August 24 Meeting
Introductory comments to the Panel Meeting by Michael Lucas, Panel Member

I wish to go over a few broad points before I hand off to Kara Woodward

**First,** the panel is NOT a legislative body, but we provide a forum for public comment and information. The mission of the Panel is Decommissioning, but recent initiatives from the governor’s office speak to continuing operations that impact decommissioning dates and sequences, and that may have many additional impacts on the community, on subsequent Diablo users, and require an expanded time horizon.

It is important to document these issues that the recent proposals have raised, based upon discussion inside the Panel, with PGE and from national, state and community sources.

**Second,** let me give you a brief timeline of events since our last Decommissioning Panel Meeting May 25:

At the May 25 Panel meeting we looked at the issue of fuel storage on site. PGE has a new vendor with a new storage system. We do not have any Panel statements on that yet, but we have had additional questions and responses, and a fact-finding meeting August 18 with the new storage vendor, Orano.

Several collateral groups with jurisdiction and input have also met. You can get to their web sites through links at the bottom of our pages.

On June 22-23 the Diablo Canyon Independent Safety Committee met.

On July 21 the Nuclear Regulatory Commission had a public meeting to discuss post-shut down activities.

On August 9 the California Energy Commission hosted an online workshop on electric reliability needs and potential extension of operations. Over 700 people attended on zoom and public comment went well past the 7:00pm anticipated close and after 9:00pm. Kara Woodruff will get more into detail of that meeting and resultant record.

It is possible the state may finalize a decision on continuing operations this week with recess scheduled for the end of August.

**Third,** let me speak to issues around Time and Impacts

Many, if not most of the impacts of continuing operations and delay of final decommissioning are in relation to a specific time proposed for the extended plant operations. This has been noted as little as five to ten years, but the California Energy commission slides from August 9 suggest a ten-year window, and it was certainly on the minds of some commenters at that California Energy Commission meeting that it should remain open as far as 20 years or more.

Each continuation window gathers significant questions, but all the time frames entail common impacts, and here are eight to consider as you listen tonight. These are my points, not the Panel’s:

1. **Continuing Operations Review Process**

Diablo Canyon at one time was submitting a relicensing application. That application required a full environmental impact statement through CEQA.

A full detailed environmental impact statement will accompany Decommissioning and is underway.

A license extension, by Nuclear Regulatory Commission rules, bypasses the CEQA process and is differently assessed by the NRC. This for many is a serious issue and abrogates public comment and studies that an environmental impact statement or full 20-year re-licensure would allow for and require. While speeding the process, what is lost in the haste? How much material is ‘grandfathered’ from the original license or prior application that was withdrawn?
2. Safety, including Seismic Issues
Given the specific history of the Diablo Canyon plant, what are safety issues around continuing operation? Panel member Will Almas will moderate a session later tonight on this. He will be joined by Dr. Robert Budnitz of Diablo Canyon Independent Safety Committee. That committee includes experts in nuclear operations and is supplemented by additional technical support. We look to them as partners in our efforts for key insights into technical aspects of safety. They will be joined by San Luis Obispo County Supervisor Dr. Bruce Gibson, whose degrees are in earth sciences and was a member of the prior seismic review committee.

Note in our web thread is an August 15 opinion piece by Edwin Lyman, Director of Nuclear Safety for the Union of Concerned Scientists in the Bulletin of the Atomic Scientists that gets into a detailed history of Diablo seismic considerations, past PGE position statements, and prior NRC rejection of possible modifications for higher levels of safety based on risk-reward criteria. The NRC is the deciding agency for determining acceptable risk.

3. New Fuel
While the nuclear advocates speak of ‘clean’ energy, this term is limited to carbon-free discharge, and does not consider the extraction of uranium and downplays the status of spent fuel storage.

At the origin point of fuel, at the opening of the plant, uranium was mined extensively in the American Southwest. Most of those mines have shut down, and the trail of that form of extraction still has major social and environmental justice issues remaining unsettled. New mines are challenged by Dine, Pueblo and other Indigenous groups who are concerned about both shallow surface aquifers from mine flooding and mines impacts on purity of deep aquifers.

Today, less than 5% of uranium is domestically produced, with 49% coming from Kazakhstan and Russia. While this sourcing is not in the direct purview of PGE, these are indirect important ethical issues for some.

At the other end of fuel life, current plant operations through scheduled decommission will fill the current on-site storage facility located in the hill above the plant. All parties agree storage on-site in the casks are superior to remaining in spent fuel pools. New fuel will have to have some kind of accommodation, perhaps with additional on-site storage, and perhaps indefinitely.

While storage does not impact the initiation of continuing operations, it does potentially add a larger spent fuel facility site to the eventual decommissioning. While the new vendor is exploring intermediate storage in other states, that license is not yet obtained. While spent nuclear fuel reprocessing is now happening in some parts of the world, it is not current practice in the US or proposed for Diablo Canyon. Plans for a long term storage site at Yucca Mountain have been abandoned.

4. Shutdown/Start Up Maintenance and Continuing Operations
Continuing operation means new cycles of plant shut down for re-fueling and maintenance. While the plant has a safety record, two of the highest risk periods are when pressures and velocities in the system change in shut down and in startup. This is prime factor in the need for an inflexible ‘continuous’ operation and inability to modify production over the day to match specific renewables generation.

Ongoing maintenance is ‘replace before failure’ based on a probable life of the component, be it a valve, a gasket, etc. Some maintenance has been timed based on the decommissioning schedule and will need to be greatly revised. This involves issues of supply chains and potentially expanded crafts-person staff, both of which the CEC stated were reasons for the renewables delay. Many expert staff left with the decommissioning path- can they be replaced, and in time?
5. Costs and Economics
The various proposals involve federal and state grants or forgivable loans, and likely total costs, as of now unknown, will be borne by a mix of ratepayers, taxpayers, and passed on to those enrolled in the recent Community Choice Aggregation efforts, an option across much of SLO county. Determining the actual cost to produce this power will be very difficult to calculate and the rates paid may not reflect additional subsidies.

What is the impact of continuing operations considering previous payments made to local governmental bodies under decommissioning? This was a concern of a letter this last Monday by local mayors.

The enormous cost begs the question of time again- if the cost is significant, how could a short duration ‘pay’ for itself? Is this merely a gesture of advertised short duration to rationalize a longer duration?

6. Loss of Windfarm Support
With the decommissioning, the facilities of Diablo Canyon are under study to help support the massive new windfarm proposed off our coast.

With continued operations, there is the loss of repurposed plant facilities such as harbor and massive machine shop that could be available to help wind farm progress to completion
Continued operations could inhibit possible completion.

7. Environmental Justice and Once Through Cooling
Diablo has no signature cooling towers. Continuing operations require the state to pass new legislation to change the criteria where once-through cooling is evaluated and its impacts on the ocean.

8. Social Justice and Delay of Site Reuse
With decommissioning, there are profound opportunities in the disposition of 14 miles of coast and 12,000 acres that constitute Diablo Canyon lands. These have been discussed in the Panel Vision Statement.

Issues of Indigenous cultural heritage including returning lands to Chumash care, recreation, research, and other development of the plant parcel itself and their potential income streams are lost for another period of time with continuing operations and required safety zones.