the history of how the plant was started up, when it was shut down. You can see the timeframe when we moved all the spent fuel up in dry cask storage in 2008. We completed that activity, and then we went ahead and went into the demolition of removal of the fossil plants and then the nuclear plant.

So demolition of the nuclear plant completed at the end of 2018. And we finished the remediation of the nuclear plant in July of 2019. So we're currently in the demobilization of equipment and doing the final permitting elevations and samples that we need to. So we're really at the end.

This shows a little bit about the CAB history. Obviously we saw the need for a CAB participation in the '90s when we were looking for the licensing associated with the dry cask storage permitting that we needed to get both with the state and the NRC. So we set up that and had the interaction with a number of community leaders as you can see on the middle of the slide, a number of the folks that we were engaged with. And they agree that we kind of came up with a charter in 1998 with the committee advisory board for Humboldt Bay.

This is a list of the CAB membership. I would tell you, in general, the CAB membership we might have a few name changes over time. But, in general, it's pretty much all the same. If it was changed, it was because we changed out an individual. But the same function that was there at the start is still there today.

From a CAB standpoint, they're recommending 15 members in the charter. We have 15 members still today. We meet on the order of at least two or three times a year. There have been some years when we had so much activity going on with the site that we met much more frequently than that.

But we also asked the CAB go on a tour at

least once a year so we can see the impact of the site moving area to see all the changes that were happening on the site. So that's kind of been the pace of the meetings that we've gone through in the past when we ve done demolition. I would note that the NRC has been invited to a number of the meetings because | the CAB had requested to talk to them specifically on a topic or two from time to time. This is an example. Certainly not comprehensible of some of the topics that CAB members have asked us to cover from time to time. Certainly a broader list In deneral, just wanted to provide a than that. little bit of insight of some of the things that occurred as we went through the last 10 years. my perspective is the CAB has done a really good job of providing insight as we talk about the topics.

This particular slide shows what the site looked like in February of this year. You can see a lot of the material on the left side and some of the remediation where we have some wetlands being created from some of the site remediation and contouring that we were requested to do by the final site restoration permit. Some of the remediation is still ongoing. Some digging on some of those portions of the site.

This shows what the site looks like

today. And so, in general, you can see that, essentially, we've removed all of the buildings except to be reused from the original facilities that were on-site, most of the admin buildings are being re-purposed. And everything else that was on-site associated with the -- with the fossil and nuclear plants was removed.

UNIDERTIFIED SPEAKER: Could you point out where the dry casks are?

MR. SHARP: Sure.

(Court reporter interruption.)

UNIDERTIFIED SPEAKER: I asked him to point out where the dry cask storage is.

MR. SHARP: This is a fairly unique dry cask storage site. I think there's only a couple like ours in the U.S. What you'll notice is that we're on a bit of a bluff at that part of the site. Actually it's a tsunami evacuation zone where that part of the site is. And all of our casks are basically placed in a concrete monolith, and they're all below ground.

So all you see there is -- in those dry cask storage is the steel concrete lid that's over the top of the casks that are put in the ground. So that's all you can see from that photo. There are

five spent fuel casks and one cask with a Class C waste that holds radioactive waste and were segmented because of their high radiation activity and all the internals we've had inside the reactor.

So those six casks are the ones that are the subject of discussion with the DOE. We have a contract with DOE. And DOE's function is to pick up those casks whenever a facility is available.

And I'm sure you're going to have more questions about that as we go through this meeting. But in general, they're still here because DOE hasn't executed their contract. And that's kind of the result from that standpoint. That's why.

And that's kind of the end of my slot. So I'll give it back to you, Bruce.

MR. WATSON: Thank you, Loren.

Are there any elected officials or elected official's representatives that would like to talk?

Anybody else that would like to speak, elected officials? Anybody from Native American tribes here or representatives? You have to speak into the mic. Sorry.

MR. COLEMAN: Thank you. So I passed on the elected official one. But I am an elected member

of the Harbor Commission. My name's Stephen Coleman.

Can you hear me? This thing is kind of awkward.

I'm also in the Community And Resilience Development Community. And resilience and community development director for the Blue Lake Rancheria. So I wanted to come up since there were no other people speaking on behalf of the tribes. And I haven't been very familiar with this whole process. But it didn't look like, on that slide, that there was any tribal representation on the CAB. And I was wondering if tribes were reached out to or given the opportunity to participate in it? Because tribes, in particular, have been severely impacted by nuclear power, both mining and execution of it.

That's all.

MR. WATSON: Well, one thing I have to make sure you understand is the NRC sponsor any community advisory groups. I said my slides didn't expect -- we encourage the licensee or the states to sponsor those. So the membership is really up to them. And I know that the NRC does have a tribal outreach group. So we notify them of all the meetings that are held publicly so that they can attend. So it's really not our call on that.

So with that, I would like to invite

Mr. -- is it Chuck Dewitt? No? Decline? Okay.

Mr. J.A. Savage. Ms.? Oh, I'm sorry. You have to come up and speak into the microphone so it's transcribed.

MS. J.A. SAVAGE: Just some questions today. So at the end of this year, by December 31st, I understand that PG&E is supposed to turn over its license, permanently, to the NRC.

No?

When I looked on the website, that's what it says. So why -- can you explain how that works and when it's supposed to happen?

MR. HICKMAN: I'm John Hickman. I'm the licensee project manager for the facility.

Humbo dt Bay is a site that has both a part 50 license to their reactor and a part 72 license. So the process we would be going through, at this point, is we're only concerned with reactor license. They're nearing completion of the decommissioning of the reactor.

They're going to conduct radiological surveys to insure that they, radiologically, cleaned up the site sufficiently to meet our regulatory standard. We will have people conducting confirmatory surveys. In fact, we had people up

there just this week doing those confirmatory surveys which are -- make sure they adequately radiologically decommissioned the site.

Following the completion of all radiological surveys, they'll submit a request to us along with their surveys to terminate their license. they'll be telling us that: Here's have documentation. We cleaned up the site radiologically.

We would review that document. We would review the confirmatory survey we conducted.

And if everything does meet our release criteria, would terminate the license for the part 50 reactor site. They will retain the part 72 license until the Department of Energy is ready to accept that fuel from this facility.

So that is, at this point, an indeterminate timeframe.

UNIDERTIFIED SPEAKER: If the NRC signs off on the first part of the license termination, then what is the association if there still is one?

Because time is - the utility -- if there still is one. Because you don't know if it's still going to be around -- and NRC oversight of what's left?

MR. HICKMAN: We're just terminating,

theoretically, the license for the old power reactor site, where unit 3 used to be. They will then -- they will be using that facility for what they've already built there. They still -- PG&E will still hold the part 72 license. They're still responsible for the maintenance until the Department of Energy accepts the fuel. So that license remains in effect.

MR. WATSON: And just to remember, this is a reminder. We'll be back to inspect that facility. So the NRC will still be coming back. I think that's the root of your question, right?

Are there any other CAB members that would like to make a statement? Sir? Come up here and state your name please?

MR. MENETAS: May name's Mike Menetas.

I've been a member of CAB since 1998.

I've been involved in nuclear power plants since 1972. I've been an educator for 40 years. The last 21 years of my career were at Humboldt State where I actually taught class in 1987, decommission of nuclear power plants. That's when EIR came out of Humboldt Bay. People here took that class from me.

So I've been following this for a long time. And I just want to start off and say I'm grateful with the folks from PG&E who have done the

job that you see, 16 thousand truck loads of stuff leaving the county over Highway 299. All at that stuff -- it's commendable. And we've reached a milestone. I think CAB has been a part of that. Of course we still have a long way to go because of the dry casks, like the gentleman said. That's going to be something that's going to happen down the road.

CAB, I'm assuming is going to be a part of this dialogue, this interaction of what's going to happen at least until 2025 when the decommissioning fund we've all been paying into off and on since 1975 or so. And we'll continue to pay for a long time. I guess the magic date is 2025 when that fund runs out. Sure it's going to be extended because this isn't cheap.

In terms of the CAB, so many comments. I will write these down and send them. We were one of the first CABs. And when we all got put together, it was a great cross section of people. And over the years, we would show up. And PG&E, very gracious, would feed us dinner. They would have an agenda, and they would present the information to us. We could ask questions.

My big concern as an educator, we learned about nuclear power and decommissioning and all this

stuff in little, tiny increments. Somebody would ask the question; that's the answer to that.

In terms of a future CAB, I would like to see some kind of an educational framework whereby the people chosen would actually have to do some homework. Would have to sit down and get a short course in terms of what nuclear power is, what nuclear reactors do, how the fuel is used, what happens after, all those kinds of things that we've been, again, kind of piecemeal.

And I can question out here do you know what's in the dry cask storage?

How many of you really know what's in there?

Yeah. Some of you do. Okay. But a lot of people don't.

And its very crucial and critical to understand why the dilemma in terms of where this stuff is going to go. We've heard the answer to that: Well, it's DOE's problem.

Well, we can worry about, you know, the spent fuel. We need to understand, in a deeper sense, the danger, what the issues are with spent fuel. It's radioactive. It gives out heat. Bottom line. That's the problem. Can't bury it

underground. Well, some people can. The issue is what do you do when you concentrate a whole lot of the thermal things underground and what impact does that have on the environment?

Those are kinds of things -- again, we've missed -- been told PG&E -- and, again, not taking anything away from them. I'm just saying my perspective and I actually told this to a woman. I finally volunteered to go down and teach class to future CAB members or to anybody who wants to understand this because it's a complicated, complex issue. And I've spent my life studying this.

And, again, I -- that would be the first thing I would suggest to the CAB in terms of communication. Again, I've been very grateful with PG&E, open minded, great people. They're community people. They're my neighbors, gone out and had a beer.

Hey, and I would think that, when we look at corporate PG&E -- I mean, I guess it's still here, you know, just saying. But there are issues in terms of how information is disseminated.

Again I'm not going to -- I told my wife I wouldn't do this. But in terms of the NRC, these gentlemen were here couple of years ago and their

presentation. And I had some questions. And, of course, they said: Gee, you have questions? Let us know.

I called Mr. Watson four or five times.

I called Mr. Hickman three or four times. Never returned my call. I finally called the PR guy in Texas. That gentleman finally got a hold of Mr. Hickman who called me when I was on vacation. I said: I need this information.

Said: Oh, yeah. I'll get it to you.

Never heard from him. Lack $\circ f$ information. Lack of transparency, lack of: Hey, I'm a CAB member not some wacko out there worried about I needed information because of my this or that. Again, to oversee what was likely role in the CAB. I can go on and on and on. the bottom line. to say that we've gone through a major milestone. drive by 101 down there. It's amazing to a see all the buildings going, crane's going, the equipment going, all the piles of dirt going. All that's going But the central canisters are still there. That's my concern because they're going to be there at least until 2025. That's the funding that we've paid for in the decommission fund.

By the way, the decommission fund

is -- correct me if it still is \$1.02 billion dollars. Close enough. May be less; may be more. Again, when I first taught my class the decommission estimate was \$95 million. In 2003 when they had Tom LaGuardia, TLG Services coming through, I don't know how much money PG&E paid them to do the survey. They came up with \$383 million. It jumped up 500 million, 600 million, 700 million, 800 million, \$1.02 billion dollars. I think we're close to doing that. But we're still paying for spent fuel storage.

And we are going to pay that price because as -- we came out of the Blue Ribbon Panel that President Obama started was there is no solution to high level radioactive waste. So we need to be aware and people in the community need to be aware we need to stay on top of all this. It's DOE's fault. It's Congress's fault. It's political. It's economical. It's everything.

And I thank you the gentlemen here for listening to me. Thank you, Bruce.

MR. WATSON: Yes. Thank you.

Any there any other CAB members that would like to come up and make a statement?

Your hame, please?

Want me to talk into the mic? MR. WELSH: Michael Welsh, here. I volunteer with Redwood Alliance, local save the energy organization. I've been on the CAB since its inception. actually the whole CAB thing started a few years before that when a couple of us from Redwood Alliance met with the then plant manager to talk about what's going to happen with that plant. And he was -- think I'm pronouncing it right -- Tom Moulia. He was a great guy. We like Redwood Alliance's Не said: ideas on this.

You know, we've been pushing for dry cask storage for quite some time and as a solution rather than safe storage was what PG&E was choosing at the time which was essentially leaving all the high level waste in a pool in the reactor building.

So anyway, short story is they went for it and they started the CAB. And the CAB has been -- PG&E has been fairly responsive to the CAB, I think. They've been pretty straight forward with us. They've listened to us when we have suggestions. And I think that our CAB is probably a good model for other CABs. The only difference I think I would make is to find some way of putting teeth into what the CAB wants to do. In other words, if PG&E had listened

to us and just not do what we suggest and -- and there's probably been a couple things where they've done that, minor things. But what we really need is for some kind of transparency and action based on what the CAB has suggested.

MR. WATSON: Thank you, Mr. Welsh. To summarize that, you're looking to have some kind of authority from the CAB to get things --

MR. WELSH: Some power.

MR. WATSON: Okay. Any other CAB members like to come up?

Thank you.

MS. KALT: My name's Jennifer Kalt, and I'm the director of Humboldt Baykeeper. And I've been a CAB member since, I believe, 2013. So not nearly as long as Mike Menetas or Michael Welsh.

But listening to a few things here, what I wanted to say originally was that I recommend that the CAB have a broad base of representation from the community, from non-profit groups, like environment groups, from schools. There's a school principal on our CAB. Sorry if I don't recognize you all because I haven't been to a meeting in a while. But there's been residents of King Salmon, lots of different people, county supervisors like Rex Bohn and Jimmy

Smith before him and our congressional representative, John Driscoll, a wide cross section of people.

I think Stephen Coleman's point is excellent. I don't know if the tribes were ever invited to participate, but that's crucial, really critical.

The point that Mike Menetas made about educating the CAB members is really important. PG&E did a fantastic job of educating Humboldt Baykeeper staff when we were invited to become a member of the CAB. And it's a lot of information. And I'm sure I barely know anything about it. But it's impossible to have an input into this process unless you are informed.

One thing that I really recommend is that the CAB continue until the casks are removed. You know, if they're not removed, then it would be in perpetuity as lone as PG&E holds that license because the environmental groups like Humboldt Baykeeper and a lot of the other CAB members, we get questions all the time from people and that's about a huge part of our role as CAB members.

Members of the public ask us what is going on down there? What are those big buildings?

What are those cranes for? And we can answer those questions only because we've been given a lot of site tours. We've had explanations for what those things are.

And now the community has questions about what the plan is in case of an emergency. How are the casks going to be monitored in the long-term? You know, we know that a lot of the PG&E staff who are sitting here who we've been working with all these years are no longer going to be on site and monitoring that. So we don't -- I don't even know who to call if I want to know what's going on right now. And I have to say, I didn't go to the last CAB meeting. So I apologize if that information was given there.

But Aldaron Laird is here. He's a sea level rise expert. He's been working locally for the past decade on sea level rise issues. We have twice the sea level rise rate as the state average here in Humboldt Bay and when that was built with the dry storage -- dry cask storage, PG&E's report assumed that sea level rise wasn't really going up very much because it was using the north spit tide gauge which, at that time, was thought by all the state experts to be an outliner or there was something wrong with it. So they would throw out the Navy statewide reports on

sea level rise. Then some local experts, local scientists, geologists did a vertical transect across the entire state. And they found: Oh, no. That's not in the state. The ground beneath Humboldt Bay is sinking at the same rate that sea level is rising because of all the tectonic activity here.

And so we have twice the rate of sea level rise as the state average in California. We literally are at ground zero for sea level rise.

And, furthermore, King Salmon and parts south of Humboldt Bay are really ground zero. They're sinking more than the north bay is.

So on top of that there is a sea wall at the base of the bluff that is protecting the base of the bluff from erosion. Right now the bluff is 44 feet above sea level which is projected to rise continually for way beyond our lifetimes. And then the shoreline itself has eroded almost 1500 feet since 1870. And Aldaron has a couple slides if these gentleman would be so kind as to let him show them. But we also have a handout on the back table that has some images.

So the bluff is 44 feet above current sea level. And it is now 150 feet from the edge of that bluff that's, you know, been eroded pretty rapidly,

sometimes 70 feet in a year that bluff eroded in the 1940s. And it happened in part because they put in the jetties and changed the wave force on Buhne Point as people call it.

So people are very concerned about this and they come to CAB members and they ask us: What's going to happen if there's an emergency? What's the plan? And you know, I, unfortunately, don't know the answer to that. But I hope that we'll continue to have CAB meetings with PG&E and be able to discuss those issues because its not over just, you know, when the decommissioning is over and in December of this year.

So I was taking notes when people were talking and I do want to add that I think it would be great to have more publicity that's coming from the experts at PG&E not just to the CAB and then they're left to disseminate that information to the public cause we're not -- you know, we're not really experts.

You hear what you hear, then you try and understand. But it's very complicated information.

And I think having dinner at the meeting was great.

You might want to also provide daycare for people so there could be younger people involved, you know, who are not able to just leave their children for an

evening meeting.

And I think that might be about it. I will take notes and write up a letter from everything else that we hear from people. So I hope other CAB members will speak.

I guess one last thing I want to say is this isn't the friendliest way to do this. I know that a lot of people will not speak in public. But if they can come up here and not have to look out at an audience -- I am a teacher. I'm used to doing this all the time. A lot of people probably came here to speak, and they will not come up here because of the way the microphone is set up facing the audience. And they have to come up and speak.

MR. WATSON: Good point.

MS. KALT: So just having a warm, welcoming environment for meetings. And I hope some other cabinet members will speak because a lot of you have way more time put into this process than I do. Thank you.

MR. WATSON: John's getting another microphone to set up.

Any other CAB members that would like to speak? Sir?

MR. BECERRA: Hello. I'm Dave Becerra.

I've been on the CAB pretty much since the beginning.

I was on the Arcata City Council and also the Arcata
Weapon Free Zone commission.

So first of all I want to thank the people at PG&E for working with us all these years. I think they did a really good job and I think we all had the feeling that they listened to our concerns which was very important. One thing I really -- the member was discussion -- discussion about how far to go with the clean up and there was kind of this model of the clean up where we said yeah, there should be able to be a dairy farm out there. And the milk should be able to be fed to babies. And they actually listened to us and went to that sort of level in terms of digging down around the reactor and under the reactor and looking for any sort of ways to lessen the outflow or way down under the ground hundreds of feet.

So I think -- I do appreciate that. And I think it was -- they were very responsive to our desires for the community. I think that Jen said also very important. We keep getting asked continually: Oh you're on the CAB? How are they doing that? What are you -- are we going to do about sea level rise? And how long's it going to be there?

And I get this kind of blank look from

the NRC: Well, that's going over to Department of Energy. We really don't know.

And a lot of us CAB members, we visit Yucca Mountain.

What was that?

Ten or some years ago. Almost crashed going into Las Vegas and then had a tour where we saw water dripping down the walls of the underground storage facility and wondered exactly where what was going.

So I think what I've come out of this with is that there clearly is no good, long-range plan for the storage of nuclear waste -- of high-level nuclear waste. I think that the -- what's -- the dry cask storage is about the best we can do now.

In our particular situation, what we have to worry about is major earthquakes and sea level rise. So its not going to bother us in our lifetimes. But it is going to be an issue into the future because that stuff's there for a long time, and it's toxic for a long time.

So I think definitely as Jen said that the CAB should continue. We need to have a community board ongoing to communicate with the NRC, communicate with the Department of Energy and with

PG&E, as long as PG&E exists. And that's also a scary thing. It's a possibility of bankruptcy and all of that, we don't know who we're going to be talking to in the future. So we definitely need CAB. We need to have the people of Humboldt County have some one to talk to who's going to be responsible for keeping safe storage or safe-as-possible storage of that waste. And I hope we can continue to be as responsive as PG&E has basically been over the years. Thank you.

MR. WATSON: Any other CAB members? Please? We have an open microphone.

MR. BOHN: I was a vendor for the nuclear power plant for probably 35 -- 30 years before. And then I actually worked at the plant for -- for a contractor and then been on the CAB for a little over seven years, I believe.

And I think the level of what we want to know and I know - kind of been there and said --

Oh, Rex Bohn, First District supervisor.

I'm sorry. Excuse me.

So when Jenny kind of filled me in and everything else and there's as much knowledge as you want. I've been very fortunate because I haven't had the same problems you had getting a hold of the NRC

if I ever had a question. And I -- but I did it digitally. And everything they do comes through the office.

I think I can echo everything that the more seasoned people on the CAB said. I don't think we've ever not had a question answered. I think they've been -- if they didn't have the answer, they brought it to us. I think they've been very able getting community members -- I know, on -- the school has been very well represented. I know we have a principal here tonight, Gary Stortz. And the school is represented and the neighboring communities.

I actually got them to widen up the road three feet so the kids walking to school wouldn't have to walk on the other side of the white line. we snuck that through. But I think the whole idea and the fear we have is -- I'm not as -- PG&E's going to be here 10. 15, 20 years from Bankruptcy -- talked about bankruptcy before and it was worse the time before. So I think they'll be okay. But I think they're going to -- hopefully, the people that are behind are as responsive as -- as they were and all the members of the decommissioning.

A lot of nuclear submarine guys I found out -- because they were all over town. And this

summer was brought to us -- before -- the CAB heard this before. There was a time for a while they were spending over a million dollars a day on this decommissioning project. And from actually having worked out there. I think they did it with -- the whole project with as many accidents you can count on one hand. So they took the safety part of it -- not just our concerns, but their concerns with what they did.

Sea level rise, as that moves along -- I'd love to have the casks explained to everybody exactly what they are because the way they're built -- think they're built to actually survive a nuclear attack. The way they were there when they were setting them in the ground, they were pretty amazing.

But my biggest fear is when we do move it. I'm worried about what the -- what might happen when they do that. You know, the devil lies in the details. Right now, it's set in a safe location or what we feel is a safe location and what a lot of agencies are saying is a safe location.

So I hope as they move this along -- and again I have heard nothing at all about the CAB being disbanded I've heard that they were very welcome to

keep this going. They may end up at Gary Stortz's school meeting because all the buildings are gone. But I know anytime I've wanted a tour, had something that had a question, I've got my answer immediately.

So the response from the people we've had from there has been great. We'll have to wait to see what we get. So thanks.

MR. WATSON: Okay. Any other CAB members that would like to make a statement, speak, comment?

Okay. Starting off with -- let's see.

The next person on the list would be Elaine --

UNIDENTIFIED SPEAKER: Pass.

MR. WATSON: Pass.

Bob - is it Ezra? Ezra?

No? Looks like -- Bob Earl?

Would you like to speak?

Ed and Diana Stellnoff?

MR. STELLNOFF: Thank you. My names's Ed Stellnoff. I'm a fairly new resident of Humboldt County. Moved here a few years ago, and I live in Trinidad. But before that I did spend sometime in Sacramento as an -- I was an elected official on the board of directors of the Sacramento Municipal Utility District and was there when the -- the nuclear

plant -- the slide closed down and was part of the -- oversaw the development of the spent fuel storage in Sacramento. And actually development of the dual purpose casks at the time.

so I just wanted to make a simple recommendation here. I think, from what I've heard, is this is going to be a very interim storage. But I think realistically this is something that's going to be handed off from generation to generation. You're going to want to know that PG&E or it's successor has a plan to be able to manage and vigilantly monitor the spent fuel storage over a long period of time.

Now, the one thing Ι did want recommend to PG&E and the NRC commission is the idea of -- possibility that you would share the experience of various community advisory boards across So if you're going to decommission -- in California. fact, you had San Diego County and San Luis Obispo. Those I'm assuming add to the advisory board as well. And so sharing the experience, you develop the best practices. I think it's a really beneficial thing that all of the committees need to benefit from and at least have more transparency about, you know, what and southern California is doing over the

long-term.

Thank you.

MR. WATSON: We have here county representatives or anyone who would like to make a statement here? If you arrived late after I made the announcement?

So wellcome to speak.

MR. JONES: Stephen Jones, Humboldt County Fifth District Supervisor. I think the casks are awesome. Casks are great. I really applaud CAB and the work it has done to come up with that solution at this point, work that it's done to come up with that solution, the cracked and broken fuel rods.

So thank you for your work on CAB, all of you.

It's not the casks that concern me or the community. As far as the calls or information I hear, it's the site. That's the concern. I think we would all agree it's a horrible site to have this stored.

And I also agree with Rex that it scares me to move it. There's no really great plan to do that. And there's a lot of risk in doing that. But even with that being said, I do not think keeping it there is the right thing. When the representative

says here: We're in the end of decommissioning; the end?

I thought they just said it would be around for generations. So I don't see this as the end at all. I see it as the finishing compliance with the cask storage and cleaning up the waste on site. But certainly it's not the end for this community or for that waste in any way.

So I do think we need to figure out how I don't know exactly where we move it to move it. I certainly wouldn't want it in my back yard and I wouldn't want $t \mid b$ wish it on anybody else as well. But if we had to think about a really bad place to set this stuff, let's see, how about on an earthquake fault, in a tsunami zone, where sea level rise is happening and we've got a failing bluff, bluff I mean that just sounds like -- nobody retreat. would plan for that. But we did because we don't have a good solution to the transport and a good place to put it. But that doesn't mean we should stop It's still at the It's not the end. beginning. It's still where we need to focus our energy for doing that.

As far as recommendations for CAB following your agenda outline, I would say better

communication is huge. I've been here 46 years, and I've heard very little about this current process that's been underway. I didn't know this meeting was happening until three days ago and that was thanks to community members.

Wasn't from PG&E or NRC or anybody else.

And I've been delving into this pretty deeply since

I became a -- a board of supervisor seven or eight months ago.

As far as the tsunami zone, there's a little piece here I pulled up online about the big wave that took out the lighthouse at Trinidad head. And that wasn't even considered a tsunami wave. It was considered a big storm wave. So just going to read to you very briefly from Captain Fred Harrington's account in 1914.

"On that day, a blowing gale all night long. The gale continued for a week and was accompanied by very heavy seas."

I'm going to cut to the chase and just basically say, when he documented waves going over Pilot Rock, which is a hundred feet tall -- the lab sits up at about 175 feet. And the lab was blown out. And he says here: When the waves struck the bluff, the jar was very heavy.

The jar? This is Trinidad head. It felt a jarring from these waves, right?

So this is an account that's in the record. It goes into great detail. You can Google it. The big wave that took out the lab on the Trinidad Lighthouse in 1914.

So this site does not say from tsunamis that can be predicted to go up to 60 to 80 feet, let alone the wash up from that wave.

If you look at the picture that was on the back table, the mouth of the bay is directly opposite from Buhne point. So the wave refraction and energy is focused right on the point which is why it's retreated 1480 feet in 60 years. That was from 1890 to 1950 before sea level rise was a factor, before our carbon dioxide levels were what they are, before the glaciers were melting. All these things were happening.

So it would easily be a suggestion for the data that retreat is going to increase. And you add to that what was stated earlier about this is a subduction zone, the Cascadia subduction zone.

So when an earthquake happens and sea level is coming up, that area is actually dropping.

And the riprap on the bluff fails anytime there's a

really big earthquake, it has to be rebuilt and repositioned.

So if you start combining all of those things together, it doesn't seem like great protection to me or a lot of people in the community. So I think we need to do a better job. Like Rex said -- Supervisor Bohn said, How many people, you know, know what's stored in there? How many people know what's in the cask?

Somebody else said that: How many people know what's stored in the casks, right?

If we don't even know what's stored there and what's going on, doesn't that suggest that we as CAB and we as a community and PG&E and the NRC need to do a far better job communicating with our communities, right?

That seems really, really important to me.

And then there's this thing called Cascadian subduction earthquake which can produce 8.0 to 9.0 earthquakes. And thanks to the work of Gary Carver another geologist at Humboldt State in the area, that's when the Little Salmon Fault was discovered underneath the reactors and what led to all this work thanks to Michael Welsh and others, the

Redwood Alliance. We finally say: Whoa this is probably a really bad place to have this stuff happening at.

So the last time that big earthquake happened was about 300 years ago and according to the data that's collected these big quakes happen every four to five hundred years. So the prediction, the data suggests strongly that we're due for another Cascadian subduction earthquake in the next hundred years or so. So that's kind of alarming.

of. I think that 's critical for CAB to work on and the NRC. What are we going to do when these things happen? And also there is a lot of evidence to suggest there has been radiation leaks over the years and it exceeded the limits, especially back in the 1970s. And so we need an ecological study, I suggest to CAB as a recommendation, so that we can help make people whole that live in South Bay or Humboldt Hill. And they have experienced significant radiation leaks in our community. So, you know, where's the compensation for those folks?

And then yes, PG&E bankruptcy is a little bit concerning as well.

So those are my concerns. Those are

things I've heard from my constituents and I share those with you.

Thank you.

MR. WATSON: I'm going to try to get this name correct, Mr. Aronson, A-R-O-N-S-O-N. Sorry.

MR. ARONSON: I'm Peter Aronson, 50-year resident of Humboldt County.

My concerns are mostly safety, range. We've heard several comments about the duration and just today I read an NRC comment that the state of the art storage for spent nuclear fuel County so-called for Humboldt casks are are guaranteed for 60 years beyond the licensing period. This is a flash in the pan in terms of 60 years. what we're dealing with.

The average civilization in our world's history is something like 375; you know, a long one is 500 years. So we have responsibility for various forms of plutonium. And I don't know what's -- 235 or 239, what the waste -- high level waste storage is of these spent fuels. We're talking about a hundred thousand year half-life. So it's like 240,000 years. And I'm sure PG&E and the Nuclear Regulatory Commission and DOB have been, according to all, been doing everything properly.

These storage casks, state of the art, the ones that are best, that are required are very limited in terms of -- I mean, Hanford Nuclear Power Plant, things breaking down and limited times. These things are guaranteed for 60 to a hundred years. And they're interim storage.

I read something today about the removal of the nuclear rods or some of the stuff. 6,000 truckloads left this area and they're going to interim storage facilities. And so this -- after 70 years of using nuclear power, there's no permanent storage depository. So it's going to be moved again.

If it is moved from the Buhne Point Hill where -- where our nuclear power plant waste is stored on site or not - I think it was addressed, but I couldn't hear a lot. And related to this storage issue is the question that's a general question: I mean, how has the Department of Energy and the Nuclear Regulatory Committee estimated the cost of nuclear power when you have no clue what the storage costs and the range of storage is going to be. We don't know the cost of that nuclear storage. And I think money is involved in a lot of this stuff.

I suppose I'll leave it at that. Thank you.

MR. WATSON: At the request of our transcriber, we're going to take a five-minute break.

Okay. Thank you.

(Pause in proceedings.)

MR. WATSON: The next person on our list is Miss Regina Costa.

Would you like to speak? No?

Looks like Miss Jennifer Savage. Don't want to talk. Okay.

And I did ask them about another microphone and they don't have one. So we're stuck with this one. Sorry.

Mr. Aldaron Laird? Mr. Laird?

We'll come back to you.

Comments from the gallery?

Donna Stoneman? Would you like to talk?

UNIDENTIFIED SPEAKER: They had to

leave.

MR. WATSON: Okay. Sorry.

Mr. Scott Rainsford.

MR. RAINSFORD: My name is Scott

Rainsford.

And in keeping with the issues here we have tonight about CAB, PG&E and the Nuclear Regulatory Commission, let me give you a little bit

of background.

I was assigned to update the contingency plan several people have mentioned. The contingency plan in case something goes wrong. This was a bit of time ago, 1978. I was in the Coast Guard. I was an oceanographer, meteorologist. And they sent me to a reactor to review their contingency plan.

Now, in 1978, they were already shut down. But we still have the special nuclear materials here. So I read their tentative plan. There is a copy of that tentative plan at the Humboldt State Library on the third floor. It's rather dated, but it's there.

And I read that and then I asked if they ever had a chance to use it. And they said: Well, yes they have.

And they brought me out a report which consisted of the nuclear operator's logs written by a man named Shifter who was PG&E's -- one of their like nuclear engineers, senior operator.

Steve Madrone mentioned that there was an issue about an accident that happened on July 17th, 1970. And the nuclear operator's log that I was presented with covered this accident.

So what I would like to see with CAB and

the NRC and PG&E. I would like to see them resolve all of the differences in the information provided to the public such as the Nuclear Regulatory Commission kept the data from the Atomic Energy Commission. And they made a description of what happened on that day. It does not match what I read from the nuclear operator's log.

So eventually what happened when they lost power to the reactor -- outside power, is the feed water pump shuts down. You had an over pressure, over temperature situation.

what happened is this radioactive steam -- and it's high pressure -- would go into the isolation condenser -- some call it an emergency condenser. It's a big vat and -- and it's partially filled with water. The steam is cooled down and condensed back to water. And that water goes back into the reactor core to keep the reactor covered. It failed. A valve would not open.

So you had a situation where steam pressure was still building up and they had pressure release valves. So several of them open, at least one. And they evacuate the coolant in the form of steam out of that reactor at the rate of 400,000 pounds per hour which equates to 800 gallons per

minute. And it was not being replaced. Their nuclear engineer decided that the he had to shut down these pressure relief valves because he feared that they would uncover the cover. And he was right.

So when he shut the pressure relief valves down, several pipes started bursting in the reactor, inch and a half pipe -- stainless steel pipe went to the reactor core into the dry well. It was a four and a half inch rupture in that pipe. Two stainless steel baffles ruptured. So the crack was coming apart. So he was faced with the possibility of recovering the core or having it rupture so he called you for help. I respect him for that.

First he called the Vallecitos Nuclear Reactor down in San Francisco Bay area by Lawrence Livermore National Lab. And said: We've got this situation. What do we do?

They didn't know.

They referred him to Preston Facility 30 miles outside of Chicago. And faced with the same question, they didn't know.

So finally they were referred to the military which means the Navy. Because the Navy were the experts in nuclear power at that time. The experts in the Navy were at Bennett Naval Research

Center up at Argonne Nuclear Facility up in Idaho, 30 miles west of Idaho Falls.

So there is a big issue about resolving the description of the accident reporting to the NRC and what I saw. And after I saw this report -- it was marked confidential. I'll say that.

I asked to see -- they did activate the contingency plan. They called the sheriff's department. And when the contingency plan is activated, it is legally mandated that monitoring happen.

And so I asked about the reactor in 1978, to see the results of the monitor. That request was denied. So as far as I'm concerned, there is a huge disparity concerning what possible radiation levels could have been released. Now, remember, I said that the outright power was down and a lot of their instrumentation failed.

So what assurance do we have that they were able to collect enough radiation level documents that they can tell the public that was involved or exposed?

Now, as a meteorologist that day or in the past as an oceanographer, I looked up the weather that day. In the morning, the wind was out of the

north at six miles an hour which means any radiation coming out of that plant would reach CR [College of the Redwoods] in 30 minutes. CR is about three miles away. CR was is in session on July 17th, 1970.

The weather shifted, the wind shifted right about when this happened. And by ten o'clock, the wind was out of the west, northwest and it reached ten miles an hour which means any radiation coming out of that plant during this incident hit South Bay elementary school in 82 seconds.

So you can see what I'm trying to ask the NRC, PG&E, and CAB is to resolve all of these disparities in information.

So that's all I have to say.

MR. WATSON: Our next person on our list is Vivian? Your mame, please?

MS. HOLWELL: Vivian Holwell. I really appreciate you having this public meeting. And if you're going to have meetings in the evening like this, it would be really good to have some snacks. This is a lot of turn out for people who are skipping their dinner.

MR. WATSON: So did we.

MS. HOLWELL: Appreciate it.

So for a little 65 mega watt power plant

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that had to be shut down because it was on an earthquake fault and had some other problems, the cost of decommissioning and babysitting the fuel storage for a really long time seems out of proportion for the amount of electricity that it was able to produce.

I believe that the public has been sold that nuclear power is cheap energy and clean energy. And because the government owns the fuel, the utilities don't have to pay for a lot of the storage, long-term decommissioning costs. The public does. That's us.

So these costs are not factored in when the idea of the cost of creating electricity by heating water with nuclear reaction seems to me, like, not very smart and a very expensive way to heat water.

So moving forward, we have so many temporary fuel storage sites around the country. And I think we've made some good progress in achieving the dry cask storage. I wasn't a part of that, but a lot of you were.

So I'm really, really glad to see so many people paying attention in our community and learning -- trying to get the best information

possible. I think there needs to be better transparency and communication between the utilities, NRC and the public. And one way to do that is through these community boards.

I believe -- I understand there's been quite a bit of training and education.

Is that correct, sir?

(Court reporter interruption.)

MS. HOLWELL: He said there's been some.

I'll be happy to repeat what people say for you.

So let's keep up our attention to these matters. We deserve to have a safe and long-term community here. It's so beautiful here. We have so much nature. We've got the storage right off the mouth of the bay here open to the open ocean with large earthquake faults as people have so aptly described. We need to pay attention and see what needs to be done mext.

Thank you very much.

MR. WATSON: Okay. The next person on the list is Stephen Coleman -- yeah. Next person on the list is Stephen Coleman.

MR. COLEMAN: I just have a quick -- I know I spoke already.

WASHINGTON, D.C. 20005-3701

Thank you. Stephen Coleman, Humboldt Bay Harbor District and Blue Lake Rancheria again.

I understand this meeting is supposed to be just all about the CAB. I didn't realize that when I came here. So I'm curious, where does the general public go to get more information about this?

And, you know, just listening to everything that I'm hearing tonight, I'm coming up with so many questions and one in particular, you know. So we're told that the dry casks are on the bluff 44 feet above sea level. But do they go into the bluff?

So, like, how far down below sea level do the casks go? Do they stick up straight from 44 feet or is the bottom of the cask actually 50 feet down from there and so under sea level?

But, I mean, just a lot of other questions and the long-term plans. Who's responsible for all the emergency preparedness stuff?

And so I think there just needs to be a lot better outreach and a lot more ability for the community to get some of this information that directly affects us. Thank you.

MR. WATSON: Okay. Michael Kansa, K-A-N-S-A? No?

Lonnie Hollenbeck?

MR. HOLLENBECK: I'm going to back this up a little bit because that cord is catching on the foot down here.

My name is Lonnie Hollenbeck. And I'm a local, went to South Bay School lived up on -- South Bay Elementary Sthool, lived up on Humboldt Hill. And when I graduated high school in '71, I moved out to King Salmon. So I have been the neighbor of PG&E I've worked at PG&E as I was a for many years. committee -- chaired many committees in the King So I've worked at PG&E. My ignorance Salmon area. the spent f ψ e l l e l l e l l e l l e l l e lAnd it been -- recently ♯ have started coming up to speed on And it's very disturbing. It really is. this.

The site itself -- when I was living in King Salmon, I had a canal in the back yard so I saw sea level up and down twice a day for 48 years. I know that area intimately well. So well that I could almost declare that, in 20 years, Buhne Point will be an island. Mr. Laird discussed that extensively sea level wise.

I have photos of the old sub or -- excuse me -- shipwreck area where the shipwreck is now inundated. The one thing to keep in mind, that road,

King Salmon Avenue, goes up and it goes out to Buhne Point. It was built in the 50s. It was not built to withstand waves coming in on the side of it.

And if you go out to Gills By The Bay, next time you do, take a look at the power poles. You're going to see the power poles either tilting to the one o'clock or eleven o'clock hour depending on which way you're going. Even the signs do that. The underneath of that road is already washing out. Now, that gets important when you talk about the spent fuel that's up there on that point.

The spent fuel, that vault actually has a lifespan of 40 years. And that is set by the American Concrete Institute for concrete in and around nuclear power plants, 40-year lifespan. And that vault has already been employed for 12 years.

There is a current process going on right now with, NRC trying to give PG&E a 40-year permit to keep it stored there. If that permit goes through and PG&E is allowed to keep that spent fuel on site, we are the next Fukushima. Watch. I can guarantee you that.

Now, the thing about that vault and it's placement for the -- the top of the vault is 44 feet above sea level. That's correct. But that's kind

of a misnomer. It really doesn't matter. The waves are not going to get to the top of that vault; nor do they have to. All they have to do is take out the toe of that bluff. Once that bluff is removed --

erosion," you're going to see cliffs, tall cliffs. The waves aren't cetting all the way up to the top of those cliffs. All it is is undermining the toe and the cliff sheers off, like what happened in Blue Lagoon. That's what ocean erosion causes and the multiple sheer.

If you take a look, historically, at Buhne Point, you will see that Buhne Point has receded. It formed that same sharp drop. Now, the curse about this ISFSI, there was no bedrock under Buhne Point.

So what PG&E had to do to brace this ISFSI against seismic activity was build it exceptionally strong. So that means a lot of concrete sitting up there on that bluff. The way those casks are filled with spent fuel and then put into those -- put into the cells of that vault, each cask weighs approximately 85 tons.

So now we have something -- those are five casks of spent fuel. The sixth cask, the

greater than the Class C nuke material, which is basically the fuel rods that they busted up, it's the same stuff. It's hot, hot stuff. That is the sixth cask.

The sixth cask turned out to be so full that PG&E couldn't even put the lid on the top. So it is minus one lid. There's another lid above it, but the first inner lid is not there.

If this vault should be undermined, should that bluff start working its way back towards -- to the edge of that vault -- mind you, the vault is broad side to the edge of the bay -- that's even worse.

So as the bay starts going back, that 500 of pounds coming down small excess footprint -- five hundred tons turns underneath it into a column. It's staying. It's not going to hold the weight. So the weight itself becomes an issue and helps with the demise of that If that winds up in a drink, which is in some vault. of the reports of the NRC -- communication with the NRC and the Coastal Commission and PG&E, what happens if -- PG&E referred to it as vault rotation.

They said: If the vault rotates so much, we can still get those casks out of there because

we've got the slop to do it.

Somebody must have said: Well, what if it goes over?

Because the next comment was: We'll get a crane in there and get it out. If there's an event that causes that vault to tip over into the surf, you're not going||to get a crane out there to that King Salmon Avenue is gone. 101 is gone. then we have got a serious problem on our hands. We have got a vault #ull of tons of nuclear material we can't get to and never will. So what then is it going to do? It's not only taken out Humboldt County, we have now destroyed fisheries up and down the coast.

This is serious stuff. I've been hearing some people say: Well, you know, it's -- we're going to have it here for generations.

No, we are not. Sea level rise, Cascadia subduction zone, all of these things are lining up.

And we should be -- we don't even have the (Inaudible.) We can see what is happening. We should not have faith that we have a lot of time in this deal. It is now we should be planning to move that.

I have a quick -- two quick articles. I

just want to share this: Nuclear power once seen as impervious to climate change threatened by heat waves.

Reading just very quickly, quote: I've heard many nuclear proponents say that nuclear power is part of the solution to global warming, says Dave Lochbaum, retired nuclear engineer, who compiled the report based on data submitted to the NRC and former director of Nuclear Safety Project of the Union of Concerned Scientists.

Quote: It needs to be reversed.

You need to solve global warming for plans to survive. This is the reason that the coolant water that the plants take out of the root plants -- plants take out of the rivers and streams is getting too hot. They will not cool the reactors. The reactors have to shut down because the water you're using to cool the reactors is too hot. That has jumped 30 percent over the last few years.

The other thing -- just -- please.

The other thing that's the problem with PG&E -- not only PG&E, coal mines and oil companies is solar and battery prices, how much? Fossil fuels buries nuclear. Renewables are coming up. PG&E is not going to be around. The nuclear industry is not

going to be around. We are in the daylight of the nuclear industry. We might as well be wailing and selling kerosene for lamps in the time of Edison and Tesla.

The technologies are changing so fast the NRC and these agencies and Department of Energy do not get functioning now moving this stuff. They have to deal with it.

Now, last thing, the whole dry cask storage system, this is bunk. These things are called Chernobyl in a can. The side wall of these canisters that this material is sitting in is a half inch thick or five-eights inch thick.

The French -- and it's stainless steel.

Conversely, the French are using their side wall or their spent fuel 17 inches thick cast iron. The Germans, 21 inches thick of cast iron.

And where do they store this stuff?
Not buried.

We don't have to find something like in the mountain. It's in a big auditorium and these casks are sitting right on the floor. They are under surveillance. They can see this stuff. It's under bright lights and everything. And they've got the stuff stored right there. If we were to adopt that

plan, we would not be having this problem with trying to find a mountain somewhere. There would be a safe way to store it.

The problem is we are storing in these canisters that are degrading and failing.

MR. WATSON: Thank you very much.

MR. HOLLENBECK: I must say, this gentleman saved you from a perfectly disgusting display. I have got photos of the children of Chernobyl.

MR. WATSON: Thank you.

MR. HOLLENBECK: You bet.

MR. WATSON: The next person on our list is Meg Stofski. Welcome.

MS. STOFSKI: I live in Eureka. I came here -- I --

MS. STOFSKI: I live in Eureka. I came here a few years ago from Indian Point, another nuclear power plant.

So I recognize bullshit and obfuscation.

And I don't feel polite about it. I feel bloody angry. I'm not sure who is exactly responsible, but I know when I'm being played.

This is called planned ignorance. Only answer the barest minimum of a question. Don't give

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more information. Give an illusion of community public input. But giving them power: Wait. Wait as long as you can before you answer the questions that clearly have come up.

The CAB has done it's work, should be proud of yourselves. But what would you have said back in 19 -- what? '78, '76 or whatever -- if you knew then what you know now?

So the time has come for people to stop lying about this, to talk about the realities and to put it out in the public. We've got a mess. We don't exactly know what to do with it. We're going to play a shell game where we're going to give the license over to somebody else. And we're going to get the funding until 2025. But we know what happens with nuclear waste. It doesn't go away. We are being played.

I think it would be very, very wonderful if you all just said what's happening. I don't have a nuclear science background. But I understand that we've got to get concerned about safety. I am concerned about being lied to. I don't like it. It makes me furious.

The tribes weren't even asked? What?

What?

What is that?

It's pretending. It's like a tea party that little children have. We're going to pretend we're going to have community advisory board. But we're not actually going to give them the information they need until: Oh, it comes out of us at the very, very last moment.

And then -- well, then we'll say: Okay.

Well, PG&E is going to be responsible except for

PG&E -- which is a known lying entity which may or

may not have any -- may go bankrupt, what are we going

to do with this?

As a community, we have to demand transparency, an end the bullshit. And the humanity -- there's children when who are -- and people who have higher cancer rates for God's sake. I don't feel like being polite and thanking PG&E for how they've gone about this. I am outraged.

MR. WATSON: Okay. Our next speaker is Mr. or Miss Sage? S-A-G-E? No?

You're not her? Okay.

Denise Smith. No? No Denise Smith?

BB Smith?

MR. SMITH: Thank you. I will keep this

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COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 mercifully brief. I just want to point out that, genetically, we do have all our eggs in one basket.

And there is no cause to trust anybody with all of humanities eggs in one basket.

So my comment is: I hope you're ready for this, NRC. Trust, question mark. Verify as best we can, for as long as we can, as long as we expect humanity to have a genetic basis for survival.

I repeat: All our eggs are in one basket.

Thank you.

And think of your granddaughters when I say: All our eggs in one basket because their eggs are formed now. And the eggs are the ones beyond are formed later. Thank you.

MR. WATSON: Is there anybody that's not on the list that would like to speak?

Yes, ma'am?

MS. REEDY: Yeah. My name's Kelsey Reedy. I'm a community member. And I want to agree with what the last two speakers have said, that this is a huge problem that -- there's been no community -- like, I didn't know about this until today. I would have brought a bunch of people here if I had known about this. And I know a lot of people

who would have loved to be here if they would have known about it.

So the lack of transparency, the lack of communication, that's a huge issue. And the facts that none of us really know about this or know the details about it, that says a lot. Anybody who lives here should understand the risk that we all are at.

And so this needs to be dealt with. And I don't know what it is that the CAB group has been working on. Like, I know a couple of the members. But I wonder, is there anybody who is young enough to actually experience, you know, the impact of what this is going to do to us? Does anyone who -- I mean, is there anyone, you know, that age range? Or is there anyone who's indigenous to this land that's part of that conversation?

I know the answers to those. But I just want to highlight that; that that's an issue; that there isn't enough people involved in this conversation. And we're not -- we're not dealing with the reality of it. We're just sugar coating it, talking about as if this is just something that existed in the past that we're done with. And we're not done with it. And it's a disaster waiting to happen, and it's pappening right now.

MR. WATSON: While they're bringing that up -- their computer up to hook up to the --

I just wanted to remind that we've had this slide up. So I just want to remind everybody of -- that these are the number of ways you can provide comments to us.

The first, of course, is the NRC website dedicated to this particular section 8 requirements for us to provide this report to congress. The second one is through the normal office for all government contacts for - which is through regulations.gov. ||Of course, you can send us an email to NEIMA resource -- NEIMA108resource.gov. course, you can mail it to one of my colleagues in the office. And that's the address right there.

UNIDENTIFIED SPEAKER: These sites have to do with the questionnaire. Is there a reference to the site you can provide that we would get answers to questions we posed?

MR. WATSON: We will be posting the comments we get. We'll take a look at those. We will go back after we get the report written. Might be next year though. And we'll take a look at those questions. We do have a frequently asked questions section on our we site. We will add to those is what

we'll try to do. Okay

So any unanswered questions we'll try to get to them.

UNIDENTIFIED SPEAKER: What is the website? I've tried to access documents and stuff, and it's a nightmare.

MR. WATSON: Yeah. You need to go to www.NRC.gov. And you can Google ADAMS, I guess. And it should bring you to the public website for ADAMS. And then all you have to do is put in a docket number, I believe, for Humboldt Bay. You should be able to get any information that is publicly available. So you're not going to get any security issues or any other things that we don't publicize. Okay?

UNIDENTIFIED SPEAKER: There's a ton of information on there. So it's hard --

UNIDENTIFIED SPEAKER: Question back here.

MR. WATSON: Oh, I'm sorry.

UNIDERTIFIED SPEAKER: Well, it's as we suggested. I've been through the internet and seen websites with frequently asked questions. But it's a lot of crap. I would like, as well as your frequently asked questions, relevant safety concern questions for our future.

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Could you try to include those as well as frequently asked?

MR. WATSON: Well, most of the questions we get are not necessarily safety issues.

UNIDENTIFIED SPEAKER: I understand that. Would you please include relevant future safety concerns as well as frequently asked questions?

MR. WATSON: I will look into that.

UNIDENTIFIED SPEAKER: Thank you.

MR. WATSON: Could you state your name?

MR. LAIRD: My name's Aldaron Laird. I'm an environmental planner --

(Court reporter interruption.)

MR. LAIRD: Aldaron Laird. Want me to spell it? L-A-I-R-D.

vulnerability assessments on Humboldt Bay for the last ten years, the most recent one for Humboldt County. And part of that vulnerability assessment has been looking at the shoreline of Humboldt Bay and looking at communities (Inaudible.) And one of the things that we found was particularly disturbing is that the jetties on Humboldt Bay were built in 1890. The jetties pull all of the wave energy right through them and into the shore of Humboldt Bay.

That happens to be the site of the highest rate or amount of erosion on the entire bay since the jetties were constructed in 1890. And by the time the sea wall was built in the 1950s, it eroded 1480 feet. That's, like, 24 feet a year.

Buhne Point is where the spent fuel storage facility is located. There's a sea wall at the base of that point at the bluff. The bluff is retreating since the wall was built in 1950. That wall would be over top of two meters of sea level rise. It's suggested that two meters of sea level rise would occur by 2090 based on some projections that just came out last year by the State of California.

So unless that sea wall was elevated, the waves will go over the top of it. And what we've seen in the recent past, it will erode as fast as 24 feet per year. So it's only at 114 feet. I'll show you this really quickly.

The jetties are the cause of the problem with funneling all the energy towards this.

When PG&E was asked to look at this, the Coastal Commission said: That site is going to be there in perpetuity. So they needed to know how it would react to sea level rise. The study was done

by PG&E.

And so PG&E's power plant or power facility that's next to King Salmon is built on relatively low lying areas, not built on the hill. And it's under water, with king tides, with one meter of sea level rise. And that's projected to occur by 2060.

PG&E's power facility doesn't need to be on the base. It's not a water-cooled facility any longer. It can be located somewhere else. If it is located somewhere else, then the investment for maintaining the spent fuel facility on Buhne Hill is not really going to have a major financial incentive if it's no longer situated in King Salmon.

With one meter of sea level rise, there won't be a King Salmon. There won't be a King Salmon Avenue. You'll have Buhne Point which will be a hill or an island instead of the bay with spent nuclear facility in front of an eroding cliff.

This is what one meter of sea level rise during king tide looks like. You can see the facilities -- you can see the community's gone. The road is gone. 101 is under water. And the new power plant is under water. Humboldt Bay Power Plant is under water. The spent fuel storage site is well

above water. But the sea wall is over the top.

So these were the findings from the recent sea level rise vulnerability assessment done in the county and looking specifically at King Salmon. And we thought that this was important information that should be shared. So I was asked to.

MR. WATSON: Okay. Thank you very much.

I guess I -- John and I have been listening to everybody's comments. Thought I'd just give a brief summary of a number of items I believe I heard.

I heard some very positive comments in the beginning about the citizen's advisory panel felt that it was a benefit to the community. And there was some -- lots of sharing of information. However, in many cases, there could have been more education on the technology and nuclear power in general that went into the -- I guess, in -- for preparation of being on the CAB. Also could have been better communications on spent fuel and such issues as that.

I also heard that many people believe that the CAB should continue until the fuel is gone.

One of the main issues is spent fuel. Needs to be a -- need to have a plan to either keep it secure and

safe; but, better yet, move it off site to its own place.

Needs to be better communication from the NRC and from PG&E and that -- I guess the industry should take into consideration all the costs associated with nuclear power. That would include spent fuel, decommissioning and other items that normally aren't looked at in the decommissioning of nuclear power plants.

So -- and, of course, many of your issues here was sea level rise and ocean erosion of the land.

So with that -- yes? Can I answer --

UNIDERTIFIED SPEAKER: I was going to -- it was nice to have multiple people. The lack of diversity, the lack of --

MR. WATSON: Okay. I tried to cover the high points. Yes, there was a number of comments mentioned about the lack of diversity of the members of the CAB. And I think it, specifically, was Native American tribes were mentioned.

UNIDENTIFIED SPEAKER: And youth.

MR. WATSON: That's one item, yeah. Thank

UNIDENTIFIED SPEAKER: And genetic danger to the future generations.

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you.

MR. WATSON: Thank you. Genetic --

UNIDENTIFIED SPEAKER: Genetic hazard to future generations.

MR. WATSON: Injury to future generations.

UNIDENTIFIED SPEAKER: You mentioned outreach several times and the lack (Inaudible.). How about making it a goal to send out (Inaudible.).

MR. WATSON: I know there were multiple press releases about these meetings. I know there were because I saw them. Whether they got to you or not, I don't know. But I do agree with you; we could do a better job communicating.

Okay. So any other comments?

UNIDENTIFIED SPEAKER: I want to thank you gentlemen for allowing us more than three minutes, letting us voice our opinions. I think that went a long way helping the dialogue. Thank you very much

MR. WATSON: Well, we had a good turn out. But we didn't have 200 people that wanted to speak. So I appreciate the comment that we did allow more than three minutes to talk. Small town. Happy to allow this.

So with that, I will conclude the

meeting. I thank you all for coming. We are listening. We're going to report to congress. That's what it's all about.

Thank you very much.

(Whereupon, the public hearing concluded at 8:11 p.m.)