

Diablo Decommissioning Engagement Panel Presentation

Bruce Severance ([00:00](#)):

My name is Bruce Severance. I'm one of the panel members. I want to summarize some of Senator Laird's comments that were given on the August 12th California Energy Commission and Governor's Office presentation as a number of the panelists felt that they were extremely relevant and concise. So following that, I'm going to give a few additional comments.

Bruce Severance ([00:31](#)):

First from Laird's comments, can we complete the deferred maintenance in time? These are quoted from his excerpts from his script. Bottom line is that we are now faced with a situation where everything that would have been done to renew Diablo Canyon's operation beyond 2025 during the last six years is now being collapsed into a three-year window.

Bruce Severance ([00:57](#)):

Item 2, safety requires experienced staff. This issue has been raised by Diablo Canyon Independent Safety Committee and requires full diligence by the state, including support for training and retention so the skilled workforce needed to deliver plant safety can be assured for years to come.

Bruce Severance ([01:15](#)):

Item 3, who pays? The existing rate system puts major costs on rate payers in a manner that stresses lower and middle-income rate payers and who are already shouldering the cost of the state's climate efforts. How will we know who pays and how much before we make a commitment to go forward on the extended life of the plant?

Bruce Severance ([01:37](#)):

Item 4, spent nuclear fuel storage. The existing facility on site at Diablo Canyon where the spent nuclear fuel is stored is large enough to accommodate the waste generated by the plant until 2025. The capacity question must be answered now as there is today no other place that can accept Diablo's radioactive waste.

Bruce Severance ([01:57](#)):

Item 5, seismic concerns. Serious questions have been raised in the community about the completeness of existing seismic studies and their possible lack of full review by neutral third parties. We need to explore the state of existing seismic analyses and get answers as to where there may be gaps and whether retrofitting is required to reduce risk if the plant's life is extended.

Bruce Severance ([02:24](#)):

Item 6, once-through cooling. Diablo Canyon is permitted to use once-through cooling technology only until 2025. That technology either needs to be replaced or the right to continue using OTC would have to be extended. If an extension is in order, it needs to be done in a manner that adequately mitigates for the significant environmental impact of releasing warm water into the marine environment over an extended time.

Bruce Severance ([02:53](#)):

Item 7, permitting. There would likely not be sufficient time to complete permitting before the plant life would be extended. Yet, the engagement process that involves stakeholder involvement and agreement on the previous decision to decommission would only happen around possible extension if environmental processes are completed. There's a fine line between overriding processes and speeding them up.

Bruce Severance ([03:18](#)):

Item 8, community transition funding. The state legislature passed SB 1090 shortly after the settlement agreement was completed which allowed \$85 million for community funding to ease the transition away from Diablo Canyon's revenue and labor base. Assurances are needed that those funds, much of which have already been spent, will not need to be returned to Sacramento, and further, that additional mitigation will be available in future years when the plant would close.

Bruce Severance ([03:51](#)):

Item 9, Diablo Canyon lands. The community has fought hard for the conservation of and public access to the Diablo Canyon lands which were expected to be transferred away from PG&E upon Diablo Canyon's closure in 2025. This process need not be delayed. It is not only good for the community, it implements the

governor's 30x30 Biodiversity Initiative in one of the richest ecological regions in the state.

Bruce Severance ([04:20](#)):

Item 10, retirement date certainty. The uncertainties regarding Diablo Canyon's future causes significant anxiety and interferes on many levels with sound planning in San Luis Obispo County. For this reason, I believe there must be a date certain on the final closure date if the life of the plant is to be extended.

Bruce Severance ([04:43](#)):

Item 12, offshore wind. San Luis Obispo County will be opened to offshore wind development. One of the allures of this location is the existing transmission lines from Diablo Canyon. How do we ensure that an extension of the life of the nuclear power plant does not hinder the ability to onboard and transmit new, renewable power on the grid using local transmission?

Bruce Severance ([05:08](#)):

That ends our summary of Senator Laird's comments at the August 12th joint Energy Commission and Governor's Office presentation. The following are additional concerns not raised by either Laird or the CEC CISO governor's presentation.

Bruce Severance ([05:30](#)):

Reactor vessel embrittlement. The reactor vessel of Unit 1 was found to be among the most embrittled in the nation in 2002. Although the NRC has allowed continued operation and waived further testing, embrittlement could inhibit rapid shutdown of the reactor in an emergency and should be evaluated by the Diablo Canyon Independent Safety Committee as well as other independent experts.

Bruce Severance ([05:57](#)):

Second item, incomplete contamination and monitoring records. There was a historical site assessment published by PG&E which cites numerous likely contamination points at the plant that should be routinely checked for radioactive contamination, but PG&E did not make records available to fully complete the report with actual monitoring data. Any further discussion of an operations extension should be predicated upon access to these records and a properly completed historic site assessment. The public deserves to know.

Bruce Severance ([06:33](#)):

Item 3, rate payer and taxpayer equity. Proposed legislation seeks to offer a \$1.4 billion forgivable loan from the state's general fund to PG&E to fund the cost of license extension and deferred maintenance and continued operations. Costs will also be transferred to community choice aggregators, also known as CCAs, statewide. This will affect both, place a disproportional burden on low-income families as well as undermine the efforts and financial solvency of CCAs that are the primary competition to investor-owned utilities and are run by local government agencies to speed the transition to 100% renewables on the grid. PG&E has suggested that CCAs should pay the additional operating costs through the PCIA. That is a power charge and difference assessment.

Bruce Severance ([07:38](#)):

20-year license extension. PG&E has suggested, although not confirmed, that they may apply for a 20-year license extension. This is in direct conflict with the governor's plan to extend the life of the plant for five to 10 years. There's a very low probability that a five to 10-year life extension would make economic sense given the level of investment needed to operate the plant safely. There doesn't seem to be a low capitalization alternative to allow continued operation for the few years between 2025 and 2029, during which the projected shortfall on the grid is anticipated. We're stuck making a 20-year investment to solve a five-year problem.

Bruce Severance ([08:26](#)):

Item 5, further discussion of the grid shortfall is needed. Senator Laird suggested that there should be further discussion about whether there will, in fact, be a periodic shortfall of power in the 2025 to 2030 time frame and that other options for meeting resource adequacy should be explored. I would suggest reexamination of Loretta Lynch's study of the August 2020 blackouts which suggests that CISO had the capacity online but was contractually obligated to export it to other states. This would suggest that better modeling and projections and possibly a higher resource adequacy requirement may have solved the problem.

Bruce Severance ([09:12](#)):

Item 6, peak demand is intermittent. Diablo is a constant source of power. There is an inherent mismatch in the strategy to solve a periodic peak demand problem

with large continuous generation. Peak demand is driven by residential HVAC, and exceptional peak demand events are driven by heat waves that occur once in five years. There seems to be an obvious mismatch between the problem and the proposed solution. A further indication that continuation of DCPD operations cannot be more cost effective than other strategies that are suited to address the intermittent problem.

Bruce Severance ([09:54](#)):

Item 7, study is needed. Economics, safety issues, and alternatives should be fully explored before this legislature elects to mandate life-extended operations at the plant. There are better technological solutions to provide grid stability. For example, electric vehicle batteries feeding into the grid during peak demand hours would have prevented the 2020 blackouts. Hydrogen peaker plant turbines with flexible fuel that can run on both natural gas and hydrogen are now commercially available and can facilitate gradual decarbonization of gas peaker plants. This would solve all long-term grid storage problems and harmonize renewables on the grid while avoiding all possible stranded asset scenarios that pose a much larger economic risk with continued Diablo Canyon operations.

Bruce Severance ([10:49](#)):

Senator Laird calls for a Marshall Plan for California energy, and we feel that further steady is needed before Diablo Canyon extension is approved. If PG&E rushes headlong into applying for license extension, we may face consequences that will not serve a higher public good.

Chuck ([11:11](#)):

Thank you, Bruce.

Speaker 3 ([11:13](#)):

Chuck, could I just ask for some clarification?

Chuck ([11:16](#)):

Yes.

Speaker 3 ([11:16](#)):

In reference to these other concerns, just for the House and also for the general public, it would be good to state where these other concerns came from or who they're actually representing. I know there's been a lot of discussion.

Bruce Severance ([11:32](#)):

I said that they were my additional concerns that were added to Laird's, but I did work on those in collaboration with some of the other [inaudible 00:11:39].

Speaker 3 ([11:39](#)):

And the last statement, as far as "we," who are "we"?

Bruce Severance ([11:45](#)):

That's a really good point. I meant to take "we" out, and I apologize if I left it in. I did take it out one other place. So I should correct that now for the record and say "I" instead.

Speaker 3 ([11:57](#)):

Thank you.

Chuck ([12:00](#)):

Thank you very much.

Bruce Severance ([12:02](#)):

... the inability to shut down a reactor is-