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>>> Okay. Everyone, we're going to get started. Good evening, everyone. My name is Chip Cameron, and it's my pleasure to welcome you to the Nuclear Regulatory Commission, the NRC public meeting tonight on regulatory issues associated with the San Onofre Nuclear Generating Station that I'm sure people will refer to as S.O.N.G.S. tonight. And, um, Rick Daniel, my colleague right over here, and I are going to be serving as your facilitators for tonight's meeting and in that role we'll try to help all of you to have a constructive meeting tonight.

I just wanted to say a few words on meeting process issues so that you all know what to expect at tonight's meeting. And I'd like to talk about the objectives and format for the meeting and to go over the agenda and also some simple ground rules to, to allow us to have a, a good meeting and then we're going to introduce the, the participants who are up here in front of you.

In terms of objectives and formats, we're using a different format tonight then we usually have in a, in a town hall public meeting. And instead of that format, we have a round table format. And the reason we're doing that is so that we can have an exchange of information and discussion

on the important issues on S.O.N.G.S. The NRC has invite representatives of the various public perspectives that are concerned about the regulatory issues at S.O.N.G.S., they're up here with us at this moment. The round table format is designed to give you a more focused discussion on the issues and we think that that's going to prove valuable to all of you in the audience and also to the people at the table, but we're also going to go out to you to see what your perspectives are on the issues. So we're going to hear from all of you tonight also.

After each issue is discussed and we have three issues tonight, I'll tell you about that in a few minutes, but, um, after each issue is discussed by the panel, we're going to come out to you and because we need to, to get you on the camera, this is being webcast, we have a portable camera that we're using and we need to - - this is probably appropriate, but - - we have a portable camera, so we're going to go segment, in other words, we're going to go to this part of the audience, half of this middle row, we're going to go for questions here first because our camera person is going to stand up here and capture anybody who is, is speaking. Then we're going to go over to that segment, the camera segment will come over, the cameraman will come over here and Rick and I will be going to each of you with this cordless microphone. So we'll get to that in a few moments.

No. That's what the meeting is all about. What it is not about it is not a debate on nuclear power. We're focused on the regulatory issues that

the NRC is responsible for tonight. And second, it's not about speeches. It's about questions and discussion. And the third thing it's not about, we apologize for there's been any misunderstanding about that, we've heard that this has been referred to as a, a public hearing. It's a public meeting in NRC practice a hearing refers to a judicial hearing in front of the NRC's atomic safety and licensing board, administrative judges or the commission itself. So this is not any sort of an adjudicatory hearing tonight. Okay. In terms of the agenda the first issue we're going to talk about is steam generator issues that S.O.N.G.S. So we'll have this discussion up here then we'll go out to you in the audience. There second issue is on regulatory, NRC regulatory process, panel discussion then out to all of you in the audience. The third segment of the meeting is going to be an open discussion where we want to make sure that we hear all issues from people. So we'll be asking the panel if there are any issues that they want to bring up that we haven't heard, then we'll be doing, we'll be going out to all of you in the, in the audience.

I said this was not going to be about presentations, formal presentations. We want to have a discussion, but when we get to each participant, I'm going to ask them to introduce themselves by giving us their name and affiliation, if that is appropriate, but also to give us a couple of sentences on what, what interests or what concerns they have with either this process or, or with S.O.N.G.S. So that we'll give them a chance the

state that as we go around the table.

Now, in terms of, of ground rules, for those of you at the table, if you have something to say when we get to discussion, if you could just turn your name tent up like this and I know that you want to say something and you won't have to worry about jumping into the conversation. Now, I do want to follow discussion threads so, I may not take the name tents in the order you turned them up. So when we get to steam generator issues, for example, I'm going to ask Elmo Collins to tee that issue up for us, then we'll start with one of you on the issue, steam generators, then we'll see what other people might have to say about that particular issue. Then we'll just keep following those discussion - - ah, threads.

Second ground rule is I would ask all of you, panel included, to be crisp in your comments, your questions, we want to make sure that we get to everybody tonight. We do have a, a limited period of time. We can stay until around 10:00 before the hotel will, will close us out, but we want to make sure that we get to everybody. So please, please be, be brief and that will help us out.

Now, when we do go to the audience, there are some people who I want to give a first opportunity to speak and we have a row of representatives of local government jurisdictions and commissions right down, down here. Rick, could you just go stand in front of them so everybody knows that? Okay. They're hear to listen to what all of you are saying and to try to, to evaluate

how, what you all say fits into their, their regulatory responsibilities. So they're down there. I just wanted to point that out to, to, to everybody.

This is final ground rule, is just, I would just ask everybody, panel and audience, to extend courtesy to everybody tonight. You may hear opinions tonight that you disagree with. I would just ask you to respect the person that's, that's giving that opinion. Also, I would just ask all of you to be calm. That enough that the facilitator and nervous and anxious, so I would ask all of you to be calm. And finally, be kind. Okay? Let's use that as a watch word tonight. And - - couple of housekeeping things. You know the exits are right behind you and this is being webcast. The DVD will be available in about a month I hear from the NRC public affairs people. If you have any material that you want to leave with the NRC, Heather? Is Heather here - - okay. If we can have an NRC person over on that side of the room. Instead of bringing it up here, give it to the NRC person over there, sometimes we have petitions and everything else. And finally after the second issue is done with the audience we're going to take a little break, okay? So that you can just take a break from the meeting and then we'll try to get all of you back, back in here.

Okay. We're going to go to the participants now for introductions and then we'll get started on the first issue. And by the way, these signs - - you might think that these are, these are NRC statements, but they're not. They're not NRC statements, but we do have advocacy groups at

the table and these are some of their talking points. So, they are up there. And, and speaking of advocacy groups, I'm going not go to Gene Stone right now for induction. And - - the mics are right here. We need to get you on the mics so it comes on the webcast and from time- to- time I may be asking you to pull that mic closer to you. Go ahead. Gene.

>> My name is Gene Stone, I represent Residents Organized for a Safe Environment. With over 8 million people in the 50- mile radius, I will attempt to speak for the safety of our Earth, our children, our homes, our infrastructure, and our California economy. Which California Edison would put at risk in the name of profit, let me be clear, I stand for decommissioning this old nuclear power plant as soon as possible before the ratepayers or taxpayers spend any more money to repair it. Our exposing our citizens to any further risk of danger. It is now clear that 9 months that S.O.N.G.S. is no longer needed for California's electric needs. When the NRC considers the restart plan, our citizens deserve nothing less than a full adjudicated license hearing under oath, and that's what we're here to demand tonight. And Mr. Collins, I would ask you what is your position on this. We also call upon Senator Boxer, Chairman Macfarlane, and the rest of the NRC commission to make sure that this is under oath, this under oath hearing happens before any experimental restarted puts us all at risk. While the NRC and California Edison may be - - [video disruption].

¶ [Music] ¶

>> My remarks today are my personal points of view and do not necessarily represents physicians of the American society. We are here to discuss the NRC's current regulatory oversight status of S.O.N.G.S. I hope this is an opportunity for folks to ask the questions that are bugging them and to get answers for those questions. I have international act would members of the Nuclear Regulatory Commission during my career and I have always found them to be technically skilled, extremely contentious, and

prudent - - something.

[Laughter]

>> So Ken will you tell us how you do that?

[Laughter]

>> Hey - - and, and found them to be - - extremely critical of all data and conclusions that are given to them.

My interactions with the NRC folks on the advance reactors that with worked on and always found them very interested in new designs with improved safety characteristics and they always encouraged their investigation. I have no doubt that the NRC staff are applying the same skills and dedication to their oversight in San Onofre. I do have a concern about what NRC is up with regard to San Onofre - - the local press has, has, has hinted or suggested that the NRC expects this review will be a long review. I'm just concerned that we make sure that the duration and intensity of the review is consistent with the level of risk involved. It may, the San Onofre steam

generators are clearly important pieces of equipment and they are very expensive. They appear to have been incorrectly designed and to be wearing out prematurely. Now, everything in the nuclear power plant has to be investigated from a safety perspective. Steam generators do not appear to me to be a serious safety issue. Based on the results from the steam generator 2 failure in Unit 3, even if all of these steam generators tubing that are affected by this current premature wear problem were to fail simultaneously, the radiation released to a person standing that worst place on the site boundary for the full duration of the accident would result in a radiation dose of less than 1 microsievert. Low doses of radiation are a natural part of our environment. Life on Earth evolves in a constant presence of low level radiation so each year us living in California receives something like 3,000 microsieverts of radiation from cosmic radio, radioactive materials in the Earth, from our food, and various medical and dental X-rays. If we live at a higher elevation, say going to Denver, we could expect to get an additional 3,000 microsieverts from the fact that it is higher in the sky and less shielding. There are also lots of minerals in, in the granite that provide natural radiation in that mountainous area. If we fly a lot, we might get an additional 2,000 microsieverts a year from radiation again, again, flying up above the protection of the atmosphere. So that extra 1 microsievert from a steam generator accident would be like spending one day a month, pardon me, one day in that year in Denver. Or like

taking one airline flight. I don't see these as serious safety issues. Further there is growing activity evidence that low levels of radiation are not only not harmful, but are actually beneficial in terms of stimulating the body's cellular - -

[Laughter]

Repair systems. There are suggestions we should not be alarmed at additional radiation doses up to 100,000 microsieverts. So I don't see the steam generator problem as a serious safety issue. I would urge the NRC to get on with their review.

>> Okay. Thank you.

[Applause]

>> Okay. Okay - - before we go to, to, to Richard, I think you can, you can see what I mean by, we're going to give people this introductory portion to, the state interests or concerns and maybe have a little bit of, of a soapbox, okay. About concerns. That's not meant in any sort of a negative way, but this is for, you heard Gene, you've heard Ken. This is the time for them to talk about that and of course, you know if you want to react, you like it, you don't like it, whatever that's fine, but when we get to the discussion, okay. On the issues then I think let's just try to have that discussion. You know what I mean? Okay. Richard.

>> Thank you very much. I'm a resident of Laguna Niguel, but I have also been involved in nuclear energy since 1963. I have worked in literally

every facet of nuclear energy that there is. I don't work and never have worked for southern California Edison nor San Diego Gas and Electric. I don't know everything about the plant at San Onofre, but I know awful lot about pressurized water reactors. I also know a lot about welding, I know a lot about materials, I know a lot about operations and, in fact my first refueling was in 1964 up at the National Reactant Testing Station in Idaho. So along the way I have been involved down in the trenches with the plants. Same place at the workers go to in San Onofre every single day. Those workers wouldn't go there every single day if it was the place to work at that some people would like to characterize it as.

[Applause]

I'm old enough to remember the Atomic Energy Commission at the later on became the Nuclear Regulatory Commission and both organizations have done a good job over the years. Um, the Nuclear Regulatory Commission is an interesting organization. But the bottom line is between the Atomic Energy Commission and the United States Nuclear Regulatory Commission, the United States has safest record in the world for commercial nuclear power, bar none.

[Applause]

The, long the way I escaped nuclear power, I thought for a little while and I was living in Hong Kong when I got a call from the State Department, they asked me, if we asked you, would you represent the United States at the International Atomic Energy Agency. I thought it was a joke. It could to

be a serious undertaking, so I took the job. I was the United States representative at the International Atomic Energy Agency as part of a six national board for four years. Six national boards were convened as a result of Chernobyl. Actually, it was a result as the Soviets going against the hands of the International Atomic Energy Agency and saying our people don't trust us. We need help. And we need to truly understand what nuclear power is all about and what is safe and what is not safe in the way of practices. Etc.

Our work was incited, there were three subjects in one, the work was entitled, "nuclear fuel cycles faculties, the environment, and public opinion." And for four years we spent delving into all of those. We asked people like the Department of Energy, we asked people like the Nuclear Regulatory Commission. We asked governments, we asked companies to provide us information. We asked a lot of media to provide us information. We invited a lot of media over to talk to us. At the editor level to find out what drives these articles that come out that are not accurate? That mislead the public. So I did that for four years. I'm involved in nuclear power today and that I have a group of people that I work with and we're all older and we supply reviews of nuclear power plate designs prior to them being submitted to the U.S. Nuclear Regulatory Commission or other commissions around the world. Since about three hours after the tidal wave hit Fukushima, I have been involved in Japan. So I come at this as a resident of Laguna

Niguel, as a concerned citizen for when are we going to get our electricity back. The delays are hurting the economy of California. I have not lost any faith in the Nuclear Regulatory Commission. I have not lost any faith in southern California Edison and especially the people at S.O.N.G.S. themselves. We need to get this power plant on- line as quickly as we can. It is a technical issue. We know how to solve technical issues. We need to get the new steam generators over here and get them involved so we can enjoy many more years of a secure and stable nuclear power plant providing us electricity that serves directly people in 14 counties, but it serves more than that, because it is part of the western grid and it serves, it is part of the entire western grid with electricity around. We need that electricity. Why do I know that we need that electricity? When I came to San Diego for my first staff job in the navy in 1971, I was given a 7 - - seven volume set of hearings called "electricity production problems in the southwest" I have followed them ever since then. Prior to San Onofre being shutdown a few months ago, we had to import 24% of our electricity from other states at a high cost and at a high loss, because transporting them over those transmission lines causes us to lose electricity, therefore what happens is we wind up putting more emissions out into the atmosphere that we don't need to do if we had taken a responsibility position in the state of California all these years.

So from my view point, it's simple. It's a technical problem. The

people that involved know how to fix it. We need to get on with fixing it and get our electricity back. Thank you very much.

[Applause]

>> Okay.

[Applause]

>> Okay. We're going to go to - - we're going to go to Grace. Grace, is it going to be easier to use this instead of bending over there. Let's see if they hear you.

>> Can you hear me? Can you hear me now?

[Laughter]

No. You can't hear me now. Is that better? Okay. That's great. My name is Grace Vontelo, a long time 50 year resident of San Clemente and very grateful for this public opportunity tonight for all of us in this category 3 NRC meeting. I'm going to go off my little script that I'm going to read, but as a resident through the whole 40 years that San Onofre, or 40 plus years of that the nuclear plant has been operating I may have gotten a few of those ongoing releases or a few extra microsieverts because I lost a kidney to cancer just six years ago. Maybe a little trivial in the water table. I'm hungry, trying to represent thousands of residents trying to protect their families. We oppose Edison's proposed restart of the defective reactor Unit 2 at the San Onofre Nuclear Power Plant. We demand a full, transparent, adjudicatory hearing and license and license amendment process,

including evidentiary hearing and sworn testimony and cross- examination, which needs to include experts independent of the NRC, independent of Edison, independent of the nuclear power industry. This public meeting tonight is very important, but it is not a proxy nor is it a substitute for that process. Given how we have gotten to this point and the serious loss of faith by the public of the NRC and Edison, as a result we believe that all five NRC commissioners should want this as well. The NRC states that they recover approximately 90% of their budget through fees and these fees come from the nuclear industry.

So we must depend, we must demand independent experts and sworn testimony. To heal public confidence, we residents, area businesses, and especially the plan workers, all of you, especially the workers and especially Camp Pendleton marine families who live within a mile of the plan all of them are impacted and we cannot be experiments waiting for more radiation leaks or release. We support the dedicated San Onofre workers. Who are our neighbors in San Clemente.

[Applause]

You are being impacted. You are being impacted by Edison's decisions and you're being impacted from the defective steam generators, which closed the plant. I'm striving. I'm striving for a safer, healthier, more hopeful home for our grandchildren. Please raise your hand you want that for our community's children and your own children and our grandchildren.

[Applause]

I know you all have - - you have children. You all have children.

[Applause]

Raise your hands. Where are you children? No. I'm not quite finished. We invite all of you who are concerned to become more informed. Primary documents from the regulator, regulators and agency reports are all available, primary documents, at sanonofresafety.org. These are facts, not closely brochures, not conference calls to the cities. The California Energy Commission has an outstanding assessment of California's nuclear power plant's committee report. 2008 through 2011 integrated, integrated energy policy reports are outstanding. The latest, chapter 14, includes all the lessons being learned from Fukushima. It is essential that your voices be heard tonight and tomorrow to Congress, to the Senate, to the administration. Thank you.

[Applause]

>> Okay. Thank you.

[Applause]

Thank you, Grace. And Robert, Robert, do you think going to be able to match that? Go ahead Robert.

>> A little bit different pace with me. I'm from the state agency, the California Energy Commission. And I want to thank the reference to good work and the independent, and, and the energy reports that we produce every year.

Our world would be San Onofre situation over this past year has been to keep the lights on. Our primary responsibility has been in grid management and to do the work around, if you will to keep the energy going in the southern Orange County and, and, southern Los Angeles basin of San Diego region. A couple of examples of our activities has been to work with our sister agency, which includes the California independent system operator and the California Public Utilities Commission, as well as the local and federal air quality officials to help work around and provide the replacement energy and the system operational modifications that we needed to do to keep the lights on in the absence of 2200 megawatts that went offline when San Onofre went offline.

A couple of examples to make more tangible is there were shutdown older conventional power plants at Huntington Beach, holes cut in the boilers, pipes severed. Air permits that were not used. We got involved with that right away to provide electrical assistant support, justice last summer. There was an effort with all of us to accelerate improvements and updates in transmission lines in Barry Ellis and Sunrise Powerlink, and also an aggressive Fletcher power to try to shed load during the high temperature dates in the summer and about a thousand megawatts were able to be shed through voluntary cooperation, with a call to reduce energy load during the summer.

There are few other things we did to modify or do demand response in

the summer. Right now we're engaging in looking forward to the summer of 2013. Our planning process doesn't assume that the San Onofre unit is up and going in any matter, we have to make a contingency plan that assumes the power is not there and do the work around on that. So we've, oh, I guess I should also close by saying is one other element that helped us this summer is we had a lot of luck. It wasn't the hottest summer on record and there weren't fires that took out a transmission line or a major loss in other generating facilities. So we had a little bit of luck there as well. We'll continue to fulfill that role. We'll do the analytical role on the grid and also on the issues that effect nuclear power, but the principle work is to work with our sister agencies and keep the grid going no matter what the circumstances are.

>> Thank you.

[Applause]

And Elmo?

>> Thank you, cliff. I wanted to -- it's been 37 minutes in I haven't spoken yet and it is my meeting. So thank you, chair for giving me a chance to say something. I really appreciate that. Of course, my name is Elmo Collins the regional administration with the Nuclear Regulatory Commission, region 4 office. I don't really think the Nuclear Regulatory Commission needs much introduction, but I would like to just offer you tonight that when the agency was created in 1975, it was in response, largely, to too assertions

that the Atomic Energy Commission had too much of a role in advocating the use of nuclear power to generate electricity. So Congress and the president created the Nuclear Regulatory Commission as an independent safety regulatory body, who's only statutory charter bylaw is safety.

So whether you believe it or not, the NRC does not promote the use of nuclear energy to generate electricity, nor do we oppose it, but the law does establish the five commissioners to set the requirements, to set the policy to determine what would constitute adequate protection for that use in the United States, would somebody choose to use it. So, I would leave you with tonight is if somebody chooses to use this form of energy to generate electricity, our job is to make sure it is safe and I think we are resolved to that. And we are very well open to technical issues, safety issues and, and, certainly the regulatory processes and procedures that have been set up by the five commissioners of the commission.

So I'll, I'm just, at this time, take the time to thank you. The members of the panel for being willing to come here tonight. I thank you each and every one of you, I appreciate your views. From my perspective, my goal is so I make sure that I understand what you're telling me tonight. Hopefully, you'll see me listening and see my understanding. We might not agree from time- to- time depending on what is said here tonight. I think that's the beauty of living in the United States, that we can foster a public forum - -

[Applause]

Thank you. Which is my goal to foster a forum where the views, even though we don't agree, we can exchange those views and understand each other. So I respect and I value all the perspectives and, and, in additional perspectives I'm going to hear tonight. I really want to thank you, Gene Stone for encouraging me to try to set up this forum. So thank you, Gene.

[Applause]

It can all be a protective exchange. Thank you, Chip, for letting me talk.

>> Thank you, Elmo. You got a round of applause, too, so -- that's good.

[Applause]

>> Thank you, thank you. Good evening. I knew this would be this big of a crowd down here, but it is still impressive to see, I want to thank you, for coming out today. It is a little bit nerve- racking for me, I think this is the biggest crowd I have been in front of since my high school graduation.

[Laughter]

So my name is Edward Randolph, I'm with Public Utilities Commission. I just want to spend a couple of minutes to explain what our role is in the alphabet soup with all of the agencies involved with San Onofre and southern California Edison and general electricity policy in California.

We in the case of nuclear power, the Public Utility Commission primary

role, thanks to federal jurisdiction that preempts in certain areas is in cost recovery. We are the agency that will determine whether or not Southern California Electric and San Diego Gas and Electric can recover cost from the steam generators that have been installed, that right now are not working. If they need to be replaced. If they got cost recovery for replacement. If they get cost recovery for any ongoing maintenance, changes that are needed that the Nuclear Regulatory Commission would determine a need to restart operations. That's not to say that safety is not a concern on our part. But it is a struggle on our agency's part at times to figure out where are role in safety for nuclear power comes into place. That's, in large part due to Federal law, it's a little part due in the expertise of the engineers that the Public Utility Commission are not nuclear engineers. So we do need to rely on other places. That said, I will get to this in a minute, we also do rely on the public for input as well. So there will be points down the road for folks in this room to have significant input in what the Public Utilities Commission determines going forward.

For the last year, 9 months now, or just short of 9 months the Public Utilities Commission has primarily been focused on what Rob was just talking about, which was getting us through this summer. Last January, and then really going into February and March, I had a lot of oh, my god, days on how are we going to get through this summer with 2,000 megawatts of power gone. Fortunately, there are a lot, a lot of plans were already in place, we had

enough warning that we could accelerate some, some new transmission lines. We were able to get a power plant that was offline back on- line on a temporary basis and we were able to make the through this summer.

As Rob said, though, that was also due to lot of luck. People do need to be aware of that if talking about again forward, going through this summer we had no problems, thus we have no problems. That's not a completely accurate statement. We didn't have any substantial heat waves. We didn't have any major fires that knocked out transmission lines for a long period of time. We didn't have major power plants go out unexpectedly besides San Onofre, and to the extent we had heat waves, they were isolated in San Diego and Los Angeles, not all of southern California for an extended period of time. That really helps. This is the first time I will say thank you, now that we're through the end of the summer. I have been keeping my fingers crossed up through the first of this month when summer is somewhat officially over in southern California.

Going forward, we're already planning for next summer. We are, you know, not saying that we, we think San Onofre should be on- line or offline next summer, but we are planning on it being offline as one of our diligent scenarios, that's the only thing to do. We also long- term - -

[Applause]

Have worked into our long- term planning scenarios are starting to look at the options of what to do is San Onofre offline as well. That gets fairly

complicated when you butt that against other statewide policies that are already in place and we are already working towards. For example the plan to shutdown or repower all of the coastal power plants that use once through cooling. If those go offline, and San Onofre doesn't come back on- line. And we don't build other power plants somewhere within this region things are not going to work. We need to start planning for that right now incase the NRC does determine that San Onofre can't come back on- line there. Are other tools we will use. And we will continue to develop those, and continue to look at those through both long- term and short- term areas. I'm also that in a few weeks we will be opening a proceeding, it's one of those unfortunately agency names, it's called an order instituting an investigation, which isn't quite what it sounds like, but it will be a proceeding to look at the reasonableness of southern California Edison and installing the steam generators that they chose.

How they maintain them, and cost incurred to determine whether or not they get to continue to recover the costs of the steam generators and rates. Whether or not they owe what they have recovered in rates for the steam generators back to ratepayers.

[Applause]

And, you know, how to deal in rates with cost of replacement power as, as the plans continue to go out.

To conclude, and - - tonight I think at times I may say some things

that are maddenly vague, the reason I will say things that are maddenly vague, ultimately the decisions that I just talked about that are being considered have not been determined and get made by five commissioners who have been appointed by either this governor or the prior governor. It is ultimately their decisions. I don't want to say anything in here today that would prejudge their departments. I can talk about process and factors that will lead into their determination, but I can't make the conclusion, they are ultimately the ones that need to make the conclusion.

>> Okay. Thank you.

[Applause]

And Rochelle.

>> Thank you, Chip. The alliance for nuclear responsibility has sort of a different perspective on the generator cases and nuclear power in general. For almost eight years we have been responsible for looking very carefully at the economics and the reliability of aging nuclear power plants. We are focused on state's issues and the state's jurisdictional agencies are located in San Francisco and Sacramento. And the alliance is not missed a single meeting when it comes to these aging plants in which we should be relying on this cost in the future. There are three very important people here tonight, one I would like to thank Elmo for bringing the oath two together tonight. This is the first opportunity since the interview commission brought all active agencies together. That would be FEMA, the Department

of Energy, the regulatory commission and every acronym agency you can think of in California. And since that time we haven't all been together at the same table at the same time. So, I would like to thank Elmo very much for bringing us altogether.

[Applause]

This man sort of understated this agency. The California Energy Commission since 2005 has been looking into the cost, the benefits and the risks of continued reliance on aging nuclear power plants. They were the first to recommend that the state do updated studies on the issue. And a very important agency of keeping their sister agency's feet to the fire discussing this. This is the agency since 2005 that's actually tried to address what does the state's power look like in the future with and without nuclear. Let's be responsible in our investments.

[Applause]

This man right here, Ed Randolph, Ed was the chief of staff of an assembly in Sacramento, Lloyd Lavigne, who coauthored the bill that mandated the cost- benefit and risk analysis at the Energy Commission recommended. Ed is now at the Public Utilities Commission, but I don't want to blame him for this the action. He has only been there for about a year. And the infrastructure at the Public Utility Commission does need some work. I think Ed will be part of that new process and he will be very good at that new process and I'm glad here's here to listen to the public tonight.

The public is here to listen to other things besides what is wrong to the steam generators. That is what it's going to cost, to replace, repair and provide energy while these steam generators aren't working. Edison tells us they had 1700 inspections and worldwide experts. The NRC tells us they have an inspection team. Where were all of those people before they approved these steam generators the first time around?

[Applause]

They are all here now, but who's going to pay for this? I tell you right now, the Commission for Nuclear Responsibility's position is - - not a penny more from us.

[Applause]

If Edison wants to start their steam generators, share shareholders can pay for it. If they want to replace them, the shareholders can pay for it.

[Applause]

If they continue to layoff workers their shareholders will be responsible for this, not the state.

[Applause]

If you think the steam generators are the only costs coming at you on nuclear power, you are wrong. We have the alternatives to cooling, could be about a billion dollars. We have emergency planning that may be expanded, what's not going to cost? We have on- site storage of radioactive waste that the NRC commission, and the Federal Government promised would be somewhere

else. It's not going anywhere else.

[Applause]

We are the rate payers of California. And we are tired of paying for Edison's mistakes. SDG&E.

[Applause]

SDG&E didn't want to replace these steam generators. We set down with SDG&E and they drew us a little graph in 2005 and showed us how these old steam generators would have worked until the end of the current license, 2022. I'm not sure if they are right or wrong, but what I do know the new ones lasted less than two years. We had enough. This is the check we wrote and presented to the California Energy Commission in 2005. It's about what we paid so far, for this steam generator fiasco. We believe that the workers want to keep this plant safe. We believe that Edison wants to keep this plant running, but we believe that the ratepayers aren't paying a penny more. That's our message to the Nuclear Regulatory Commission, to the Public Utilities Commission and to everyone out here tonight. Thank you.

[Applause]

>> Thank you, Rochelle.

[Applause]

Okay. Don, are you ready?

[Applause]

>> Yes. Rochelle, you are a hard act to follow. My name is Don

Mosier. I work at Scripps Research Institute in La Hoya. I'm also a city council member in the city of Del Mar and I'm here nearly because I'm concerned about the safety of the restart of it, too. Let me just tell you a little about my training. I'm a physician, I'm trained in pathology. I've been doing research for the last 40 years. I was chair of the Scripps Research Institute safety committee for a decade, just a couple of years ago, I'm familiar with radiation damage, radiation doses. I think Ken - - meant macrosieverts, not microsieverts, but - - that's a small point. And I'm used to risk assessment in a complicating laboratory environment, and in a regional environment. I'm concerned about the safety of restarting Unit 2 given the problems that it has. I think my most important job as an elected official and as a resident of this area is to insure the safety of our citizens.

The city of Del Mar.

[Applause]

The city of Del Mar joined six other local city councils in passing a resolution urging that Unit 2 not be restarted without a license amendment, a hearing, a public process, with testimony from experts in the - - experts and experts from NRC and Southern California Edison, and - - a real judicatory hearing where the data is presented in a way that everything one can understand it. I'm a scientist, I'm used to looking at data. And science is a pending field. If someone wants to convenience me

of the argument, I say show me the data. Okay? That's what I want to see.

[Applause]

Frankly - -

[Applause]

- - I think many of us our citizens and maybe most have lost faith in the NRC and Southern California Edison because of past failures including the - - installation of the two steam generators without going through a licensing amendment.

[Applause]

I also think from a safety point of view we have not fully absorbed the lessons of Fukushima.

[Applause]

One of the lessons that I take home is don't trust the experts until you see the data.

[Applause]

Okay. Now I think this is a, a, a - - not as complicated as how many in the tubes might be wearing in the steam generator. These are very old nuclear plants, both of them in California. The decision to keep a major power plant limping along despite major problems is like a problem that many of us face when we have an old car that's got a lot of problems, but we want to keep it running for a couple more years. Should we consider to pure good money after bad when we have a 40- year- old, car that is running on 4

cylinders, rather than 8. That has a leaking radiator, has two partially deflated tires. The roof leaks., but they tried to fix that and the top speed is 30 miles per hour? If this were my money, I would say no way I'm dumping more money into this project. This car is ready for the junkyard.

[Applause]

But - -

[Applause]

This is our money. They're starting, or talking about user to keep this old nuclear power plant running. This is what Rochelle just told you. This is our money they are spending to fix this damaged speed generator or replace. And it is a lot of money. And we're paying for it. So it's our decision, not their decision.

[Applause]

>> Thank you. Thank you. Please - -

[Applause]

>> Good evening. My name is Cathy Ewana. I'm a recent resident of Solana Beach. I came here, native Californian, born and raised in California, spent half of my life in Japan, after 25 years in Japan I brought my two daughters back to California, we now live in Solana Beach, I'm a teacher by trade, I had a two English schools in Japan for children, ESL teacher, as well as thought at my daughter's elementary school. So, I'm here to, I'm here - - for most, as a concerned mother. I'm also affiliated

with Mr. Gene Stone down at the end rows. As well, I've been very active in Coalition Against Nukes. The national organization in the United States. After 25 years in Japan, I evacuated with my two daughters because of the nuclear meltdowns of March 11, 2011. We lived with a glider counter for a year measuring radiation contamination in our food as well as our environment. Our city, is 380 southwest of the Fukushima reactors, and yet we measured locally caught fish to be highly radioactive. Last October, a city councilman's test soils revealed pre Fukushima radioactive levels to be 5 times higher than March 11th, 2011. I researched my daughter's school lunches and found that 40% of the ingredients going into these school lunches were procured from areas in and around Fukushima. My daughter was - - forced to lie that she had allergies at her school and therefore brought a homemade lunch. I was told by her principal that this sharing my research with the mothers or the PTA at her school would cause panic and so we went ahead with the lie, because we were contemplating evacuation.

40% of children in and around Fukushima. The ones that do not have the means to evacuate and yet are left in highly contaminated radioactive shot spots are being diagnosed with irregularities and tumors of the thyroid gland. That is due to low dose, extreme contamination. Before the disaster, our government told us that debris measuring anything measuring over 100 mackerels per kilogram of radioactive cesium, this was labeled radioactive waste. This April, the Japanese government came out and told us that these

same measurements of contamination in food would be safe to eat.

Presently in Tokyo, there is radioactive milk coming from Fukushima and the school boards there are legally diluting the radioactive milk from Fukushima with milk from other areas in Japan. Because of these higher standards of accepted contamination in food, this is being served to children for their lunch. This disaster has torn families and communities a part. My husband remains in Japan. We are working to get him over here, but this is a serious, serious issue and we're not talking about a 50- mile evacuation scenario. I live 380 miles southwest of the reactors.

The distrust in government is rampant in Japan. Entire towns have been abandoned and thousands of homes and business have been lost due to radiation contamination in and northeastern Japan and the upper northern half of Japan. We were told that Fukushima could withstand large tsunamis and earthquakes, but no one ever in their wildest dreams, the engineers of the plan, no one ever imagined the devastation and magnitude of 311. I cannot remind the NRC commissioners and staff enough of their immense responsibilities to protect us from a nuclear disaster at San Onofre.

[Applause]

Unfortunately, this is one that Edison cannot control. It is an abomination that amidst the wake up call of Fukushima, Edison has proposed a restart of defective Unit 2 reactor at San Onofre. I stand for my children I demand a fully transparent adjudicatory hearing base would license

amendment process and sworn testimony from outside experts that can challenge the expert opinions of those in the NRC as well as those in Southern Cal Edison. We need an open, public process. This is our children. This is 8.4 million people that if there was ever an accident would have to evacuate a 50- mile radius of the plant.

I would be appalled if the NRC called this meeting tonight as a substitute for such process. And I am deeply hoping that the lessons learned from Fukushima can indeed be applied to our situation as it stands now at San Onofre.

[Applause]

Until you've lived through a nuclear meltdown and many of us haven't, I think there's no license to call for restore, restart under the present circumstances. Thank you.

[Applause]

>> Thank you. Thank you, Cathy.

[Applause]

And Dan. Now you're going to go to, we're going to hear from Dan Domingos now. Dan?

>> Good evening. I was looking at the clock and we're already into an hour in this meeting. My understanding was the meeting was for your meeting to get information. So it's no small feat, but for a union leader to be brief, but I will make my statements brief. I will give you some background,

some of my background in case it may prompt some of you to ask questions during the question period. I will tell you my name is Dan Domingos, I'm the chief executive officer for the local union that represents approximately 750 of the employees of San Onofre. We represent operators, maintenance people, clerical people, warehouse people, some engineering folks, radiation protection people, and hopefully, I haven't left anybody out, because I'm sure I'll hear about it tomorrow.

The, I'm also licensed reactor operator. I have an active operator license. I worked at San Onofre for 30 years come this December. I was there for the start up of units 2 and Unit 3. I was there for the decommissioning and the removal of unit 1. In addition, my local used to represent all of the fossil stations that used to be owned by Edison, the ones that are now producing the replacement power. We represent some of the independent energy producers that are providing that power. The additionally, I sit on the - - I guess it is called the governing board, or board of directors for an organization called the California Coalition of Utility Employees. There's about 20,000 of us. And it consists of our union, the IBW locals or PG&E, the Edison, San Diego Gas and Electric. And our charter is primary the safe, reliable and affordable electrical supply. We present cases or we, we - - intervene other present cases at the Public Utility Commission and also at the state legislature's, state legislators.

As I said, I was going to be brief. And I'm here because there's been

a lot of media attention and questions about the employees, you know, there's issues about the health of the employees or the health effects of radiation and also whether employees are afraid to bring up safety concerns. I will address those questions if anybody has any questions regarding that issue. I will tell you that, you know, I have filed nuclear safety concerns, in fact I filed one probably about a month ago. And it was resolved between the employer and myself. We reached resolution on it. As far as I know, I still work for Edison, I'm sure Mr. Dietrich would have told me otherwise if that was not the case. So that, I promised I was going to be brief. And thank you for - - listening to me.

[Applause]

>> Thanks, Dan J. just would note that we still have to hear from Pete Dietrich. So - - Ed?

>> Hi. Good evening, my name is Ted Quinn I'm a 30 year resident of this area. I live in Dana Point. I'm an electrical engineer and my training was from the navy in nuclear. My company does work in other parts of the United States of America for the utilities in improvements and instrument control. My company is building two new units in China and I work for the Department of Atomic Energy Agency. And I will tell you in the countries that I go visit the Nuclear Regulatory Commission is the gold standards for regulators around the world. They are really proud of it they way that they are independent. I just give you this frank input from many regulators that

I work with that the NRC is, is considered the best of all that, that we ever worked with.

I'm also past president of the American Nuclear Society. I see this category 3 meeting that's a facilitated meeting as an important tool for all of us. Very powerful for all of us to have input towards this process. I'll be brief, too, I see the importance of us continuing this dialogue in an open and frank manner with all interested parties. And I want to thank you for including me tonight.

[Applause]

>> Pete Dietrich. Pete?

>> Thanks, Chip. Good evening. I'm Pete Dietrich, the senior vice president and chief nuclear officer for Southern California Edison. I'm here tonight representing Southern California Edison and the employees and workers at the San Onofre nuclear generating station. We're pleased to be here tonight as part of this meeting and public process. We feel it is very important. We take very seriously the responsibility of running the plant safely. And the trust that our local communities place in us in doing that exact purpose, running the plant safely. We've been a good neighbor to the local commercials for over 40 years. We care about the community. Our employees care about the community. A good number of our employees live very close to the plant.

We have a commitment to keep our customers, our communities and the

public informed on the progress and plans for San Onofre and we will continue to do that. We are not in the business of myth or speculation. We are in the business of safety. Ultimately providing safe, clean, and reliable electricity to our customers. Thank you.

[Applause]

>> Okay. Thank you. We thought that it was important to get all those perspectives out that this NRC category 3 meeting because they represent the full- range of perspectives that all of you have out there.

But now you're going to get to the state generator issue, was why we're here, I know that you've been sitting for a while and we will take a break, but I think we need to get to the safety issues and have that discussion and Elmo are you, are you ready to, to, to tee that issue up and then we'll have a discussion around the table.

We may take a break before we go out to all of you to discuss those again, steam generator issues. But I'm going to give it to you, Elmo Collins, right now.

>> Thank you, Chip. Just to recap. San Onofre generating station 3 shutdown in January of this year after it detecting a leak in one of their steam generator tubes at the time of the Unit 3 shutdown, Unit 2 was in a repealing outage. Subsequent inspection of Unit 3 steam generator 2 was identified significant and unprecedented wear. The direct cause of the wear was thermodynamic conditions in a phenomenon known as fluid elastic

instrument. I know that, that's, that's a complicated term and a technical phrase and rather than explain it now, maybe that will come out in the discussion that we're about to have on what, what that means. So March 16th the Nuclear Regulatory Commission chartered a fact finding inspection team, that report was issued in July. That report was issued with ten open items and the NRC follow- up inspections on that report is still ongoing.

On March 27th, the Nuclear Regulatory Commission identified the objectives which would need to be met before either Unit 2 or Unit 3 could resume power operation. The Nuclear Regulatory Commission formalized these requirements in a confirmatory action letter, simply put it California Edison is required to identify the causes for the substantial degradation in Unit 3 and evaluate Unit 2 and take action to prevent the occurrence at that degradation. Edison is required to submit their analysis in writing. I think we all know that Edison did send that analysis to us last week and I'll just share with you right now, the NRC plans, that discussion around that submittal is so important, we're going to schedule a separate public meeting and that will be the only topic for that meeting. So you can look forward to that.

[Applause]

On this note, because other information has come out, and it’s on our website, and inspections identified tube wear in unit, in Unit 2 but of different types. Edison also needs to present the basis for maintaining

steep generator tube integrity considering that type of and not just what was identified in Unit 3. This is a regulatory requirement and it is contained in the technical specifications. We call the steam generator tube integrity program. And so we'll be looking for that analysis as well in what they sent us last week.

So looking forward the Nuclear Regulatory Commission will begin its inspection and analysis of the items that Edison submitted last week. As I said, the first major activity will be a public meeting from the NRC to meet with Edison in a public forewoman and discuss and understand the contents of what was submitted to us. So, to the panel members, once again I look forward to hearing and understanding your perspectives.

>> Okay. Thank you for that tee up Elmo. Do we have a question? First question for Elmo on steam generators?

>> Here we go. Thank you.

>> Okay. Rochelle.

>> Is this on this is this on? Okay. Elmo just mentioned new hearings, new meetings, new requirements is each one of those has a cost. And each one of those costs the NRC intends to pass onto Southern California Edison, who intends to pass 20% of those on to SDG&E. Where that goes from there should be shareholders, because the buck stops for ratepayers right now.

[Applause]

>> Okay. And - - we heard about the - - ratepayers and very

important issue, let's try to keep on the steam generators safety issues. Grace, do you have a question about what Elmo said?

>> Yes. In part 21 NRC report from October 5th, it sounds like it's a done deal. Southern, it reads Southern California Edison will run Unit 2 at 70% powerful a short duration as a corrective measure. Now what recourse do we have to protect our families and the mayors and city councils that have been requesting for a licensed amendment, what objections might you have to have a full license amendment process and adjudicatory hearing? What would the objection be.

>> Just let me state on that is that the evidentiary hearing really falls into what we were going to talk about in the second issue, NRC process. So we'll get to there, but let me ask Elmo, can you, Elmo, can you explain to people what Grace is talking about in terms of part 21? Was that an accurate statement? Can you amplify at all on that? Okay. Good. Thank you, Grace. Let's go to Elmo.

>> Yes. Thank you, part 21 is just to inform everyone, a procedure used, NRC requires when problems are identified by manufacturers or suppliers of equipment to nuclear power plants if there is a substantial defect they are required by law to report that to the Nuclear Regulatory Commission so we can understand that, and inspect it and get it fixed as we need to. So, all nuclear power plants are informed by that, because it may affect them as well. So you talk about this being a done deal, it is far from a done

deal. We are actually now in this phase of review just beginning our review. We think this is going to take a number of months for us to get through. We've got a lot of work in front of us right now and we don't have a timetable. We'll take the time we need. I will just share with you, it is our identify to make sure that there is a sound technical basis for safety before NRC gives the green light to start up Unit 2.

>> Okay. Thank you, Elmo.

>> Does that answer your question?

>> Thank you. Grace, Grace, we're going to do, Rick can you put in your parking lot in your head that we're going to go back and get Elmo's views on the question that - -

>> The adjudicatory hearing?

>> Yeah and the, let's, let's keep going with steam generators and then we'll get to that process issue. Don?

>> Yes. Elmo, when we had a Southern California Edison representative come and testify before our council. And the one issue about the steam generators that we had the hardest problem understanding was it, the Unit 3 steam generator and the Unit 2 generator had identical design and the Unit 3 generator, steam generator was being pulled from service because it had slightly more severe tube wear, why was the problem in steam generator 2 fundamentally different? When it seems if they were identical design, the problem should be fundamentally identical.

>> Okay. Thank you. Thank you for that question, Don. Elmo?

>> Well, thanks. I, I think the, to, to try to put this problem, you know, in, in a - - in context, what was in Unit 3 was substantial and unprecedented tube wear of a type that resulted in really a rapid, rapid deterioration of a number of steam generator tubes. Our regulations and our licensing requirement were supposed to preclude that, but the design here for Unit 3 did not. Of course, as you stated Unit 2 is of the same design. So in the cause analysis. So therefore it is susceptible to the same problem. That's really the biggest concern that the NRC has, that's why we included Unit 2 in the confirmatory action letter. That it had to be evaluated for impact on Unit 2 before it could return to power.

So what we're really, what we've determined is, it is susceptible and we need to make sure it is understood and actions taken, it could only be a matter of time as we understand the fabrication differences between Unit 2 and Unit 3. In all likelihood Unit 3 showed itself first because of some fabrication issues. Unit 2, we've got to make sure that it does not show the problem does not manifest itself in unit two. So we want to make sure it is prevented before the plant returns to power. I hope I'm answering your question.

>> Don, does that - - do you want to follow- up, or Gene, do you have a related one or a new one? Okay. Do you want to follow- up on that before we go on?

>> No. I mean it strikes me that this is an experiment because you got one generator of identical design has failed. And the second generator of identical design with maybe some subtle differences in fabrication is going to be tested for five months at 70% power. That seems to me a- - a dangerous experiment to perform for all of us who live close to San Onofre. When you already have the precedent that one of the two identically designed reactors or steam generators has failed.

[Applause]

>> So, so you're concerned, your concern is - - since they are so similar, why is one thing going to happen with - - one - -

>> Why take the chance?

>> All right. Elmo? Maybe some further elaboration?

>> Well, yeah. I mean, I appreciate your comment. I think there's a couple of things I would offer for perspective here. One, there was damage in Unit 3, substantial. It is not yet been repaired. We appear it is going to take some amount of effort and time before those repairs can be made. So it's, it's further down the road at any rate. With respect to Unit 2 then what we need to see and present - - from Nuclear Regulatory Commission's perspective, if there is a technical basis for, for this steam generator can be operated without this problem manifesting itself. So, I haven't read their submittal, we will certainly talk about it more. What you should look for and what we're looking for in that submittal is this of sound engineering

technical basis for starting up Unit 2. Because we don't experiment with safety with the Nuclear Regulatory Commission. So if, we if we ever give the green light we're going to make sure there is a basis for that before the plant ever starts up.

>> Okay. Thanks, Elmo. Before we go to Gene for a new issue, let me see if, if, if Pete and Ted have something on this, this issue. Pete, do you want to go ahead?

>> Sure. Sure. Thanks. First off let me just say that we recognize that there could be a perspective that this is some sort of an experiment I can assure that the way we approach would with our expert panel and the information we have provided to the Nuclear Regulatory Commission and posted up on our website that should people take the time and it is - - very voluminous, over a thousand pages of information, data and information as you mentioned, but taken the time to read that, I think you will see there is over 170,000 inspections of steam generator tubes that have been conducted. We bought in independent experts whose specific focus was to dissect our conclusions and convince us that our conclusions were wrong. That's one of the reasons it has taken us eight months to build a sound technical reason for first understanding the problem and then assuring ourselves that it won't occur again. On top of that we built in a lot of conservatism and again, that information is contained within the report. As Elmo mentioned I anticipate in the next public meeting we will get quite a bit opportunity

to discuss that. I will just say, why on Unit 3 and not Unit 2? Science and evidence out there in the in technical journals that professors have developed over many years since the 1970s have shown for fluid inelastic instability to occur you have to have two things - - you have to have adverse thermohydraulic conditions and ineffective tube supports. Unit 2 operated for 21 months at full power with no, essential tube, or tube wear. Unit 3 only operated for 11 months and had the tube leak and there were 300 some odd other damage tubes in the Unit 3 steam generators. One thing that we know from the data we have taken and from those facts, 21 months on Unit 2 and only 11 months on Unit 3, is that the tube supports on Unit 3 are not as effective. We feel that is because of these manufacturing adjustments. Nonetheless, I said there were two things required. Adverse thermohydraulic conditions and ineffective tube supports. Our proposed corrective action to reduce reactive power to 70% from 100%, improves the thermohydraulic conditions, and as confirmed by three different independent experts, improves those thermohydraulic conditions where fluid elastic instability cannot occur even within effective tube supports. We feel that in our analysis, and again, I recognize it takes time to read through it, and understand it, in our analysis I think you will see there is conservatism upon conservatism on why we know we will not have fluid inelastic instability occur on Unit 2 at 70% power. Thanks.

>> Okay. Thank you.

[Applause]

Okay. We're going to go, we're going to go to Ted on this issue. Because we want to - - we went to follow, we want to follow this thread. We're going to go the Ted and then we're going to go over to you. I would just, an observation on what Pete said is that - - there's data. There's data in the report and that's what everybody needs to look at. The data. Ted?

>> Yes. Elmo, I want today follow- up on this issue of experiment I think it is really important for the precedent to be discussed. Please, if you could discuss or layout a little bit the past history of plants that are on rated at low power with the NRC approval for continuing through a cycle. I believe an example would be Palo Verde and another one would be Seabrook as occurring right now and in Palo Verde it was due to steam generator issues. Could you expand on that please?

>> Elmo?

>> Do you want someone from your staff to address?

>> I don't have the specifics, but Ken, Ken might be able to offer, Ken Kowalski from NRC headquarters perspective on what we are done with other plants at reduced power.

>> Okay. Ken? Or - - please introduce yourself. We want to get you - -

[Laughter]

>> All right. I'm Ken Kowalski from the NRC. I'm a senior level adviser for steam generators. Number of plants had tube integrity issues over the years. They proposed various corrective actions in order to address those issues. They've made steep generator design changes in order to change, for example, thermohydraulic conditions. They performed more frequent inspections during the course of an operating interval, typically referred to as mid- cycle inspections in order to ensure tube integrity is maintained. There have been proposals to operate at reduced power and I believe some plants are on rated at reduce powerful short periods of time to address the tube integrity issues.

>> Thank you very much. We're going to go to Gene.

[Applause]

>> Can you hear me? Well - - Mr. Dietrich I'm not sure that's quite conservative enough and that might be funny coming from a person like me. But I would say that, um, first of all, I have to say, I'm not a nuclear expert, but I have read the part that you talked about and I have started reading your report, I wish you could have made it a lot shorter.

[Laughter]

But, so here's a simple question from artist contractor guy, is it true that the only way that you're going to know if the steam generator is broken again is when you get a radiation leak? And, in the part that I read it said that you're going to institute a sound safety monitor nearby

to hear if it is leaking. And so that may work. That may not. It sounds like a new experiment but for me, to use Don's analogy, when a car is broken, as I read your report, you haven't fixed anything except plugging the tubes and putting, putting on a - - um, a, a monitoring system for sound to see if it's leaking. So how is that going to work? Are you going to send employees over to check on this? Like the fire watch debacle that you had for five queers? You mean - - [booing]. You're going to start - -

[Applause]

>> Okay. Everybody, please, let's, let's hold it down so that Gene can finish and we is hear from Pete Dietrich.

>> So you're going to start your reactor using a broken steam generator that you haven't fixed, but you're putting in place a couple extra safety devices and maybe this concept of having people go by and check it. If I were repairing my car, I'd fix the (bleep) thing before I started it.

[Applause]

>> Okay. Pete, do you want to, want to address some or all parts of that? Thank you.

>> Yeah. Thanks, Gene. I think it is important to point out that the leak occurred on Unit 3. That there was not a tube leak on Unit 2. So when we refer to the plant being broke, I just want to point out for clarity that the leak is on Unit 3. We are addressing Unit 3 separately and we view, because of the amount of tube wear on Unit 3, likely there will have to be

some sort of repair. Potentially a relatively extensively repair before we begin operating Unit 3. We need to convince ourselves that Unit 3 can be operated safely. I think it is important to point out that Unit 2 operated at its full operating period at 100% power. That is the maximum expected amount of time that we would operate one of those plants before shutting it down and going in and inspecting the steam generators. Nonetheless, because of the adverse thermohydraulic conditions at we know are present at full power. Even coupled with what we know are a the current set of tube supports on Unit 2, we feel it is appropriate from the safety standpoint to reduce the power on Unit 2 to improve those thermohydraulic conditions and prevent anymore wear, where we are to see any unexpected tube support loosening. On Unit 2, in addition, to running at 70% power we propose operating the unit for only 5 months. Half of the period in which Unit 3 operated before we shut the unit down and inspected all of the tubes again using the same technology we have inspected the tubes with. Further, this is all contained within the reports available at the S.O.N.G.S.community.com website. Feel there is adequate amounts of conservatism there to allow us to put this asset in use to provide clean, affordable, reliable electricity for our customers in southern California and at the same time allow us to continue our work on Unit 3.

As far as the vibration loose parts monitoring system that you referred to. We are installing a state- of- the- art system that we anticipate may

be able to provide us some additional early warning type of indications, but I want to point out that the symptoms we had in place back on January 31st were fully effective. It identified a very small tube leak that was less than half of the text spec allowed leaking, technical specification leaking from Unit 2 and our operators took the appropriate safe action. They quickly shut the plant down.

[Applause]

So again we take the responsibility to operate the plant safely, very, very seriously and to protect the health and safety of the public very, very seriously. I think the acts we demonstrated of January of this year show that.

[Applause]

>> Okay.

[Applause]

So we're going to go to Dan Domingos and then Rochelle Becker. Dan, on this issue.

>> As a reactor operator we constantly train on procedures in a simulator, which is a mockup of the units and one of the procedures we train on is a tube leak. We train every five weeks. In fact I'm slated to go next week to do a week of training.

This training is not something new, as I said, at the tube leak procedure was part of my training when I got my license 25 years ago. These procedures

are required by the NRC. You train until it becoming basically second nature of what you got to do. And, well, I was not there the night that Unit 3 was shutdown, but it went according to the procedure. We have instrumentation that alarms that 30 gallons per day leak and - - I mean off the top of my head, that's about a little bit over 2- ounces a minute leak. We had the alarm. The operators initiated the procedure and they shutdown Unit 3.

[Applause]

>> Okay. Thank you, Dan. We're going to go to Rochelle and then Gene Stone has a follow- up question on the one he asked. Rochelle.

>> Yes. I have a question on concrete. I know it's not a steam generator. Concrete domes at San Onofre. About a year ago, in fact a year ago at October. There was a NRC letter to Southern California Edison questioning the concrete repour of the San Onofre domes. It was a concern of ours in 2005 because Edison had the several years of being unable to meet their safety culture standards. We were concerned by cutting 28- foot by 28- foot holes in containment, putting the old steam generators out and putting them back in again, until they had operated maybe one quarter without the safety culture problems.

We want to Senator, well, first we went to the Nuclear Regulatory Commission, and they said, no were not really worried about this. So then we went to Senator Kehoe, San Diego, state Senator, and Senator Boxer and said we're concerned about this. And they sent a letter to the Nuclear

Regulatory Commission saying we're a little bit concerned about this, too. And the Nuclear Regulatory Commission wrote back and said don't worry -- we're looking at this very carefully. So, this is the NRC looking at steam generators very carefully. However in October of last year I received a letter from the Nuclear Regulatory Commission to Southern California Edison about the cement pour of the domes. I didn't know what a meant to be very frank with everyone here. So I waited until I saw Edison's response. I still didn't know what it meant, so I sent it to a senior lead engineer at the union of concerned scientists who everyone knows, Dave Blackbalm and asked him what it meant. He said it is probably one of three things -- either they just didn't cross their Ts and dot their Is. When they do that it will be okay. Two, they have smaller problems. So three it could be a great big problem. So, I wrote the NRC back and I said, what's the status of the steam dome, the concrete issue and they didn't respond at first. So, I wrote them again. And they responded and said we're looking into it. I wrote them again in June and asked them about what was going on, they said we're looking into it. I asked them again in September, and they said, again we're looking into it. I said will we know before October 9th when the NRC comes to town? And they said, yes. We don't know. I haven't received an answer to that. So basically we know the yoke of Humpty Dumpty is not working well. Now we know the shell of Humpty Dumpty may not be just fine. And so we're fairly sure that all the kings' horses and all the kings'

men are going to try to charge the surfs on this and we would like to know some answers before they charge.

[Applause]

[Boos].

[Applause]

>> Okay. Let's hear from Elmo Collins. We're going to hear from Elmo Collins on this. Elmo, what do you have to say on that?

>> Yeah. I appreciate, would you summarize your question, Rochelle for me so we can make sure - -

>> Sure. What is the status of the cement or the concrete at San Onofre.

>> Okay. Thank you for that question, I'm going to let Ryan here take that one.

>> Sure. I'll wait for the camera to switch here. I'm hi. I'm Ryan lions, I'm with the Nuclear Regulatory Commission. I'm actually the branch chief over San Onofre. One of my direct responsibilities is to make sure that the inspection program is carried out at San Onofre.

And Rochelle, thank you for that question. We do have a goal of six months when something like this, there was a technical interface agreement, basically our requests back to assistance from our headquarters offer at the concrete restoration. What I think you're referring it is the holes that were cut into the concrete domes, into the containment for the steam generator replacements. We had a question on some of the methodology that was used

by Southern California Edison in examining the structural strength of that concrete. The methodology that they used was not specifically described in their safety analysis, a method that was used. That review is actually still ongoing. However, the technical resolution of that has been finished. We don't have any technical concerns with the strength of the concrete. The concrete has been restored. The domes have been restored. What is left to be done is really the regulatory significance of not using the methodology that was specifically described. So that's really where we are on that.

[Applause]

>> Okay. Thanks, Ryan. And - - let's go to Pete Dietrich on that and Gene, I'm not forgetting we have to come back to you, but let's hear on concrete or cement.

>> Well, I was just going to point out to make sure everyone in the audience understands and Rochelle that you understand as well, following the closing of the construction openings and the reassembling of the areas around where the construction opening were for the construction of the steam generators, we tested both of the concrete domes using a process that's called an integrated leak rate test. Where we actually press of the inside of the building with compressed area with a pressure around 60 pounds of pressure per inch gauge. And make sure there is no leakage from the building or that any leakage from the building is within allowable limits required within our technical specifications. And also after the integrated leak rate

test we went back and looked at specific areas of the construction where it was closed up and did constructive examinations of some of those same areas. So in addition, to just conducting the analysis of the strength of the concrete, there was and, there was a pretty serious, or thorough set of tests that were conducted following the completion of that concrete work.

>> Okay. Thank you.

[Applause]

Thank you all, thank you, Rochelle. Gene, Gene Stone.

>> Hello?

>> Thank you.

>> All right. So the follow- up to my question earlier and my a little bit analogy about driving the broken car, was how many steam generators replacements and this is for Elmo, how many steam generator replacements have been licensed that were under rules 50.59 and how many were not?

>> I'm going to turn to the headquarters technical staff for a better answer, several have been done under 50.59. I'll ask Ken to provide the details.

>> Okay. We're a little bit off topic because that's an NRC process issue, but - - can we, can we go to - - let's go to you.

>> Starting in about 1989 plants that replaced their steam generators use the 50.59 process. There's been about 55 replacements in the United States and I'm guessing around 8 prior to 1989. So around 45 replacements

have been done under 50.59. Approximately - - 8 were not, I'm estimating. All of the replacements prior to 1989 and replacements started in the 1980 time frame.

>> Thank you. And question was - - how many were not.

Okay. Others on steam generators? Grace?

>> I'm not sure if this is exactly steam generator or not, but I want to go back to the reduced power, that thread, that thread of thought and I know that the need for the licensing amendment for the steam generators comes up in the process, but when we're looking at the thread about the reduced power, it's my understanding that nuclear power in California makes up 15% of California's in- state electrical generation and only 13.9% of the entire California power mix. Now, my field is human development, so it's not steam generators, but that would sound like that San Onofre actually gives the state about - - [no video].

¶ [Music] ¶

>> Some of what I consider the most highly trained and skilled workers in the world working at San Onofre. My question - -

[Applause]

- - and it can be filled by anyone on the panel, is there an issue at all in regards to the craftsmanship, the - -

[Applause]

- - and it can be billed by anyone on the panel, is there an

issue - - at all in regards to the craftsmanship, the labor, the - - the, the working conditions that my people work under, because as I understand it, it is one of the most safe places ever to work at, the industry's - -

[Applause]

Incident rate is low there. There are no issues as I understand from, from nuclear fall out on any of that. Is there anybody there and I love what you said earlier, brother, about the construction workforce there, does anyone there have a problem with my folks?

>> Okay. And are your folks in the lemon shirts?

>> You know if you work at San Onofre, will you stand up?

[Applause]

>> Okay. Thank you. Thank you all. Thank you, Mr. Lemon. This is - - generally related to steam generators. I don't know - -

[Laughter]

- - I don't know if anybody can, wants to respond to that, but - - but Don are you going the leap into the breach?

>> Sure, I have a little political experience.

>> Okay.

>> You know, we appreciate the skill and dedication of people who work in San Onofre. I'm concerned about their safety - -

[Applause]

- - their first in line if anything goes wrong. And certainly none

of us are alleging construction defects of the workers that are here tonight.

[Applause]

- - however, the issue industry has some explaining to do. I think they use incorrect modeling for building these steam generators. I think they don't have enough liability for the mistakes in there describes so that California ratepayers will end up absorbing more of the cost replacing faulty generators then they should have. That was obviously, a business decision at some point, but if there was any items not up to par, I think it was done by the industry - -

[Applause]

Let me - - ah - - answer that. Pete?

>> Thank you, Don. We have a question here, we have a question here, and here. And right there. And then what we're going to do is we're going to go to Rick and you see these people, Rick, but we're going to do these four or five and then switchover to Rick. Yes, sir.

>> My name is reed royalty, I was a U.S. navy submarine officer, I was not nuclear trained, but I lived in the nukes and admire and understand how well and carefully the equipment is operated and maintained. Submarines operate under conditions that are probably 100 times more challenging than those that face S.O.N.G.S. That there is never been an accident or death attributed to nuclear power in 58 years of U.S. submarine operation. We have lost two nuclear submarines during that time for reasons that had nothing

to do with the nuclear plant. As I understand S.O.N.G.S. was taken offline for reasons that had nothing to do with the nuclear plant but was confined to the steam turbines. I do not share some people's fear of nuclear power. It is physics. It is not witchcraft, we urge you to complete the tests and then restore normal operations.

[Applause]

>> Thank you. We're going to go - - thank you. We're going to go to this gentleman here. All right. We're going to take a few of you then we're going to switchover to that side. Go ahead sir.

>> Yes. Hello. My name is Ray Lets. I'm with Citizens oversight. I did attend the last meeting and I asked a question there verbally and I also followed it up with a written request for an answer. That request, that question is - - what is the actual cause of the failure? Now we always cite excessive steam velocity or the femoral elastic instability, but that's just the proximal cause. You need to actually follow that up and find out what actually caused the excessive steam velocity that then caused the tubes to fail. Ultimately, I believe what you'll find in your very cautious not to say this - - what you'll find is that the design was a failure. The people who designed this apparently, with Southern California Edison and Mitsubishi Heavy Industries made far too many changes to these steam generators. They thinned the tubes. This is not mentioned in your, in your report. Tubes were thinned by an additional 11.4%. You took 11 tons of

steel out of the tube bundle. Then they came up with a novel new shape. They came up with a new way to support them. They didn't do - - sufficient modeling. They did not do mock up testing. Now, we know today that the steam generators that were installed are quite a bit different than the ones that used to be there. And there a safety concern. Absolutely are. Yet when it went through your process, the 50.59 filter that's supposed to catch anything that's a safety concern, nothing was caught. And even when you analyzed the later you said, we wouldn't catch it again. Nothing was a problem except for one thing - - some program that was missed, wasn't used correctly.

So what we're faced with is an organization, apparently, that's not able to correct itself. The NRC is unable to say, number 1, that they were miss designed. Southern California Edison said that the ultimate cause is the excessive steam velocity and not a design mistake. Oh, they don't want to say that. Secondly, you won't say our process is broken. 50.59 doesn't work. What it does is allows things to creep through. Especially when the engineers admitted and, and the journal article that their goal was to avoid NRC approval. What I'm worried about is this - - are you going to look at this problem of how this crept through your system? Are you going to answer my question about what the ultimate cause is probably say it was a design mistake by Edison and they are license for that? And that we, the rate payers should not be paying for anything after this point.

[Applause]

>> Thank you. Thank you, Mr. Lets. Elmo, I - - Elmo, I think everything was captured in Mr. Lets last comments about the 50.59 and the ultimate cause of, of this. Do you want to talk to those?

>> Well, let me start and then I'm going to turn it over to one of the headquarters staff. I believe we agree that there was a design failure here. The design objectives that steam generator were not met. In terms of the, and so that's actually an open question. It was one of the open items from our inspect team report and we're continuing to do a follow- up on it to get the details behind, what was behind the modeling problems with Mitsubishi and the themrohydraulic. We know that contributed somehow. We're, we're continuing to do inspections to, to, to better understand that. With regard to the 50.59 process, we've, we've looked at, we've inspected that as well. And I think we have some of the same questions that you have about our 50.59 process and what should we be doing, what could we be doing associated with that to improve our process? That's I'm going to turn it over to - -

>> Please introduce yourself to us.

>> Sure. Hi. My name is Dave Pelton, branch chief of the NRC. Me and my staff are responsible for the implementation and care of the 50.59 process. As you heard from Elmo, you know, there's, I think we heard from one of the panelist, young lady behind me, how important lessons learned are. We're

going to make sure that we take the lessons learned from the events at S.O.N.G.S. and we're going to look at 50.59 and look at where it fits in a larger regulatory process. 50.59 is a simple process, frankly, just ask the question, yes or no, do I don't need a license amendment. It is not a design review. It was never intended to be, but it does look at and concern itself with design function and look at function. Anything that we can learn from S.O.N.G.S. that would have been an indicator that design function was - -

¶ [Music] ¶

[Video buffering]. [No video].

>> We may not be taking a break. Okay. We're going to go right here.

>> Hi. Dave Likeness. City commission, Vallejo, I'm a council number. It is the largest city in south Orange County here. We are all concerned with safety. That's a, that's pretty obvious, but we should also for the confidence of the, the NRC and Edison and, you know, they do not have a track record of, of, of, I don't want to say something like screwing over people, they have a good track record in our city. My question is - - this here - -

[Applause]

- - I have been to the facility, I have been to S.O.N.G.S. I had a tour last year while I was mayor. I have seen the security up close. I have seen the safety up close and I was very impressed. The residents that I deal with

are interested in getting it - - um,, but in a safe manner. Here's my quick question. Two quick questions and then I'll give it to Paul, the mayor of Laguna Niguel sitting right to my left here. Two questions, one - - I heard that when the NRC comes in, it's a one time shot. They look at it, and it is either a yah or a nay, if that is true. Second, has the NRC ever shutdown a facility? Thank you.

>> Very good. Thank you. Dave, my name is Paul Glab and I'm the mayor of the city of Laguna Niguel. And we are very, very close to San Onofre, as everybody knows. You go to geography. I also search as the chairman of the board of directors of the Orange County Transportation Authority. So I take this responsibility very seriously has many of you have. All of you in this room are convinced that safety is the issue. I believe that it is, but I'm also convinced that the NRC and Southern California Edison are going to do everything they possibly can to make this a very, very safe facility. Thank you.

[Applause]

>> Okay. Thank you. Thank you, Paul. Thank you, sir. We do have a question on the floor if, if anybody, fell no wants to address it, but - - someone asked me for a clarification about leaving and getting back in. It's, you can leave, but then you have to stand in line to get back in, because the fire code limits this room to a certain number of people. So they're monitoring that out there. So. I hope that explains it.

Elmo, so you have an answer to this gentleman's question?

>> I, I, I think it would help me, Chip, to give the question was - - is this a one time shot? I need some clarification on that, that, to really know what the question is.

>> For the restart.

>> What, what, what for the restarted?

>> I heard when the stag comes in to examine and to do an evaluation, it's a one time, they look at, they won't come back and visit again, is that true or not true.

>> Okay. I think I understand it. The answer is no. We'll be back and we'll be inspecting. When we have actually have two inspectors on- site full- time, so - - I think the other question was has the NRC every shutdown a nuclear power plant. The answer to that's yes. I think I need - - were, for temporary, for permanent, there's a whole context around, have we ever shut them down, the short answer is yes we have. And for safety reasons. Ah - -

>> Okay.

>> We're going to take, we're going to take two questions here and then we're going over to Rick's side of the room. Yes, ma'am?

>> According - - is it on? Okay. According to the figures on the NRC website, complaints of safety problems, San Onofre in 5 years from 2007 to 2011, San Onofre had the worst safety record, 144. Let me read from the

opposite end of the septum. I'll read you the first front, best ones. It starts out -- 5568891010111111121313131515. I could go on. Okay? So and also, you have, you have -- so --

>> Hey, ma'am, can you finish up with this?

>> You mean I don't get to talk as long as all the other guys?

>> We're trying to keep this, we're trying to keep this to questions now about the steam generators.

>> Well, it is safety about the steam generators. Okay. Okay. So, I guess Mr. Dietrich and Mr. Collins with all due respect, I would like to know why, Mr. Collins, why you allowed this to go on for five years and also, Mr. Dietrich, it is quite a bit of difference in the numbers from 5 until 144. And so, when you say that safety -- when you say that safety -- when you say that safety is of your utmost concern, it is very concerned for an intelligent person to believe what you say when the facts are very, very different. Thank you.

[Applause]

>> Thank you. Okay. Thank you. We're going to go to one last question here and then Rick, we're going over to your side. Then we'll be back. Yes, ma'am?

>> Hello. Hi.

>> We have someone, there's going to be another question here, and then we'll see fell no wants to say anything about the general questions okay?

Go ahead and ask your question, please.

>> Hi. I heard a presentation the other night by someone who I wish was able to be here and I'm - - unable to do justice to the presentation. But there was a study done by students and professors at, at the university in Santa Cruz. And they, they studied the claim that the - - steam generator problems in San Onofre are similar in any way to other steam generator problems around the country, because that claim has been made, this is just one of many problems that we've seen. In fact, the number of, of degraded tubes in other steam generators was minuscule, 0 to 4 is what I recall from the presentation, that's just how many tubes were degraded. There were none that were plugged in recently replaced steep generators. So this is a very unusual situation. And I would like to hear a comment responding to that.

>> Okay. We have two questions on the floor. One is about the safety record. Okay? Right. And the second one, the second one is about the steam generators. So, can we talk to the steam generators question first? Elmo? Do you, do you understand what she is talking about on steam generators?

>> Yeah. I think so. And I think the, the, the - - perspective is accurate. There were a high number of, very high number, unexpectedly high number of wear indications even on Unit 2. We already talked about Unit 3. Unit 2 has a very high number of wear indications as well. I would offer, first we need to take a look at the evaluation that is contained in the

submittal that Edison gave us last week. The requirement is to maintain structural integrity. It is not unusual to see wear indications. It's not unusual to see plants start up with that being evaluated and they do maintain integrity. What is interesting here is the high number, but it also has to be evaluated, but for those types of wear indications on Unit 2, the types of wear are relatively well understood and evaluated under the technical specifications of our tube program, but that is something that we will need to, to take a look at in, and inspect as part of our processes.

>> On the question that was brought up about the - - the safety record. Do we have any comments on that from, from anybody on the panel at this point? Elmo?

>> Yeah. I was going to say I thought I saw a chart or a poster board reflecting that information earlier. So - -

>> There it is.

>> Yeah. I appreciate that. And, yeah. I know, I know, yeah - -

[Laughter]

I think, the NRC has - - I'll just say pretty exhaustive safety assessment process. It takes into all sorts of information and dada. One of which is the number of allegations or number of concerns that we see people bringing to us throughout the year in, and, and we post that data on our website, I think that is the information being referenced here. About two years ago or so San Onofre was such, had such a high number, it was

a concern. We issued a specific letter to, we called that the chilling effect because we did not feel that employees had the correct level of willingness to bring forward their concerns. That was a major concern to the Nuclear Regulatory Commission.

[Applause]

Since then, a number of actions have been taken and we have been inspecting it. We seen the numbers come down. Roughly maybe half of what they were at an annual rate. There is still plenty of room to improve at the site. So, I think that is the NRC's perspective.

>> Okay. Thank you. Thank you for that question and data. Thank you very much. We're going to go to Rick over here. Rick? If you want to start taking - -

>> Sure.

>> Thank you, Chip. Let's stick with the team of steam generators for now, folks.

>> Yeah. Thank you for helping me up. Joe Holesman. Mission Viejo. This is the ninth meeting that I've attended concerning San Onofre. In reviewing my notes of 2008, I got the paper here, it said San Onofre concerns aired about safety. The last meeting I was here I asked a question about engineering. It has to using a methodology that engineers use call failure mode effect analysis. Now, Mr. Dietrich answered that question and sort of faked his way through it. It was obvious to me that it wasn't used in the

design. The algorithms and the models were 3 to 4 hundred% off. So Elmo, are they going to use FMEA. And if you need any engineering help on that the University of Michigan or the University of Washington are well schooled in that. And all reference to Dave, he doesn't know what the hell talking about.

[Applause]

>> Thank you. Just a second. Elmo?

>> Well, would you, would you take a stab at framing the question for me. I want to make sure my response is - -

>> Elmo - -

>> What, what I would like you to do is making sure in your design review and in your pauses that we're going to employ in reviewing what's going on and in any kind of startup process that you're using failure mode effect analysis. It is a very simple technique. Hell, I learned in engineering school in 1964. It's been around that long. Ford uses it. McDonald Douglas uses it. Boeing uses it. Lockheed- Martin uses it. All of the big engineering outfits in this country are well aware of it. General Electric in the production of their steam generators are using it, too.

>> Thank you. I guess I'm probably not as knowledgeable as the details of that process as you are, but - - there, I, in our review so far, we've seen a number of cause analysis techniques applied by, by Edison. There's, there's a whole, there's a whole fleet of them out there to be able to be

used. I think they're all good if they're applied rigorously and discipline to produce the causes for problem and problem analysis when they are, when they are employed - - so - -

>> Thank you, Elmo.

>> My name is Julie Telly from Mission Viejo and I came with a planned speech, but I now understand that it has to be about the generators so my question is - - centered around some of the things I heard tonight. And I'm going to preface it with just a comment or two and then I will end with questions to the panel about generators.

Would it be possible for me to hold this myself, okay. I just want to thank the NRC for this opportunity. And I also want to thank the people at orange, at first I thought they were here to represent Orange County. Now, I understand they are here to represent their jobs. And those of us are here to represent the lives of those in Orange County. I will ask the questions to the panel about generators in just a moment. I also just want to say that to the nuclear scientists over here - - we are concerned about a nuclear fallout and what that would do to the health, that would be if the generators were to blow, or be in disrepair and cause damage, the steam generators were to cause damage, you were talking about the milisieverts whatever they are called - - and that is what would happen should we have a meltdown, we would be affected by our health. The NRC's own gold standard for a nuclear meltdown is based on Hiroshima, is that not correct? Yes.

It is. And the amount of radiation is how it affects the health of people. I'm a licensed nurse. I don't know if I told you that. We go to, we go to an oral surgeon to have our teeth pulled you talk to nuclear experts they are going to tell you the good side of nuclear. We see here, I'm sorry.

[Laughter]

Okay. My question - - all right. Question - - question - - here we go. All right. All right. Number 1, okay. First of all, I, a little bit tired of speaking about the meltdown and the steam generators - - if there is a meltdown, is it a gamble? Is it or is it not a gamble to the state health of the people? Number one, that's my number 1 question. Number 2, and I would like hands on this one. Which of you, which of you go to the dentist, if you're really so saying that it is not a big deal that radiation is not a concern, how many of you go and don't put the lead aim ran on when you get your teeth x- rayed. Okay. And just one more thing. Okay - - so anyways, I guess that is it. I want everybody to realize that the gold standard is Hiroshima, there is no known safe level of radiation. No known safe level. Okay. That's my question. Is there any known safe level of radiation. 1, and 2, yes or no it is a gamble or is it not a gamble to run the station without the, it being fixed and proven safe under legal - - under the judiciary hearing.

>> Thank you, Julie.

[Applause]

Anyone care to respond to that?

>> Yeah. I think - - yeah. Listen, please, thank you. I - - I'm not sure I understand the questions - -

[Applause]

[Laughter]

I'll, I'll speak, I'll - - no.

>> I'll hold the microphone this time.

>> Is it a gamble or is it not a gamble? Yes or no?

>> So you're saying is it a gamble to have - -

>> Or a judiciary hearing to keep up the station in operation? Is that a gamble or is it not? Yes or no.

>> I really did have trouble understanding it. It was not that clear, I'm not joking.

>> Do you want her to restate the question.

>> Rick, repeat the question.

>> Is it a gamble to keep San Onofre in operation before it is proven safe under a judicial hearing.

>> Okay. Thank you. First is it, is it a gamble, as I have stated earlier the - -

>> Just, just - -

[Laughter]

Okay. I will say it is not a gamble because what is necessary for

etiquette protection is established by the Nuclear Regulatory Commission and they will not be allowed to resume power until they meet those requirements so that's the level - -

[Applause]

And - -

[Applause]

- - we - - the Nuclear Regulatory Commission, we're not going to gamble with safety. So thank you.

>> Okay. Thank you. On that - - I know people can go on with their questions and I'm going to ask people to be brief, briefer. We're going to get to, to, to most of you, but one thing I would ask you is that - - let's not shout down people. Let's not make fun of people.

[Applause]

Okay? Let's, let's just not do that. A lot of people are saying, look, we really need a break and they don't want to wait in line again to come in. So - - we're going to try to figure that out so we can let you all go out, but there are only four bathrooms. Okay?

[Laughter]

So we got, we got an issue, but - - Rick, can you take a couple of questions over there?

>> Yeah. I'll let the panel go first.

>> Thank you very much. My name is Mike Geary. I'm from San Diego,

California. And the question I have is this - - if we want the ultimate resolution of the question of safety and reopening to be something that the entire community can support, given the fact that the Nuclear Regulatory Commission does not enjoy the confidence of the public as a whole in large segments of the community, do not feel that you're capable, willing to represent the safety concerns of the public, would it not be better to have litigation filed in the United States district court in San Diego and to take the Southern Cal Edison's executives involved depositions and have the, have the, as are you and have, and have, and have that process go through the normal process? You know, that's how, whether you like it or not, that's how we get to the truth in this country is through cross- examination. Collaboration is important, but when you have a situation where the generators were put in without the relicensing and since then not a single person has been held to task, not a single person has been put in jail. Not a single person has been found to have done something wrong - - the fact that we have someone from Texas, great state of Texas, instead of someone from California overseeing these procedures, wouldn't we be better off having the united states district court judge in the state of California making the ultimate decision not the Nuclear Regulatory Commission? Thank you.

[Applause]

>> Elmo?

>> Well, I think, it's, it's a fair question. Where I'm obligated to

do is follow the law and follow the regulations established by the Nuclear Regulatory Commission. I believe we are following them. We've got a lot of work ahead of us. So there's, there's a lot of information to look at and how the information, how the NRC process is that moving ahead, I think, I think we'll see, but right now, we, we are, we are in our inspection process and we're following that.

>> Okay. One thing on the, excuse me, Rick. Just - - there doesn't seem to be a line to get back in at this point. Okay? So, I think that, that- - the crowd has thinned out a little bit, so if you need to use the restroom, please do that. You'll be able to get back in. We got, we got to - - we got to get people in the back and - - Rick, can you just let me get one gentleman up here before you go? Okay. And then we're going back to you, Rick.

>> Yes. My name is (Indiscernible), I'm the business manager of San Diego labors international union of North America, local 89.

[Applause]

I'm also an executive, I'm also the executive board member to the southern district council labors representing over 20,000 workers thwart southern California. We have employees that work at San Onofre, Diablo Canyon, and all over the United States. I'm proud to stand here today and tell everybody here on this panel that I'm proud, although we, we are not working that much at the plant at this time, I am proud to stand up in front

of my members of NRC, the job that they're doing to make it safe with Edison and all people on- site. And I know we will get there. When the time comes, when, when all of the requirements are met, you're skilled crop, not only labors, but everybody else will be there make sure they are earning an honest living and not being attacked. I deserve the right to standup for the people that were addressed in the orange shirts. My question is - - show some respect while I'm speaking first of all - -

[Applause]

Thank you for allowing me to speak. This is a democracy, that's why were here. Thank you very much.

[Applause]

>> Okay. Okay. Rick, you got someone?

>> Gave us your name.

>> Okay. Hi. I'm Lee Haydue from the city of Del Mar. I'm a city council person. SCE came to our city council a couple of weeks ago and we had a resolution addressed to this issue. One of the things that was told to us is that SCEs did say that NRC was responsible for our evacuation. Nobody has addressed evacuation of citizens. I would like to know how NRC is going to do our evacuation plan. Are they just telling us, that it is you to get us off your back. My next question is how much are these union representatives here, I mean employees being paid, and is that being charged to the citizens.

[Applause]

[Booing].

>> Elmo? Pete?

>> I think, let me speak to emergency preparedness. One of the strengths I believe and I get to see a number of nuclear power plants in region 4 is the support and the capability of the, the local authorities around San Onofre could excrete the evacuation. It is called the Interjurisdictional Planning Committee and they, they cross jurisdictions. They were very well together. And the primary, it is exercised that evacuation capability is graded by another federal agency, FEMA. And they, they score whether or not the plans have satisfactory or not. So that's how our evacuation is going to be conducted if needed.

>> Elmo? This is Gene Stone. When we were planning this meeting and - - we found out that the union people were coming, I was told specifically this was not going to be a pep rally for the unions. Now, I'm a pro union person. I have been a union, pro union my whole life and if we went to go outside and get some beers and have a pep rally for the union I would attend. I wouldn't drink any beer, but I would go.

>> Yeah. Thanks, thanks, Gene.

>> I would like to see us stay on topic.

>> Yeah. I think you - - thank you for that reminder. I think I agree with you. We're here to try to present information, have an exchange. It

becomes difficult, you know when we get loud. So, I will, I do appreciate, I really appreciate your attendance tonight. So.

>> All right. Folks, we're going keep taking questions around steam generators and safety, but I just want to remind you all to just let folks ask their questions, show them respect. We'll get to you as soon as we can. Go ahead.

>> I'm Tony Iseman. I'm on the city council in Laguna Beach, my 14th year. I've been paying attention to San Onofre for a long time. And to follow- up on the question of the worst safety record and the highest member whistle- blowers and the challenge of is it safe or whatever that was, I'd say it would be fun to take it to Las Vegas and see what the odds are in this one, but my, my real specific concern is I spoke with someone from the union of concerned scientist whose say his greatest concern about San Onofre is that there is a fire plan that was due in 2006. And every year the NRC has given them maybe an incomplete or wait. It is six years later, my question is - - do you have the fire plan in? My second question to Mr. Dietrich. When you hear these things I don't know why you're replacing things or managers every few months and we keep seeing people going through the plant trying to fix things. We don't know what they were trying to fix, but if I were in your place, I'd cut my losses.

>> Thank you, Tony.

[Applause]

Can we address the fire plan?

>> Certainly. There are, there are a number of federal NRC requirements associated with fire protection in San Onofre. Thank you for pointing out that we do inspect them and where, where there are weaknesses in that, compensatory measures are in place. So the Nuclear Regulatory Commission actually has a long- term plan. It's an issue, generally speaking nationwide with nuclear power plants and fire protection. We're implementing a plan - - it's the National Fire Protection code 805 is being implemented in a number of facilities for the long- term resolution for this, but for today, there are sufficient measures in place.

>> Okay. Thank you. We do have a steam generators question here and then we're going to go to that gentleman.

[Applause]

>> Hi. My name is Robert Strunk. I'm obviously a local 89, but also, I'm a student, at, at MiraCosta College for the NAPO class. And one of the things you thought us in the operations class is every time we're going to take an action on any type of operation system is that we always anticipate a result. We came up with a 70% number. If you guys can talk about how you came up with that number, that 70%. It seems to me that if 70% is good to get the better economic out of it, later down the road would we push it to 71, to 72, to find out exactly at the point where we can get the maximum usage out of the steam generators but not sacrificing the safety of the public.

Can you talk a little bit about how you came up with that number, and would we go down to 69, 65, somewhere around there and then what you kind of anticipate your reaction, what you kind of, what your expecting to see in the steam generators as far as flow rates and tube integrity.

>> Okay.

[Applause]

70%. And Pete - - Pete Dietrich. Thank you.

>> Yeah. Thanks for the question. We have done three different sets of expert analysis on the changes in the thermohydraulic conditions that I mentioned in the steam generators. Using three different groups of experts have gone through and verified that the improvements in the thermohydraulic conditions will return our steam generator conditions, primarily steam velocity and something called void fraction or the moisture content of the steam back into a range of known successful steam generator performing conditions in the United States. So that was very important to us, to be able to put our parameters back inside of a zone in a plant where other steam generators, certainly, haven't seen this situation. On top of that, we have the independent experts verify that that will take the steam generators out of the range where we would expect this fluid elastic instability to occur. So that was our first look at the process. That's where the 70% number has come from. After we operate the plant for, at 70% power for five months and perform another full set of inspections we will

take that data and information and build it into our analysis and use that to identify and determine what could be a higher power level or a longer duration that we could safely operate the plant, but we think what's very important, first and foremost is to show and confirm our analysis, again, by three different sets of independent experts at 70% power clearly puts us in a situation where we do not experience fluid elastic instability.

[Applause]

>> Okay. We have one more question here and we're going to go to Rick. We obviously, a lot of people have questions and we're just going to try to get to you. We're going to give everybody a chance to ask one before we go back to anybody who has already asked a question. So let's go to this gentleman. If you could introduce yourself to us please.

>> My name is Marty Moore. I have a quick question for Mr. Dietrich. Marty Moore. I have a quick question for Mr. Dietrich. I helped install two of these steam generators. We watched the best and finest at SCE design these things and figure out how the put them in. No one in this room thinks that it wasn't a miserable failure. Who's going to pay for that? And who is responsible? Because I haven't seen any heads roll.

[Applause]

>> Pete, I don't know, if you can - - what you want to say about that, but obviously directed to you, so - -

>> Well, thanks. Thanks for the question. It is certainly something

that we're focused on and will continue to focus on as we move forward. The case we put together, and what we presented in our confirmatory action letter is the basis for safety. I think it is important that we focus on the basis for safety and what the conclusions have been reached about how we know what is safe to operate the unit. That is what the discussion is about in our confirmatory action letter. That's what the discussion has been about with the NRC. And that's what we look forward to this discussion being here tonight. In the future, we certainly foresee a situation where we will get to that point. Where we will get more specific and identify who we think is at fault and how those situations will be addressed. But, you know, up until this point I will just share with you, our discussion has been on can we safely operate the unit? And we believe we can.

[Applause]

>> Folks just to let you know as Chips earlier, we're going to work section by section, we know you're there. We're going to get to you. Please bear with us.

>> My name is DeAnna Polk. I'm a public health nurse. I have a master's in Science and Homeland Security and a thesis for masters of Science in Public Health for Global Emergency Preparedness response. And until I was laid- off due to budget cuts in June I was the emergency preparedness coordinator for the council of community clinics. I formed the first decontamination response team Scripps La Hoya and I have been involved with

the Department of Homeland Security resilience meetings under Michael McDonald. I know what kind of response we have here. And if the same generators did fail and we did have an event, well first I want to know what type of advance threat and risk analysis has been conducted? Was it conducted under the guidelines of IS800 as outlined in the Department of Homeland Security. And how can you, um, address the issue of emergency preparedness when HRSA funds are being cut and we do not have the radiation detectors add our hospitals that we need. We do not have the money to train and keep retention of, of - - um, people to respond to this event with budget cuts. And, has this analysis been done considering all of the geological factors and the recent plate activity and the earthquake storms? I would like to know, I would prefer that this be an adjudicated hearing, but since it is a public hearing I gratefully, I give my gratitude for at least being allowed to ask these questions. Thank you.

[Applause]

Emergency preparedness, Elmo. What are the standards that we're used in planning for EP?

>> I think, it, it - - looking - - for the - - so repeat the question.

>> Emergency preparedness, what standards, what standards were used in calculating emergency preparedness?

>> For the security, for physical security - - for the community.

Okay. Well, I think I'm going - - I'm not sure that the premise of your statement is true that we should have done that. I can talk about what we have done and will do in terms of risk assessments. In our inspection and through our programs we are completing the risk assessment using the NRC's processes about what it meant or didn't mean to the outlying community.

>> (Speaker off microphone).

>> Okay. I think - -

>> We need to get you on the record.

>> Okay.

>> Yes? We're not using that process.

>> Okay. We're going to go to this woman right here. And Rick is going to go to the gentleman in the black T- shirt. Then we're going back to the panel. Okay? We're going to go back to the panel. Okay? And we're going to come back out here, but we're going to the panel. Do you want to talk about this? Okay.

>> Chip?

>> Yeah.

>> I don't want to cut you off two much. I know this one young lady who has been waiting patiently for a long time to ask a question.

[Applause]

>> Thank you.

>> Okay.

>> My name is Sharon Andstat, and I'm a material handler at the plant. And I have a question - - what resources are in place at the plant for employees to report safety concerns. And I would like to direct that to Dan. And also, has the safety report improved at the plant?

>> Dan - -

>> The, the employees have an employee's concern program where they're free to report safety concerns. And these are nuclear safety concerns. I believe, too, they also look at industrial safety concerns. The NRC also, you can report your concerns to the NRC. I believe they also will take information on industrial safety. They are primarily dealing with nuclear safety, but they will take information on industrial safety. I believe they have a memorandum of understanding with OSHA the Occupational Safety Department to report safety concerns. The represented employees they also have a grievance process to report concerns in addition, the union has a, a safety team, there's about seven members on this team. Employee- led safety team. They report directly to me. And I have meetings with the director of this team. So and, and they're primarily focused on industrial safety, but the leader of the team is a senior reactor operator. He is the safety director. So he also will look at stuff, a nuclear safety perspective, as I stress, he is a senior nuclear reactor operator. Licensed by the NRC. We have reports. So they have those avenues available.

In addition, you canned about the safety record. I will report on the

industrial safety record, because I get constant reports on that. Again, you know, from a union's perspective, one of the most important things or the most paramount responsibilities of a union is to ensure the safety of its members. From that perspective, actually all employees at the station. So - - the numbers on safety have been trending down. They're still room for improvements, obviously, there is always room for improvement. We continue to monitor it. We meet with management I periodically meet with the vice president, Mr. Doug Bowder, along with my safety director, William Doyle. We have, I want to say it is biweekly meetings. That's one of the topics is safety. We don't limit it to industrial safety, we also take a look at nuclear safety.

>> Okay. We have, we have two questions - - we're going back to the panel and then we're coming back out to you people. Okay. Seth, go ahead.

>> Sure. My name is Seth Enter, I'm with Government Affairs chamber of commerce representing 350 businesses and approximately 15,000 employees. My question is - - actually directed primarily to Ken, Richard and Pete. My understanding based on testimony and today and reading the reports, is that grid stability is very important. Safety is very important and COB, and Grace, you kind of opened this issue up when you talked about the percentage of contribution that this power plant brings. My understanding is, is that the significant impact of the San Onofre nuclear power plant generating station is very large, in fact it is about five times the size

of the AS plant that was brought in on- site, so based on that, at 70% with the correction action outlined by Southern California Edison, will these two generating stations, or generation areas provide the grid stability that not only beach and on the beach, but also in the community like bowling needs in order to guarantee consistent operation overtime with those safety measures in place. Thank you.

>> Ken? Richard? Pete? Go ahead. Who's first?

>> Actual I think I probably should be first.

>> Go ahead Robert.

>> That's all right.

>> I mean, the important thing is to have good reliable power and there, if you get 70% of the - - you'd have 1100 megawatts, 70% of that, that would definitely provide good grid support that would help address the needs that we have over the summer. Setting aside the issues about safety and all of that, the, the - - the inputs that we have and the importance of San Onofre station is both in terms of its megawatts it generations, inertia it provides because it is a large turbine. And the grid and voltage support it provides. So it is a pretty strategic location, setting aside the type of generation, but having the megawatts would be helpful.

>> Richard? Ted?

>> Thank you. I had my, my - - card up the backfill anything that Rob missed. I think he hit most of it. To echo it a little bit, this summer

the problem wasn't as much the loss of the total megawatts, it was the loss of the voltage support that it provides. I'm not an engineer enough to explain any of this, other than to know that's the issue. So bringing Huntington Beach back on- line was a large safety measure, even though it was not anywhere near the same capacity as the other plant. It provided the voltage that was needed to be able be able to input power from other places and make sure that the grid stayed at the constant level it needs to stay at during the time. Now, overtime, can we continue with that? No. First off - - Huntington Beach next summer it will not have the air permits to keep running. There if fixes at Huntington Beach that we're exploring now that would hopefully, keep that as a unit to provide some level of voltage support. Then as other power plants on the coast go down, that would create additional problems.

>> Robert, would you - - just a follow- up question?

>> Yeah. I just wanted to clarify. Actually, I think it is Richard, right. Since you were out of the room. You seem to be the nuclear expert on the panel here. So I just want to hear from you as the expert based on your experience, these safety measures seem reasonable and effective. With this power generation the other two have answered, in your expert opinion is that sufficient to guarantee our safety?

>> The easy answer is yes.

[Applause]

>> Okay. Elmo. We have a question from Burt Modal to you.

>> Okay. Right. The failure that took place in Japan was due to natural causes. And then the loss of electrical power, what I have been told the loss of electrical power was not the real reason. That had their not been a failure of electrical power the tsunami would have ground out the pumps and the pumps not being water immersible pumps would have ceased to function and that would have stopped water from cooling. Now, what do you feel, how confident can we in California feel sitting on several faults that something that could destroy or break water feed to our steam generators - - would not occur under natural causes. We have seen many instances where we have been come very close to this country to disasters, floods, possibly flooding a plant. We have plants that sit downstream from dams. Dams bust, we know that. We have tornadoes that are taking down electrical lines. Okay. So how confident can we really be with nuclear power when we cannot anticipate or predict what natural effects can assure that can in essence put us in jeopardy.

[Applause]

>> Elmo?

>> I think that's an excellent question. How do you protect the nuclear power plant against external hazards or natural hazards. There is a whole spectrum of things that can happen at a nuclear power plant. I would just offer that number 1 the NRC has regulatory requirements for protective

measures for each of those hazards. Seismic, flooding, the loss of off- site power and high winds and the plant was designed and built for that. The lesson we're taking away from Fukushima is it needs to be looked at again to make sure that we have assessed the hazard correctly. That process is working right now. In all nuclear power plants across the country to reassess the hazard from seismic, to reassess the hazard from flooding and make sure that we have the particular correct level of protection in nuclear power plants. Great question. Thank you. Pete? Yeah?

>> I just wanted to add at that I'm funded by the National Institute of Health and I get all of the grant applications. There was a recent request for grant applications to develop new medicines to protect against radioactive exposure. The only thing that we're working in nuclear disaster is to prevent against iodine 121 uptake. In the preference for that grant application it said that the national thread assessment team. Another acronym in Washington, thought that the highest risk to our nuclear power plants was terrorist attacks. Followed by natural disasters, followed by engineering failures. And the terrorist attacks were rated as a much higher threat than natural disasters. Worldwide, there have been several incidents where terrorists have attempted to infiltrate nuclear power plants. And in a couple of cases they have infiltrated the perimeter, but not serious damage.

This is a large grant and the reason its out for application is because

there are no radio proactive medicines developed in the last 30 years despite continuing calls for these kinds of things.

So in the event of a serious nuclear release, there really, there's evacuation. Shelter in place. There's nothing else. There's - - there's no medically proactive - - device or, or medicine that can be used to protect us. So that's why safety is a big issue. You know, you can't plan for unexpected events. You can't plan very well for terrorist events. I hope the marines at Camp Pendleton might be helpful, but these are what our government says are the threats to our nuclear plants. So, I just want to make sure that we know about this terrorist threat level.

>> Thank you, Don.

[Applause]

We can take his question and we're coming back to the panel. I'll give you a preview of what we can do in the rest of our time here together, but Rick, go ahead.

>> Pete Dietrich, it is a question for you I believe.

>> Mr. Dietrich. You earlier tonight characterized the document that Southern California Edison recently submitted to the NRC in a request to restart by saying that, at 70% capacity cannot experience the kind of adverse thermohydraulic conditions that we saw before. And later than in response to one of the other questions as you characterized it as three independent groups have identified an acceptable rain for those, those thermohydraulic

conditions running at 70%. My question is - - whether you or anyone else associated with, with the process needs similar or identical assertions to the NRC before the two new steam generators were installed and I have a follow- up question.

[Applause]

>> I'm not aware of anybody making an assertion like with the installation of the original steam generators.

>> Well, my follow- up question then had to do with, if those assertions weren't made before the steam generators were originally installed why it is important for us as a community to put our faith in that single assertion now?

[Applause]

>> First off I would say it is not a single assertion it is the conclusion reached separately and independently by three different groups of experts and withstood the scrutiny of an independent panel that was put together in those talented folks on thermohydraulics in the world. So it's not a single assertion. At the same time, we compared the thermohydraulic condition that we will establish in our steam generators at 70% power to known thermohydraulic conditions in other steam generators in the United States. If shown that those steam generators did not experience fluid elastic instability. So it's both independently determined by three different groups of experts and then also benchmarked or proven against a set of

operating conditions at other plants. Thanks.

>> Okay. Rick. One more, go ahead.

>> Thank you. My name is Maria Seiverson. And I notice a lot of support here by the workers. Before I ask a question of the panel, I'd like these workers, anyone who represents unions or staff, or Southern California Edison, would you all stand up so we can see just how many of you are here. If you are proud stand up so we can see who is filling this room. Come on, if you're Southern California Edison, or - -

>> Hey, you don't need to stand up if you don't want to. Okay.

>> Okay. Well, thank you, because my question is - - I see this is a staff meeting, I'm wondering where the public meeting is, because I thought that's what this is supposed to be. Okay? Now, I do have a substantive question for the panel. If there was - -

>> Hang on. Folks - - hang on a second. Just be patient and let the lady ask her question, please. Okay?

>> Thank you. I appreciate them letting the union leaders speak. And I appreciate also my opportunity, thank you.

Now, there was a prior complaint about implementing a design change in the power cable system without performing the 50.59 process in the past. And there was a serious risk of fires. There was some investigation by the Nuclear Regulatory Commission, but it kind of fell flat. I'd like to know why if there couldn't be closure on that investigation when it came to cables

that carry currents how do you expect the public to believe that the NRC and Southern Cal Edison is going to be able to face the problem of the magnitude with the generator design as a whole.

[Applause]

>> I - - ah, believe your question points to an issue that had been raised seven years ago about a specific condition with a breaker and some current carrying capacity, is that correct?

>> It had to do with the breaker?

>> I understand, it had to do with, how I understand the current capacity was reduced to 60% but the current was not and there were no protections in place.

>> Yes. I believe we're referring to the same situation. And my understanding is that the issue has been closed out and there was not a safety concern or a substantiated allegation determined there.

>> Okay. Thank you. We're going to come back up to the panel and we're going to talk about this second issue process. We've heard a lot about it. Elmo is going to talk to that. We're going to see if there's anything else that the panel wants to talk about. And then we're going to go back out to all of you for any questions, questions on any subjects. Okay? And you've already been asking questions about that. So we want to get to the panel. And we went to get to this young lady over here. Okay? So we're going to the panel then we're going over right there Rick. Okay?

>> Got it.

>> Elmo, do you want to talk to this issue about the evidentiary hearing that Grace brought up a long time ago, or any other process issue. Go ahead.

>> Well, thanks Chip. I did listening in the opening remarks and I did hear a number of times the calls other requests or demands for an evidentiary hearing, an adjudicatory hearing - - that phrase, that is a very formal NRC process. In, in, what that means for the Nuclear Regulatory Commission, that's administered by the, really by the five commissioners and they are the ruling body for the final decision in, in those hearing processes. It is a very formal meeting for us to say that we're hearing.

So in the region we implement NRC process and so inspection and oversight processes and by commission policy and by commission practice do not require that evidentiary hearing or even make that an option in our current processes. So what I would - - just highlight to you then is, I think we're all aware there is a request, a petition and, in front of the commission asking for that very thing and that's an open question the commission has not ruled on it yet. So that, that is being considered by the NRC commission.

>> Okay. Elmo. Before we go to Gene, just one clarification. You mentioned it was the region doesn't really have a voice on that decision. But I think generally it is not just the regional staff, but the NRC's staff, as opposed to the commission's staff. That makes that decision.

>> Yes. That is true. You are exactly right. I was just referring to the inspection process that we're in right now, that does not have that issue.

>> Thank you, Gene? Get the mic on you.

>> Mr. Collins. At the last June 18th meeting, you reminded us that you work for us. And we appreciate this. I appreciate it, particularly. So again, we demand no restart of this defective unit, 2, until a full adjudicated hearing and a licensed amendment process is completed. So if you work for us. This is what we're asking for. It is very simple. We need to most effective to available for us to - - assess this problem. We're asking for it. We're pleading for it. We're asking all of the members of the audience who are concerned about safety of their families to call Senator Boxer and to call the chairman's office, Chairman Macfarlane to talk about this and to request this show I know that Friends of the Earth has formally put a request in. But we've been, we think it's important that, that the NRC accept this request. Because there's really no other way to move forward in a fair and - - a truly acceptable way then this adjudicated hearing. Thank you.

[Applause]

>> Thank you, Gene. And - - and Grace?

[Applause]

>> Mr. Collins I just want to ask again, before fabricating and

installing the new steam generators, from what we heard tonight about the FOI analysis, the design failures, the fabrication issues, the one, almost $1 billion that have been spent, and employee jobs that are really on the line because of all of these issues, if it had been carried out through a licensed amendment process, would that licensed amendment process have uncovered the computer modeling and quality control issues then, that Mitsubishi Heavy Industries and Edison, so that the under predicted conditions in the steam generators that contributed to the tube vibration would have been caught in a licensed amendment process before fabricating, before the stalling these steam generators? Could that have been caught? To both of you. To all of you.

>> Well, I'll, I'll start with the response and see if I get any help from the front row here. I think our answer is could it have been caught, the answer is clearly yes. It could have been caught. It's, I would add quickly add though it is impossible to go back with certainty and talk about how that review would have been conducted and what it would have challenged. Our license review rigorous. A lot of questions get asked and when they get asked, they are very probing and, and they explore all areas. And you know, prevention of a rapid tube degradation mechanism is an acceptance criterion in our standard review plan and it provides our reviewers guidance on that topic. I can't say for certainty that it would have been caught. I would like to think that it would have been caught, but I'm never going to know

that now.

>> Okay. Don?

>> Yeah. Thank you. To me the central issue that, that faces both the NRC and, and Southern California Edison is a loss of faith in their decision- making process. No entity is perfect. Every, every thing that you try to do has some small mistakes so I'm not expecting that either one of these organizations is going to be perfect, but the fact is they made enough mistakes and calculations and failed to disclose to the public clearly what they are planning to do. That they have lost the faith of the local community and the people they are supposed to serve. So for me the importance of these adjudicated hearings is to try to restore that faith. We want to believe that what they are doing is safe - -

[Applause]

But that needs to be demonstrated. You know, this is a management decision. They have lost the faith of the people that they serve. And I think they need to take every possible step to re, restore that faith.

[Applause]

>> Okay. Ah - - I don't know fell no you want to say anything now or wait until we hear from, from - - Rochelle and also from Richard. Maybe we should go to Richard.

>> Okay.

>> Okay. Go ahead Richard.

>> I consistently hear this loss of faith. We have a loss of faith and you have to do all of those things. Well, we don't represent all of the public.

[Applause]

No matter - -

[Applause]

I know an awful lot of people in southern California and around the country that depend on electricity for a lot of things. And the majority of the people that I know, they have questions, but they haven't told me that they lost faith in the Nuclear Regulatory Commission nor Southern California Edison, but there is a group of people that are not being represented here. In 1982 there was a new rule passed about medical lifelines and some, some where between I don't know, 50,000 people and 70,000 people in the service area for Southern California Edison and, and, and San Diego Gas and Electric, there were people they their very lives on the day- to- day hour and our basis depend upon electricity. When you have a drop in voltage, you have rolling blackouts. You have unreliable power there is a couple of nurses that have spoken, they should be able to talk, they should know about the equipment that they use, what happens when you have a loss of voltage to that equipment.

But these, among these 50 to 70,000 people, there are 2200 of them that have declared that they have, they depend upon this electricity so much that without it, they have two hours to live.

So, so you can hold up all of the signs that you want, lady, but, you know - -

>> Okay. We know that - - could you not, could you not block people in the back? Thank you.

>> People, the, the, there are people that are deafly afraid of the fact that they're not going to have electricity and they're not being heard here. So when someone says they recommend all of us and all of us demand this, that is just not the case. We don't all demand that.

[Applause]

>> Okay. We're going to go to Rochelle, and then Grace, if there is no more panel discussion, then we're going to go to the young lady over here with, with Rick and - - we're going to just go out and gets as many of you and we have some priorities - - people, but - - Rochelle?

>> Thank you. I go back before 1982 with the two nuclear power plants in California. The original price tag for San Onofre was under $200 million. The final price tag was for San Onofre was over $4 billion. So none of that was due to ratepayer's fault. None of that was done for the energy commission's fault, but what happened was we allowed the utilities and the Nuclear Regulatory Commission, who is not located in California, to make decisions without independent review. I'm sitting next to someone whose responsibility for that independent review. The Public Utilities Commission made it very clear that's when they didn't independent review seismic issues

that both Diablo Canyon and San Onofre, that it cost ratepayers billions of extra dollars. We know now that it's going to cost billions of extra dollars to continue to operate San Onofre. 1967 designed plant. It's had its lifetime. The steam generators were supposed to last the full 40 year life of the plan, they did not. We have a series of broken promises, none due to ratepayer responsibility. It is time for the state of California to say thank you very much, NRC, please do continue to make us safe, we want you to do your job, but its time for the state of California to step- up to the plate. We can provide electricity in other ways, but we need to start planning. The energy commission has asked its sister agencies to start planning years ago to see whether or not we could afford to continue to rely on nuclear plants. Its sister agencies did not do that job. I'm hoping with the new blood at the Public Utilities Commission, the new commissioners at the Public Utility Commission, the new people on Cal ISO. That they will start planning in earnest, I use electricity like everybody else in this room. And I want my electricity like everyone else in this room. I'm not closed off to other forms of electricity, but I'm tired for paying for promises that were not kept. And continued promises that will not be kept. So, I would like very much for Mr. Randolph to go back and speak to the commissioners before they come down here to southern California at the end of this month, which I hope that they are still planning on doing, and all of you who have questions about the safety of this plant - - what price safety? What price

inadequate regulation? What price inadequate management decisions? Who is going to pay for those. Mr. Randolph, please return to the PUC and ask those questions. Thank you.

[Applause]

>> Okay. Thank you, Rochelle. And, um, thank you. Thank you, Ed. Elmo and then Grace. Well, Grace why don't you go ahead, let me give Elmo food for thought.

>> Okay. Just a moment. I want to see Mr. McPherson, that I agree people's lives depending upon electricity. That's why all these union workers are working so (bleep) hard that we have our electricity. And I want to ask, you're welcome. And I want to ask Mr. Randolph and Ed - - Robert, Robert, everyone that knows about this, this summer, thank goodness, something was initiated called synchronist condensers to add to the grid reliability, to add to the efficiency, to push the power rather than to make the power. How can we grow these new technologies for efficiency?]

>> Um, actually, that - - that's something we're looking at for next summer. Essentially what, the way the, the, the grid works it is not just a matter of gross megawatts it is voltage support, and part of that was supported this past summer pie the restart of the two power plants at Huntington Beach. Those are going to be turned off on November 1st for good. So that leads us with a conundrum about how to apply that voltage support, that reactive power, in that region. So it's a matter of what type of

support is provided to the grid, but it is also a matter of where it is.

So the plan that's being developed right now and is in progress is to put in a technology called synchronist condensers, which adapts those two power plants that were just shutdown to use the generators as if you will, an electronic flywheel. That provides the inertia, the voltage support that in part was provided by the plant when they were restarted. So that's part, that and other strategies are part of the solution that we're moving forward on to continue power next summer with the assumption that San Onofre would still be down.

>> And Ed, do you want to say something before we go to Elmo on this issue? Go ahead.

>> Yes. Thank you. Just to add on to what Robert just said. The synchronist condensers are not an efficiency measure. And that is something that is important to understand. So they don't reduce demand. They don't add capacity. They provide a very specific purpose in very specific areas. Long- term we will need more capacity or more energy efficiency, more reduction in load or some combination there of. The synchronist condensers don't do that. They provide some other things.

Like I said in my opening, at the PUC through several proceedings we are looking at long- term solutions, you know, in the event that S.O.N.G.S. doesn't come back on line. That's not predetermined that S.O.N.G.S. will not come back on- line, but planning for that potential event or if it comes

on- line as a reduced capacity over time. While I have the mic I do want to respond to something that Rochelle said and actually thank her for it, but to get to the bigger issue of faith and trust in the governmental agencies. I cannot speak for the NRC. I can speak for the CPUC that post San Bruno, a different set of events, the public really last faith in the PUC. And quite frankly, rightfully so. What we can do as an agency and what we're trying to do as an agency is to be as transparent as we possibly can. And through this process here. I hope that wherever possible, we are transparent, the public has a chance to see what we're doing. Rochelle will point out that there are places that we're failing now. I appreciate her pointing that out. We will do our best in moving forward so at least the public and see the decision- making process.

>> Thank you. Thank you, Ed.

[Applause]

Elmo? Go ahead.

>> Well, I just wanted to try to give my perspective on, on, on the license amendment and the adjudicatory hearing items. If, if there's nothing I haven't heard tonight, I think you've, you've done a good job at driving the message home to me that you want to see either, or and/or a licensed - - [no video]

¶ [Music] ¶

[No video].

¶ [Music] ¶

[No video]

¶ [Music] ¶

[No video].

¶ [Music] ¶

[No video].

¶ [Music] ¶

>> By law to live with.

>> A question?

>> Follow- up - - [booing].

>> Both reactors are shutdown right now. And they will remain shutdown until we receive permission from the NRC to start them up.

>> Okay. Go ahead Rick.

>> Gary?

>> Elmo, just a quick follow- up question to you from Gary.

>> So, Elmo, what I understand, under the confirmatory action letter, Edison is start up reactor number 2 up to what is the equivalent of normal operation heat and pressure, that would be acceptable to the NRC under the current regulation and you could have, a disastrous result from that and it still within the regulations, and we would never get the adjudicated hearing that we want. That's what we're here for. We don't want an accident to happen this judgment is made by independent experts.

[Applause]

>> I'll, I'll, a couple of points if I might to address that. Number 1 the reactor is not going to start up until we have completed our review and we think there is a sound basis for safety, but secondly and I think the point you're making here with the difference between mode 2 for Unit 2 and mode 4 for Unit 3 and we thought about that's when we formulated that requirement. And the reason that it exists is Unit 2 steam generator tubes, none of them lost structural integrity. They retained their strength and have retained it until today. So that was never lost. There is no risk or additional risk with Unit 2 being at the normal operating pressures. What we have to do before they start up though is consider the dynamic that was observed on Unit 3 to make sure that is not going to happen. So that's why we formulated the requirements. It is really a technical answer, so - -

>> So - - I'm trying to understand. And I'm - - with all due respect, I think what you're saying is you're going to allow Unit 2 to be taken to the mode 3 operation, which the only difference is it's not critical reactor, but it still has the same heat, same pressure and the same weakened tubes, we haven't determined, we haven't done a study yet. And you're going to allow them to start Unit 2 at that pressure at our risk, why is that even reasonable?

>> Yeah. Yeah. I think, we've, we've talked, I think the tubes are not weakened in Unit 2. They have full structural integrity and it was

maintained - - I, yeah. I think, this is requires further discussion to make sure that we're talking about the same thing. So - -

>> I'm going to ask Pete, Pete Dietrich to respond again to this. Pete? Gary, you want to listen up, go ahead Pete.

>> Taking Unit 2 into mode 4, mode 3, which is allowed by the confirmatory action letter, does not create, anywhere close to any thermohydraulic conditions in the steam generators that can create elastic instability. The reactor is shutdown and remains shutdown in modes 4 and 3. There is no heat of nuclear fission that is driving steam generator flow or steam flow in the steam generators. It is a matter of testing.

>> Hey, Rick. Do you have one more? Because I think we have people here. Okay? And, and, and as Pete said, he's, he can talk to Gary about the different modes after the meeting or whatever, but I think we need to get - -

>> We're going to move on now.

>> We want to have independent experts tell us, not him.

>> Right. We heard that. We heard that. Yes, sir?

>> Thank you, thank you, sir.

[Applause]

>> Okay. Um, I'm going to be - -

[Applause]

- - ma'am, could you sit down please? Thank you. Okay. We have

a question, we have a question here. Right here, we have a couple of people.

>> First of all, let me say that I'm in the minority here tonight. I want that plant on- line.

[Applause]

Excuse me. I'm from the city of Covina, I'm the pro tem mayor, we have 7,000 of a population there. We've experienced brown outs in our city. We appreciate Edison and all the appropriate bodies involved to get the plan on line. I think Mr. Oglesby and Mr. Randolph mentioned the fact that there's going to be problems with getting sustainable power to get that voltage that's needed to power southern California. I will say this - - brownouts for Covina and the east San Gabriel valley cities. The inner cities, ah, we use air conditioners, we're not close to the beach. We don't have air from the beach. We need, we need power. The question is - - how soon once you go through the approval process, can you get this system, number 2, at S.O.N.G.S. up and operating? Thank you.

[Applause]

>> Hi. My name is Ace Affman. Pete, I have two questions for you. First of all, there were three independent groups of experts that have reviewed all of the data that is available. And all three have concluded that you should not be restarting unit 1. That would be Fairwinds Associates - - even two, Fairwinds Associates, Dan Hirsch and his group

and the DAB group of which I'm a member. So are you aware of those three groups and the research that they have done. That's my first question. My second question is a couple of weeks ago in Del Mar your representative, we tried to ask him, some of the panelists, the council members in Del Mar tried to ask what is the difference between Unit 3 and Unit 2. And all he could tell us was Unit 3, one of the generator had been spun about 250 times because of a manufacturing error and that there was a 1G event on all three of the, of the accelerometers that occurred. So my question is, have you got anything else? Because that is not a whole lot of stuff that is the difference between Unit 2 and Unit 3. We're not hearing anything else, but that is all that you had a few weeks ago. Nine months after the event, you know, just a few weeks before you release this statement saying it is so different. Now that's my other question for you.

Now my question for you Elmo is in the documents of the root cause analysis, it said that you did, this is not going to look at manufacturing problems that might have occurred throughout the process. That it's assumed that the processes were done successfully. In light of what's actually happened are you going to change that regulation and consider what is actually going on in the various sub contractors throughout the world who are building defective parts. Thank you very much.

[Applause]

>> Can we have, can we give Ace some answers on this and we got a pod

right here that I want to get to, albeit quickly. Elmo, do you want to talk to Ace's last and then we'll see, Pete, do you want to go? Go ahead.

>> Sure. We are aware of the work that Fairwinds Associates and Friends of the Earth and Dan Hirsch has done. Let me just share with you the three expert groups that we had perform formed the independent analysis are all world renounced steam generate experts and they put their companies reputations on the line by providing the analysis that they provided. We're certainly aware of that your next question was related to, if you can repeat it again, Ace? Differences, thank you. Mitsubishi technical evaluation support. Which is part of our confirmatory letter submittal and is available on- line on the S.O.N.G.S. website, we go through a series of discussions about manufacturing differences and tolerance differences within the steam generators. So there are several examples. In addition, to the rotation of the steam generator in, in a horizontal condition while we're repairing a weld that had a defect, we also identified some changes made to the anti- vibration bar flattening process that Mitsubishi used as well as some alignment of some of the tube support structures within the steam generators. Again, this stuff is laid out in detail in Mitsubishi technical evaluation report. Thanks.

>> Thank you, Pete. Elmo?

>> Yeah. Thanks. I want to make sure that I understand Ace's question. That is about is the NRC going to inspect Mitsubishi? So yeah. I want to

make sure that I understand it. So - - make, are we going to include, well, we inspect them, it encompasses the, the - - the range of the licensing, I mean the manufacturer's program, I'm just going the make sure - -

>> It said in the root cause department, your own document, it said you do not consider the manufacturing problems that might occur in subcontractor portions of the process, like the actual manufacturing of the tubes, the U tubes themselves it is out beyond your observation point.

>> Well, I believe we are, we do inspect the manufacturers or vendor program does look at it. On, on, on, on, on a periodic basis and we have inspectors - - in Japan right now taking a look at Mitsubishi. Brian is going to help amplify the question, or the answer.

>> Okay. This is Brian Lance. I think, Elmo, Ace, thanks for the question. We actually do have a vendor inspection going on in Kobe, Japan, right now to look at that. And I think your question is also pointed to are we going to look back in our regulations and see did, you know, both screw up or improve the way those vendor inspections are done. I think we can say that we're taking a look at that has part of the lessons learned from this experience.

>> All right. Thank you. We're going to go to this person right here.

>> Andrew Minchisky. Surfers Environmental Alliance and Charlesbad resident. I just want to say that all of the employees here who work at these plants I think you guys are wonderful. I don't think any of the questions

that anybody has had relates to you or your jobs we totally understand that you guys work hard every day in difficult conditions and you guys should give yourselves a round of applause.

[Applause]

However, I do have a big concern about this entire process and I feel far less confident then when I stepped into this room.

[Applause]

I feel that Mr. McPherson and Mr. Collins, I, I've heard Mr. Collins pass the buck. I've heard from experts who actually work at the plant who installed tubes who seem like they have a hell a lot more concern than people just opting for their jobs. I heard from another person about safety and, and how they actually, you know, they work at the plant and they're concerned about safety, and we don't know how to report it. I heard the NRC come up with answers like we're looking into it, we're checking our processes. We're, we're examining what happened in Fukushima. We've heard that the review process, you know, we're looking into it. I mean, these for things that we can't chance with nuclear energy. I mean - -

[Applause]

- - we, we are, we understand, we - - want electricity. We understand we need power. I think we heard testimony that at this point San Onofre accounts for a very small portion of our electrical power.

[Applause]

We also heard from Mr. Dietrich that, I'm making a statement, guys, please, Mr. Dietrich that unit number 3 is severely damaged and we don't know when it is going to be on- line. We have company like Mitsubishi which is supposed to be in the best in the world providing product that is faulty.

So my question here is after Chernobyl, after Fukushima, which was state- of- the- art, what kind of guarantees do you have for us in the most densely populated area in the country when you have problems with tubes and we end up having a disaster all at the same time, which we know can happen. And we all know, Mr. Collins, that - - San Onofre was not built to the standards that it should be, that we would be building to today. There may be regulatory standards because the rules and regulations are so far, out- of- date, but even geologically speaking this plant would not stand up to a 7.0 earthquake the way that it should be.

[Applause]

>> Elmo, I don't know what part of that you want to address, but - - go ahead.

>> Thank you. Yeah. I guess, at a high level, and, and - - I. I apologize if I've come across as passing the buck at any time tonight, that's not been my intention, but in terms of safety in nuclear power plants and what the Nuclear Regulatory Commission has done, you know - - after Three Mile Island in 1979, there's been a number of improvements and strengthening of the regulations of nuclear power plants. In the record, our goal is to

prevent accidents and to prevent releases of, large releases of radioactive material. In the United States, with, with, under NRC regulation has been successful in that record, but just because we haven't had an accident or a serious event doesn't mean we don't pay attention to what's going on. We are always checking ourselves and we're always challenging ourselves. Even the steam leak that occurred in January, to put that in perspective, right? It was small, it was, it was a small amount of radioactive material, the calculated doses. You could calculate it, but they were exceedingly small, the way the plant was built, designed, and operated with the defense in- depth and the protective measures in place, I would tell you protected the public and kept them from hazard even during that event. It is a serious issue to be sure. And it’s got to be fixed, that's why both units have been shutdown since then, so we do - - we are serious about safety.

>> Thanks, Elmo. And Pete, do you want to say something? Go ahead.

>> Yeah, I would just say our commitment is to operate the plant safely and if we don't feel that we can shut it down. And our commitment is to protect the health and safety of the public and our employees. Thank you.

>> Mr. Collins, I think this - - the point here is that when can we expect the NRC to effectively regulate to the maximum of your regulations? Because oftentimes, far too often we can point to so many examples of things being complained about, getting on the list to be prepared, and not getting prepared for 10 or 15 years. That is not acceptable after Fukushima. If

you point out a problem, it needs to be prepared in - - some reasonable period of time - - acceptable after Fukushima - - if you point out a problem it needs to be prepared in - - some reasonable period of time considering the nuclear power plant. I would not give you more than six months to fix anything. It may take you longer, but - - this is the main, main problem that we have.

You have rules and regulations that you follow and sometimes those rules and regulations get in the way of getting anything done. And there's no reason for licensee to be - - hanging on for 10 or 15 years without repairing things properly. And getting it done efficiently. Thank you.

[Applause]

>> Rick, Rick, we have someone over there.

>> Yes. We have a couple of questions over here. Okay. Go ahead.

>> Hi. I'm Amara Wilson. And I came with my friends. And we were all wondering what you plan to do with all of the toxic waste, and if you don't a plan, why keep making more?

[Applause]

>> Elmo, I think that was for you.

>> The, and understand the question to be what are we going to do with the, the, the spent fuel which is stored on- site.

>> Yes. Yes.

>> I think, I think I have the same question. As it turns out, you know,

this, this is a national policy issue. It's a real issue. It's a real challenge, it's a real problem. The federal, the Federal Government - - the Federal Government, you know, just recently completed a move with the commission run by our current administration with a number of people to solicited input and suggestions for a permanent solution for this. So I don't have an answer for it, the Federal Government has not developed it.

>> Okay. All right. Okay. Rick, do you have, do you have another one?

>> Yes. Yes. Folks I want to address these two sections in particular. You know, we're not going to get to everybody's questions tonight, because as Chips we're going to be out of here at 9:45. That's the limit placed upon us. Hear me out. We're going to take two more questions from this section and then I'm going to direct you to the NRC website, the NRC website under public meetings tells you how you can submit your questions and get answers. So I'm going to take two more questions from this area. Go ahead.

>> I would like to hold the mic, please. Hello. I'm Fred Shultzs. I'm a local citizen and I go in the ocean a lot, I'm also an attorney, and I'm running for president, although that's not for anything, but - - my question is, um - - I was going to take a poll on cancer here, but they wouldn't let me, I was going to ask Mr. Elmo Collins, please, if you can answer me this question - - number 1, I've read that many scientists both working for the government and independent consider there to be no such things

of safe levels of exposure to children of radiation. I'm wondering what you would consider to be a safe level of exposure to radiation to children. Number 1. Number 2. Would this plant here be allowed to be built today. And if the answer is no, why are you allowing it to stay kept open? Please. Thank you.

[Applause]

>> Elmo? Safe levels of radiation for children?

>> Ah, you know, over the years as we come to learn more about radiation, what its effects are, a number of scientific bodies in studies have been conducted, the International Council on Radiation Protection, we have a - - what the effects are. A number of scientific bodies in studies have been conducted. The International Council on Radiation Protection, we have a council on radiation protection in the United States. In all of these are to establish the standard level - - so - - there is a limit. From, from, from NRC regulated material for children. I believe its 100 Millie - - a year. That's the federal requirement. In answer to your second question, would this plant be built today? If it meets the standards, meets the licensing requirements, application would be made, I think the NRC - - it's not to go through the licensing process, it would have to be reviewed. So but - - I, I think it would have to go through the review process.

>> So it would have to go through the review process.

>> If it meets the requirements the answer is yes.

>> Yes. Okay. Thank you, Elmo. One other question here. Wait a second.

>> My name is Penny Mainered and I'm with the San Clemente chamber of commerce, and I would like to know that, this is for the NRC agency. If S.O.N.G.S. is not restarted, how long before, and is there a specific plan in place to provide reasonable energy, energy so vital to both the quality of life and to a strong economy, and what is the timeline if you have anything in place? How much thought have you been giving - - done. That's my question. That's my question.

>> Elmo, did you hear that?

>> I thought it was - - the - - I thought the question was it San Onofre is not restarted what is the plan to supply energy?

>> Correct. Correct.

>> So I'm going to hand that one.

>> It has been asked, but to address it again very quickly, this summer multiple state agencies have plans to replace the power. We got through this summer. We have plans through next summer and we're doing planning for long- term right now. To reiterate we got through this summer, but we also got very lucky this summer we the no heat waves and no other major power plants down.

>> Okay. I apologize that we can't get to all of you, but we have to

be - - out of the room - - okay? And - - ah, I'm going not go to Elmo to close the meeting for us. I'm sorry. The panel, we can't get to you, Elmo, do you want to close out?

>> First of all, I want to thank you, all of you for your attendance this evening and for your attention. I think you have been very patient. I want to remind you I can tell there are a lot of questions we didn't have time to get to everyone. It's a very, very large crowd. We have mechanisms on our website, put your question in there, or use our meeting feedback forums to write your question on there. We will provide answers.

But, but, to close the panel, I want to thank the panel members for coming.

[Applause]

Thank you for your input. I mean I said at the beginning was I listening I heard a couple of things, it was pretty loud and clear the messages you were sending me. I thank you for those. I learned some things as well by listening to this exchange and this dialogue. So, with that, this meeting is adjourned. Thank you very much.

[Applause]

[Event concluded]

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