



DIABLO CANYON

Decommissioning Engagement Panel



# A Strategic Vision

*December 2018*

*Revised May 2019 / February 2020 / July 2020 / March 2021*

*April 2022 / April 2023*

# Acknowledgements

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The Diablo Canyon Decommissioning Engagement Panel (DCDEP) would like to thank PG&E for recognizing the value of public engagement and creating and supporting the DCDEP. The meetings, workshops, tours and other outreach efforts that PG&E has made available to the DCDEP and the public has provided invaluable information and created a forum for an open dialog with the citizens of the County that will continue throughout the decommissioning process.

The DCDEP greatly appreciates and thanks the numerous individuals, groups and agencies for helping us understand the decommissioning process, the opportunities available for conservation of the scenic lands that surround the power plant, the possibilities for repurposing of on-site facilities and the deep connection that our local Native American community has to this land.

The DCDEP would especially like to thank you, the Public. Without your testimony at meetings and workshops, your letters and emails, and your passion for our beautiful county, the DCDEP could not create such a comprehensive vision for the future of Diablo Canyon after decommissioning.

The DCDEP would also like to thank two individuals in particular who help us significantly in bringing this Strategic Vision together. First, Charles Anders, the DCDEP facilitator, who enables fruitful discussions between DCDEP members and the public and keeps us on track and focused. Second, Kami Griffin, who provides invaluable writing and editing assistance. We are sincerely grateful to you both.

Thank you,

The Diablo Canyon Decommissioning Engagement Panel



2022 Diablo Canyon Engagement Panel

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[Photos](#)

# Executive Summary

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This Strategic Vision was prepared by the Diablo Canyon Decommissioning Engagement Panel (DCDEP). The DCDEP anticipates that this vision document will have multiple purposes. In December 2018 and again in 2021, PG&E submitted its [Nuclear Decommissioning Cost Triennial Proceeding](#) (NDCTP) to the California Public Utilities Commission (CPUC). The DCDEP submitted the initial Strategic Vision (prepared in 2018) as a supplement to the 2018 NDCTP, and has submitted and will continue to submit each revision of the Strategic Vision as they are completed. The Strategic Vision is also a stand-alone document available to the community, stakeholders and regulatory agencies. It provides information about the decommissioning process and recommendations from the DCDEP that reflect the community's wishes for what will occur before, during and after decommissioning.

The Strategic Vision is revised, updated and refined as the DCDEP continues to hold public meetings and workshops and receive comments on the decommissioning process, including the complex issue of long-term storage and intended future removal of spent nuclear fuel from the DCP site, the potential to reuse the DCP site, the conservation of the undeveloped land under PG&E's control, transportation of demolished materials from the site (both radiological and non-radiological) and the California Public Utility Commission's decisions on each NDCTP.

## Diablo Canyon Power Plant (DCPP)

The DCP is an electricity generating nuclear power plant located near the town of Avila Beach in San Luis Obispo County operated by Pacific Gas and Electric (PG&E). The plant has two 4-loop pressurized water nuclear reactors. In June 2016, PG&E announced plans to close the two Diablo Canyon reactors in 2024 and 2025. The closure was approved by the CPUC on January 11, 2018.

## Diablo Canyon Decommissioning Engagement Panel (DCDEP)

The DCDEP was convened by PG&E as a volunteer, non-regulatory body created to foster and encourage open communication, public involvement and education on DCP decommissioning plans and activities. It is intended to serve as a forum for the local community to provide direct input to PG&E and regulatory agencies on matters related to DCP decommissioning. The DCDEP was formed specifically to provide an avenue for communication from the public to PG&E on the issues surrounding decommissioning, and not to address the decision to stop or continue operation of the DCP.

## Community Outreach Process

The DCDEP has held regular public meetings as well as workshops focused on specific subjects. The first meeting was held on May 30, 2018 and since that time the DCDEP has conducted a total of twenty-seven public community meetings and workshops to receive information and listen to the public's concerns and perspectives. In response to the significant outreach efforts by the DCDEP, over 900 documented comments have been received to date.

## Strategic Vision

This Strategic Vision has been prepared by the DCDEP as a "living document" that will be amended and refined as the decommissioning process continues and the DCDEP hears from the public on various issues surrounding decommissioning. The recommendations contained in this vision document are based on the views of the community as expressed during public meetings and workshops, as well as through emails, letters and other correspondence. The Vision, Goals and Recommendations were prepared by the DCDEP and this document was created by the DCDEP using a facilitated process.

## Summary of Recommendations

This Strategic Vision contains specific Visions, Goals and Recommendations that represent the DCDEP's vision for the DCP and lands before, during and after the decommissioning process. In general, the DCDEP recommends:

- ❖ The decommissioning (decontamination) process should begin immediately upon shutdown with a goal of 10 years for completion of radiological decommissioning and decontamination, avoiding SAFSTOR (which allows up to 60-year delay in decontamination).
- ❖ The health and safety of the community and the environmental quality of the area should be the primary consideration when evaluating cost-effective methods of decommissioning in order to save ratepayers money.
- ❖ The 12,000 acres that surround the DCP are a spectacular natural resource and need to be conserved in perpetuity while allowing for managed-public access and use.
- ❖ The repurposing of facilities should be explored as a way to both reduce the amount of demolition materials created and create opportunities for new local jobs and economic development while considering public safety, traffic concerns and the environmental quality of the region.
- ❖ The engagement panel should be in a form that would lead to the best possible recommendations on achieving a safe and effective decommissioning of the DCP, including the disposition of Diablo Canyon Lands and Facilities.
- ❖ The planning, execution and communication of a rigorous safety and emergency planning program should be ensured until the plant site is fully cleared of all waste, facilities, and other structures not suitable for repurposing. *[Added April 2019]*
- ❖ The protection of human health and safeguarding the community, workers and the environment should be the primary considerations in the management of spent nuclear fuel at DCP. *[Added May 2019]*
- ❖ The activities associated with decommissioning should promote a successful and sustainable economy while reflecting a future that embraces our community values and builds upon existing economic drivers, including agriculture, education, technology and tourism. *[Added February 2020]*
- ❖ The safest method of transporting demolition materials from the site should be considered and put in place in a manner that minimizes the impacts to neighboring communities and the county at large. *[Added July 2020]*
- ❖ The ecological resources of the Diablo Canyon coastline, and in particular the intertidal zone, should be protected to ensure their preservation and the continuation of the desalination plant should be considered in order to maintain a reliable source of fresh water to the site. *[Added March 2021]*
- ❖ The review of the land use permit and the completion of the CEQA review should be accomplished in a manner that ensures an efficient and collaborative process that includes comprehensive public involvement. *[Added April 2022]*
- ❖ The installation of the new dry cask system should be completed in an expeditious manner, while assuring the safety of workers and the protection of the environment. *[Added April 2023]*

## Topics Included - Strategic Vision Document

The following topics are included in this document:

- A. Decommissioning Process
- B. Decommissioning Funding
- C. Diablo Canyon Lands
- D. Repurposing of the Diablo Canyon Facilities
- E. Engagement Panel Structure and Function Review
- F. Emergency Planning
- G. Spent Fuel Management
- H. Economic Impacts / Opportunities
- I. Transportation of Non- and Low-Level Radioactive Material
- J. Water Resources
- K. Decommissioning Land Use Permit and the CEQA Process
- L. New Spent Nuclear Fuel Storage System

*[Amended April 2023]*

## Topics Scheduled for Meetings and Workshops in 2023

The following topics are scheduled to be the subject of DCDEP workshops and meetings in 2023:

- Second Quarter – Draft EIR on Decommissioning / 2021 NDCTP / Other Topics
- Third Quarter – Diablo Canyon Lands Update / Current Decommissioning Topics
- Fourth Quarter – Strategic Vision Document Annual Report

*[Amended April 2023]*

## Revisions – Strategic Vision Document

The Strategic Vision Document will be amended and added to by the DCDEP from time to time. You can search for these changes by the month followed by the year as shown on the Amendments Page at the back of the document. In addition, a vertical line in the margin delineates the most recent changes.

The following memos provide a general description of revisions.

[May 2019](#)

[February 2020](#)

[July 2020](#)

[March 2021](#)

[April 2022](#)

[April 2023](#)



# I. Introduction/Background

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The following sections provide an overview of the Diablo Canyon Power Plant (DCPP), the lands surrounding the DCPP, the decision to close DCPP, the decommissioning process itself and the Diablo Canyon Decommissioning Engagement Panel (DCDEP).

## A. History of the Diablo Canyon Power Plant

The DCPP is an electricity-generating nuclear power plant located near the community of Avila Beach in San Luis Obispo County, California. After the permanent shutdown of the San Onofre Nuclear Generating Station in 2013, it is the only remaining operational nuclear power plant in the state.

The facility, which is located on about 12,000 acres of which about 12 acres form the power-producing portion of the plant, has been in operation since 1985. Its two Westinghouse Pressurized Water Reactor units are licensed until 2024 and 2025 respectively. The two units produce a total of 18,000 gigawatt-hours of electricity annually, which is enough energy to meet the needs of more than three million Northern and Central Californians. This is nearly 10 percent of California's energy portfolio and 20 percent of the power that PG&E provides throughout its service area.

In February, 1963 PG&E announced plans to construct five nuclear reactors at the Nipomo Dunes in southern San Luis Obispo County. Protests were immediately raised and later that year, the Sierra Club met with PG&E to discuss establishing the new power plant on an alternative site. PG&E agreed to choose an alternative site and two years later in 1965, the Diablo Canyon site became the new alternative to the Nipomo Dunes. Over the next three years, PG&E began the process for construction of a two-unit reactor with the Atomic Energy Commission (precursor to the Nuclear Regulatory Commission) and the California Public Utility Commission (CPUC). The Atomic Energy Commission formally approved the construction permit in April 1968 and in July of 1968, construction began on Unit 1. The Unit 2 construction permit was issued in December of 1970, with construction beginning in early 1971.

Continuing through the 1970s, there were hearings, referenda and litigation covering issues involving earthquake safety, security plans, and environmental quality. In 1984, after 14 years of hearings, protests, blockades, interventions, court cases, retrofits and reconstruction, PG&E was granted a full power license by the Nuclear Regulatory Commission (NRC) for Unit 1 on August 2nd and Unit 2 on November 2nd. On May 7, 1985, Unit 1 began commercial operation and on March 13, 1987, Unit 2 followed.

## B. Diablo Canyon Lands and the Irish Hills

The Diablo Canyon Lands stretch along 14 miles of pristine coastline, containing relatively undisturbed grasslands, coastal sage, oak woodlands and bishop pine forests. These areas are currently managed by PG&E using innovative best management practices and a strong land stewardship program. The Diablo Canyon Lands include the North Ranch (north of the power plant), South Ranch (directly south of the power plant) and the 2,400-acre Wild Cherry Canyon property to the southeast. The Diablo Canyon Lands also include the public Point Buchon and Pecho Coast trails, as well as the Point San Luis Lighthouse, which is open to the public through docent led tours.

The Diablo Canyon Lands are located in the Irish Hills region of San Luis Obispo County (See Figure 1), which has been the subject of significant conservation activity over the last two decades. In 2000, the Nature Conservancy identified the Irish Hills as a top conservation priority in the state, noting the following:

*“The Irish Hills embrace the rugged, western portion of the San Luis Range, extending from the Pacific Ocean to Los Osos Valley, and from the town of Los Osos on the north to the San Luis Obispo Creek on the south. The largely undisturbed and highly scenic site includes Montana de Oro State Park, the Hibberd Preserve [now owned by the SLO Land Conservancy], and scattered large private holdings, including PG&E properties surrounding the Diablo Canyon Nuclear Power Plant.”*

That same year, 75 percent of county voters supported the [DREAM](#) Initiative (Diablo Resources Advisory Measure, also known as Measure A). DREAM called on PG&E and county leaders to set aside the Diablo Canyon Lands for habitat preservation, agriculture, and public use upon the closure of the plant.

Since Measure A’s passage, multiple conservation projects have been completed within the Irish Hills. In 2001, The Nature Conservancy acquired approximately 1,000 acres along Davis Canyon, and over the next several years acquired and conserved the Andre, Basserti, Muzio, Yost and Miller properties, totaling nearly 1,900 acres. Additional properties have been conserved on the northwestern edge of the Irish Hills by the City of San Luis Obispo as part of its greenbelt protection program. These acquisitions along with other protected properties (including the Hibberd Preserve, BLM lands, and Montana de Oro) nearly complete a path for a 20-mile interior trail connecting Avila Beach to Los Osos. The last critical piece is Wild Cherry Canyon, which has been the subject of numerous (as of yet unsuccessful) conservation efforts.

### C. [Process and Decision to Close Diablo Canyon Power Plant](#)

On June 21, 2016, PG&E partnered with labor and leading environmental organizations on a joint proposal that would increase investment in energy efficiency and renewables while retiring Diablo Canyon Power Plant (DCPP) at the end of its current NRC operating licenses when they expire on November 2, 2024 (Unit 1), and August 26, 2025 (Unit 2). The parties to the DCPP joint proposal include PG&E, International Brotherhood of Electrical Workers Local 1245, Coalition of California Utility Employees, Friends of the Earth, Natural Resources Defense Council, Environment California, California Energy Efficiency Industry Council and Alliance for Nuclear Responsibility.

PG&E’s decision to withdraw the license renewal application for DCPP was based on the determination that the continued baseload operation of the two DCPP units beyond the currently approved operating periods is not necessary to meet PG&E’s projected energy demand requirements. This decision was also in support of the state policy to meet California future electricity needs with renewable generation resources. This resource planning decision was approved by the CPUC on January 11, 2018 (Decision 18-01-022). In February 2018, PG&E withdrew its application to the NRC for a licensing extension.

# Diablo Canyon

## LAND OWNERSHIP



### Map Legend

- PG&E Fee Parcels
- Eureka Energy Company Fee Parcels
- Leased to PG&E
- Leased to HomeFed
- DCPP Site Boundary
- Montaña de Oro State Park
- State Parcels
- Conservation Easements
- Pending Conservation Space (1,200 acres)
- Land Conservancy of SLO Fee
- Federal Parcels
- Private Party

### Reference Table

①	GTE Mobilonet (Verizon) Site License Agreement for telecommunication equipment
②	California State Lands Commission Lease to PG&E for Water Discharge Channel and Intake Structure
③	Properties Lease to PG&E: Plant (Parcel P), Transmission Lines (Parcel T), (Parcel I) and Road (Parcel R)
④	Grazing and Agricultural License to Mello
⑤	License to Mello for Marro House
⑥	Road Easement to Martin
⑦	Grazing License for Blanchard
⑧	1,200 Acre Deed Restriction Area
⑨	Point Buchon Deed Restriction Area
⑩	License to Blecha for North Ranch House

The CPUC has authorized several elements of the joint proposal, including approval to cease plant operations once the NRC operating licenses expire, and funding for employee retraining and redeployment. The CPUC also stated its intention to avoid any increase in greenhouse gas emissions resulting from the closure of DCPD.

Funding for the community impact mitigation program and full funding of the employee retention program were not approved by the CPUC. The CPUC instead set forth that legislative authorization would be needed to approve the community impact mitigation program. Senate Bill (SB) 1090 was introduced in the California State Legislature to meet these key remaining goals of the joint proposal. It was approved by the State Senate and State Assembly in 2018 with bipartisan support, and was signed into law by Governor Brown on September 20, 2018.

## D. Decommissioning

When a power company decides to close a nuclear power plant permanently, the facility must be decommissioned by safely removing it from service and reducing residual radioactivity to a level that permits release of the property and termination of the operating license. The NRC has strict rules governing nuclear power plant decommissioning, involving cleanup of radioactively contaminated plant systems and structures and removal of the radioactive fuel. These requirements protect workers and the public during the entire decommissioning process and the public after the license is terminated.

### Decommissioning Process

The companies that operate nuclear power plants can use one or both of two options to decommission their facilities.

The first option is known as “DECON,” short for decontamination. With DECON, the first steps of taking the plant apart begin as soon as the fuel is removed from the reactor vessel. The operator first decontaminates or removes contaminated equipment and materials. The transfer of spent nuclear fuel into dry cask storage and the removal of equipment lowers the radiation level in the facility and significantly reduces the potential exposure to workers during subsequent decommissioning operations. DECON can take five years or more.

The second option is called “SAFSTOR,” for safe storage. This process takes much longer. After the fuel is removed from the reactor vessel, the plant is kept intact and placed in protective storage for an extended period of time. This allows the radioactive elements in components to decay to stable elements. During this time, the main components of the plant remain in place, including the reactor vessel, fuel pools, turbine and other elements. All fuel is removed from the reactor vessel and placed in fuel pools or dry storage on-site. The NRC continues to inspect the site and provides regulatory oversight of maintenance and security appropriate to the low risk profile of the site. The plant is dismantled in a process similar to the DECON option once radioactivity has decayed to lower levels and the safety risk to workers is substantially reduced. Generally, sites must spend no longer than 50 years in SAFSTOR to allow up to 10 years for decontamination. The entire process must be completed within 60 years.

According to the NRC website as of 2018, eighteen commercial reactors in the United States are in the decommissioning process. Twelve of these reactors are using the SAFSTOR option, six are using the DECON option.

### Decommissioning Funding

Before a nuclear power plant begins operations, the NRC requires that the licensee must establish or obtain a financial mechanism (such as a trust fund or a guarantee from its parent company) to ensure there will be sufficient money to pay for the ultimate decommissioning of the facility.

Each nuclear power plant licensee must report to the NRC every two years the status of its decommissioning funding for each reactor that it owns. The report must estimate the minimum amount needed for decommissioning by using predetermined formulas. Licensees may alternatively determine a site-specific funding estimate, provided that amount is greater than the generic decommissioning estimate determined through the formulas. Approximately 70 percent of licensees are authorized to accumulate decommissioning funds over the operating life of their plants. The NRC completes an independent analysis to determine whether licensees are providing reasonable "decommissioning funding assurance" for radiological decommissioning of the reactor at the permanent termination of operation.

In California, the CPUC also regulates and reviews nuclear decommissioning costs and projects, pursuant to the California Nuclear Facility Decommissioning Act. The California Nuclear Facility Decommissioning Act was passed by state legislation in 1985 to ensure that there is sufficient funding available to decommission nuclear facilities upon shutdown. As early as 1983, the CPUC ordered PG&E to begin forecasting its nuclear decommissioning costs to make sure that there is adequate funding and that those decommissioning costs would be distributed equitably over time among all customers who benefit from the operation of the DCCP.

Under the 1985 Act, the CPUC established the Nuclear Decommissioning Cost Triennial Proceeding (NDCTP) as a proceeding to examine nuclear decommissioning costs funding levels for the trust fund that each utility establishes to fund decommissioning, and the assumptions associated with that funding level. Specifically, the NDCTP application includes a decommissioning cost estimate that covers reasonable and prudent decommissioning costs and assumptions around how that cost estimate is developed. The application also includes a review of any decommissioning projects that were completed since the last application was filed, and any assumptions about the trust fund, the rate of return and funding requirements. The NDCTP application is filed every three years and the revenue requirement can and will be adjusted every three years with subsequent NDCTP applications as new information becomes available. PG&E filed a NDCTP application in March of 2016 and again in December 2018. The latest filing was in December 2021.

### Ownership of Nuclear Power Plants During Decommissioning

Because the expertise needed to operate a nuclear power plant is different than the expertise needed to decommission a plant, some operators in the United States have elected to transfer the power plant after closure to a third party to complete the decommissioning process. The acquiring party accepts the responsibility for full decontamination and site restoration, and would have access to the trust funds established by the original operator and in the case of a regulated utility, funded by ratepayers.

Other power plants retain ownership of the plant itself, as well as the licenses, spent fuel and Nuclear Decommissioning Trust. They may elect however, to hire a contractor to perform the decommissioning activities, instead of performing the activities themselves. Both SONGS, located in San Onofre, California and the Fort Calhoun Nuclear Generating Station, located in Fort Calhoun, Nebraska are examples of this option. Both of these plants have entered into a contract

for EnergySolutions to be the General Decommissioning Contractor. EnergySolutions will perform all of the work and hire the subcontractors while the power plant operator (SCE and Omaha Public Power District) will perform the contract oversight (similar to a general contractor and property owner of a construction site).

The following nuclear power plants, located in other states, have been sold to companies that will complete the decommissioning activities.

**1. Indian Point (NY) Nuclear Power Plant, Buchanan, New York – Merchant Generator**

Entergy Corporation has agreed to sell the subsidiaries that own Indian Point Units 1, 2, and 3, to a Holtec International subsidiary for decommissioning. The sale includes the transfer of the licenses, spent fuel, decommissioning liabilities, and Nuclear Decommissioning Trusts for the three units. (2019)

<http://www.safesecurevital.com/entergy-agrees-to-post-shutdown-sale-of-indian-point-energy-center-to-holtec-international/>

**2. Vermont Yankee Nuclear Power Plant – Vernon, Vermont – Regulated Utility**

Entergy Corporation completed the sale of Entergy Nuclear Vermont Yankee to subsidiaries of NorthStar Group Services, which will decommission the Vermont Yankee Nuclear Power Station site. The sale is a first-of-its-kind in the nuclear power industry – a permanent ownership and license transfer to a company that is slated to perform timely and efficient decommissioning and site restoration. NorthStar will own, possess the licenses for, and decommission Vermont Yankee. (2018)

<http://vydecommissioning.com/entergy-completes-sale-of-vermont-yankee-to-northstar/>

**3. Zion Illinois Nuclear Power Plant – Zion, Illinois - Merchant Generator**

Exelon Corporation completed the sale of Zion Station to EnergySolutions, to dismantle the plant and remove material and parts to its Utah waste facility. The sale includes the transfer of the station license. Exelon retains ownership of the spent nuclear fuel. At the completion of the decommissioning, responsibility for the site will transfer back to Exelon. (2010)

[https://www.exeloncorp.com/newsroom/Documents/Press-Release-Starting%20with%20Zion%20Station%20Decommissioning,%20Exelon%20to%20Make%205-Year,%20\\$46%20Billion%20Investment%20in%20Illinois\\_2585.pdf#search=Zion](https://www.exeloncorp.com/newsroom/Documents/Press-Release-Starting%20with%20Zion%20Station%20Decommissioning,%20Exelon%20to%20Make%205-Year,%20$46%20Billion%20Investment%20in%20Illinois_2585.pdf#search=Zion)

**4. Pilgrim Nuclear Power Station – Plymouth, Massachusetts - Merchant Generator**

Entergy Corporation has agreed to sell the subsidiaries that own the Pilgrim Nuclear Power Station, after shutdown and reactor defueling, to a Holtec International subsidiary for decommissioning. The sale includes the transfer of the licenses, spent fuel and Nuclear Decommissioning Trust. (2019)

<http://www.pilgrimpower.com/entergy-agrees-to-post-shutdown-sale-of-pilgrim-palisades-nuclear-power-plants-to-holtec-international-for-decommissioning/>

**5. Palisades Nuclear Power Plant – Covert, Michigan – Merchant Generator**

Entergy Corporation has agreed to sell the subsidiaries that own the Palisades Nuclear Power Plant, after shutdown and reactor defueling, to a Holtec International subsidiary for decommissioning. The sale includes the transfer of the licenses, spent fuel and Nuclear Decommissioning Trust. (2019)

<http://www.palisadespower.com/entergy-agrees-to-post-shutdown-sale-of-pilgrim-palisades-nuclear-power-plants-to-holtec-international-for-decommissioning/>

**6. Oyster Creek Generating Station -Lacey Township, New Jersey - – Merchant Generator**

Exelon Generation has agreed to sell the Oyster Creek Generating Station to Holtec International for decommissioning. Under the terms of the agreement, Holtec will assume ownership of the site, real property and used nuclear fuel. As the site’s owner, Holtec will manage all site decommissioning and restoration activities. (2019)

<https://www.exeloncorp.com/newsroom/holtec-international-to-purchase-oyster-creek>

**7. LaCrosse Boiling Water Reactor - Genoa, Wisconsin – Merchant Generator**

Dairyland Power Cooperative executed an agreement with EnergySolutions Incorporated for the decommissioning of the La Crosse Boiling Water Reactor (LACBWR) site located in owned by Dairyland. Under the agreement, Dairyland’s Possession Only License will be transferred to an EnergySolutions company, LaCrosseSolutions, which will assume responsibility for completing the remaining decommissioning of the site except for the spent nuclear fuel storage facility. Dairyland will retain ownership of the site and the spent nuclear fuel. Upon completion of decommissioning, the License will be amended to cover the dry fuel storage facility only and transferred back to Dairyland.

<https://www.energysolutions.com/dairyland-power-and-energysolutions-sign-license-stewardship-agreement/>

The electric utility industry is partially unregulated. Although a few states don’t regulate electricity generation, most of the sector is still regulated. Companies usually operate with a combination of regulated and unregulated activities.

Regulated markets feature vertically-integrated utilities that own or control the entire flow of electricity from generation to meter. Examples in the United States include Florida, Colorado, Idaho, and Kentucky. Conversely, utilities (Merchant Generators) in deregulated markets must divest all ownership in generation and transmission, and are only responsible for distribution, operations, and maintenance from the interconnection at the grid to the meter; billing the ratepayer; and acting as the Provider of Last Resort (POLR). Deregulated markets feature grid operators that administer wholesale markets to ensure reliability on the grid and prevent blackouts. Multiple retail suppliers (or load serving entities, known as LSEs) buy generation and sell electricity to end-users.

Several states have become deregulated markets over the last 20 years, largely in the Northeast, Mid-Atlantic, and Texas. Other states, such as California, are partially deregulated or have had deregulation suspended.

If PG&E, as a California regulated utility, were to pursue sale of the plant to another entity to accomplish decommissioning, that sale would require the approval of the CPUC, as well as the NRC.

*[Added May 2019]*

### 2018 NDCTP Decision

On December 13, 2018 PG&E submitted the 2018 Nuclear Decommissioning Cost Triennial Proceeding (NDCTP) to the California Public Utilities Commission (CPUC). On January 10, 2020 a Settlement Agreement was filed in response to the 2018 NDCTP between PG&E and the following intervenors:

- The Utility Reform Network
- The Public Advocate’s Office of the California Public Utilities Commission
- Alliance for Nuclear Responsibility
- County of San Luis Obispo
- Women’s Energy Matters
- yak tit’u tit’u yak tihini Northern Chumash Cultural Preservation Kinship

The Settlement Agreement included a reduction in the Decommissioning Cost Estimate from \$4.8 billion dollars to \$3.9 billion dollars. PG&E proposed this reduction through a \$200 million dollar savings related to general repurposing (subject to regulatory approvals), \$300 million dollars in savings created through a shortened time frame in the transfer period for the spent nuclear fuel from the cooling pools to dry cask storage and \$400 million dollars in savings through the repurposing, instead of removal, of the breakwater. The settlement also provided a revenue recovery requirement over eight years that created about \$112.5 million dollars that also provided an opportunity for non-qualified trust use. This would allow funding to be used for planning and permitting work in the years before the plant ceases operation. This means that PG&E would be able to proceed straight to “decon” when Unit 2 shuts down in 2025. This is consistent with this Strategic Vision that states: “The decommissioning (decontamination) process should begin immediately upon shutdown with a goal of 10 years for completion of radiological decommissioning and decontamination, avoiding SAFSTOR (which allows up to 60-year delay in decontamination)”. It also allows for the procurement of a spent nuclear fuel management system, and the conducting of physical work while the plant is operating.

On August 6, 2021, the CPUC issued a preliminary decision that adopted the Settlement Agreement. That decision found that the Settlement Agreement is reasonable, consistent with the law and is in the public interest. On September 9, 2021 the CPUC voted to finalize the decision. *[Added April 2022]*

### Extending Operations at DCP

#### **Background**

At a public meeting held on December 14, 2022, the DCDEP heard from different agencies that will be involved in the potential extended operation of the DCP. On September 1, 2022, the California Legislature passed Senate Bill 846 (SB 846), which authorizes the extension of operating the DCP beyond the current expiration dates (2024 Unit 1 / 2025 Unit 2) for up to five additional years (no later than 2029 Unit 1 / 2030 Unit 2).

The bill also authorized a mostly forgivable loan of \$1.4 billion from the state (using largely federal monies) to PG&E to facilitate the extension of the plant. PG&E announced that it will seek an operating license extension from NRC. A completed application for license renewal will be submitted to the NRC by PG&E no later than December 31, 2023.



Existing law requires the California Public Utilities Commission (CPUC) verify that utilities have plans in place that assure system and local reliability on both a near-term and long-term basis. A number of events, including drought, unusual cold and heat occurrences, global supply chain issues and changing market conditions, have made it difficult to meet planning standards for near-term reliability. These events have also made it difficult to bring renewable energy projects on line fast enough to cover these extreme conditions in both the near-term and long-term. There is a need for more resources to cover the reliability risks associated with peak electricity demands. (see chart below from CEC Vice Chair Gunda's presentation to the DCDEP at the December 14, 2022 public workshop)



To address this, in 2022, the California legislature passed four bills that work together to help address the state's energy reliability issues. Senate Bill 846 (SB 846) is one of these bills. Assembly Bill 424 (AB 424), requires an assessment of Firm Zero-Carbon Resource standards. Assembly Bills 205 and 209 (AB 205 and SB 209), primarily provide various state agencies with additional funding to shore up additional resources that can help with the emergency peaks coming from extreme heat, drought or fires. Also, AB 209 provides additional funding for offshore wind and other renewable technologies.

SB 846, sets in motion the analysis, conditions and requirements necessary for an extension of DCPD through 2030. The bill has two objectives as follows: (1) the bill tasks State agencies with determining the prudence of the extension, taking into consideration reliability issues, as well as cost effectiveness and greenhouse gas (GHG) reduction goals; and (2) given the time constraints of extending the operation of a nuclear power plant (which has many regulatory hurdles) provides direction to State agencies to take the minimum required steps to maintain the option for extending operations at DCPD beyond 2024 and 2025. SB 846 also directs, primarily the CPUC, to take actions to ensure ratepayer benefit, protection and safe operations.

**Summary of actions required by SB 846**

SB 846 provides a financial and regulatory pathway that would allow the potential of continuing operations at the DCPD beyond the scheduled shutdown. While the legislation provides a pathway, there are numerous activities and approvals that must be accomplished before DCPD would be able to continue operations. There are approximately 40 different activities assigned to various State agencies outlined in the bill.

The California Energy Commission (CEC), CPUC, Department of Water Resources (DWR), and the California Natural Resources Agency (CNRA) are primarily responsible for the tasks laid out in SB 846. The California Independent Systems Operator (CAISO), the State Water Board, Department of Finance and the State Controller's Office and other entities are also called out specifically in the legislation.

#### CEC Tasks

The CEC is tasked with development of a joint agency reliability planning assessment which will inform the prudence of extending operations at DCP, along with several other tasks, outlined below:

A Joint Agency Reliability Planning Assessment (Reliability Planning Assessment) addresses requirements for electricity reliability reporting as set forth in both SB 846 and AB 205. The report provides the first quarterly review of the demand forecast, the supply forecast, and potential high, medium, and low risks to reliability in the California Independent System Operator territory from 2023 to 2032. The analysis completed for 2023 is preliminary and will be updated in May 2023 to capture relevant pre-summer conditions (e.g., hydroelectric updates). The report also provides an evaluation of summer 2022 reliability and the magnitude of reliability problems for 2023–2026, as required by AB 205.

A Clean Energy Reliability Investment Plan (CERIP) addresses a requirement in SB 846 for the CEC to develop a \$1 billion investment plan for clean energy resources. Specifically this plan would evaluate an acceleration of the creation of clean energy resources so that there would no need for DCP beyond 2030. The CERIP provides justification and recommendations for clean energy investments that accelerate the deployment of clean energy resources, support demand response, assist ratepayers, and increase energy reliability. The plan takes into account California's anticipated supply and demand needs for near-term and mid-term reliability, advancement of the state's policies towards 100 percent zero-carbon and renewable energy resources by 2045, and the state's greenhouse gas emissions reduction targets for the electricity sector.

An Analysis of Need to Support Reliability addresses a requirement in SB 846 for the CEC to determine the need to extend the operation of the DCP for 2024–2030. The analysis is based on a CEC assessment of the state's electricity reliability based on forecasted demand and supply for that period. Based on CEC's analysis, the CEC staff recommends that CEC determine that it is prudent for the state to pursue extension of DCP. This determination is driven by the risk that sufficient electricity resources may not be built in time to reach the ordered procurement and to address potential grid demands in extreme heat events associated with climate change. This report was submitted in March 2023. It can be found at this [link](#).

A report on the need for an extension of operations at DCP is due in July 2023; and a report on operations at DCP, the cost effectiveness of DCP and cost comparison of alternatives to continued operations at DCP is due in October 2023. The CEC will also look at load-shift goals and policies to ensure there are more tools in the toolbox for the State to rapidly meet its clean energy goals.

The joint agency reliability planning assessment estimates the electric supply and demand balance over the next 3 to 15 years. It identifies expected loads and resources and potential delays or barriers in bringing in a new supply and recommends actions to resolve these potential delays. This report has to be completed on a quarterly basis. The first report was submitted in February 2023, and it must be updated quarterly. Follow this link to view the first report: [Joint Agency Reliability Planning Assessment \(ca.gov\)](#)

Specific to DCP, the CEC will need to evaluate whether there is a potential for reliability deficiencies and whether an extension of operation makes sense. Also, an assessment of operations at DCP that would look into the past and see how often the plant was out of operation (ie: planned and unplanned outages). Alternatives to extending DCP operations and cost comparison of these alternatives will also be evaluated.

The legislation also requires the CEC, in consultation with the CPUC and CAISO, look at the opportunity to reduce the demand for electricity through load shifting to reduce net peak electrical demand for some of the resources in the long term. This is not just looking at DCP, but also at other once through cooling power plants that are seeking extension.

Finally, the CERIP sets forth a billion dollars to support investments that take into account: anticipated supply and demand (need for near- and mid-term reliability), advancement of 100 percent zero carbon and renewable resources policies and meeting the Greenhouse Gas reduction target for electricity sector.

#### CPUC Tasks

The CPUC will have a supporting or joint role with the CEC in many of the tasks assigned to the CEC. However, the CPUC's primary responsibility is making sure that there is ratepayer protection if operations are extended at DCP. By the end of 2023, the CPUC will need to determine DCP final closure dates. This determination will not look beyond 2030, but will determine if it's feasible for the plant to close sooner. The CPUC, within an "Energy Resource Recovery Account" type of proceeding, will look at enabling PG&E to recover the reasonable costs and expenses of operating DCP, authorize PG&E to recover, in rates, an operating fee for each megawatt hour generated by DCP during extended operations, and determine whether PG&E is liable for any above-market costs resulting from any extended outages.

The CPUC is also tasked with establishing a new cost allocation mechanism to recover costs from all CPUC jurisdictional entities, authorizing the recovery of reasonable replacement power costs by PG&E, if incurred, during any DCP unplanned outage periods, and determining whether and how much additional decommissioning funding is needed and authorize PG&E to collect as needed.

Both during the license renewal process or any extended operations, the CPUC will determine whether continued operations are reasonable or not as a result of the cost of performing upgrades needed to continue operations of one or both units. This is reviewed in relation to whether the costs exceed the benefits to ratepayers. Also, at the end of any continued operations, the CPUC will verify that PG&E's sole compensations during the period of extended operations is limited to the volumetric and fixed payments.

A key requirement for the CPUC established in the legislation to is assure there is sufficient funding for the Diablo Canyon Independent Safety Committee (DCISC) to continue and to attract qualified experts to sit on the committee and for PG&E to respond to the findings and recommendations of the DCISC and distribute the response to various public entities.

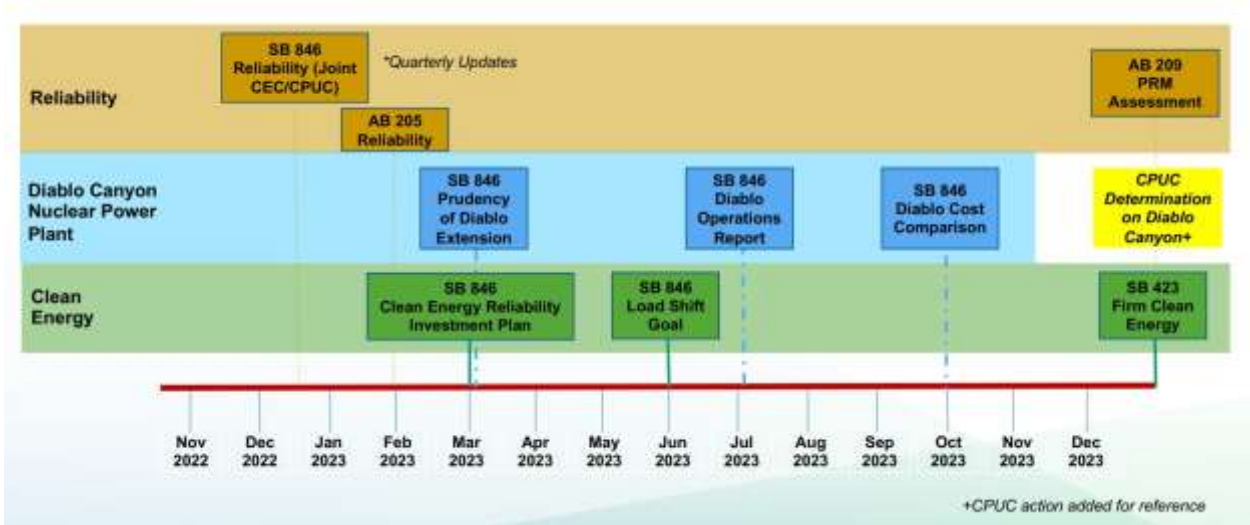
There is also direction for the CPUC to work with local Native American tribes to make sure that their interests are reflected, along with the local communities, relative to the disposition of DCPD properties. This includes the designation of a tribal liaison to consider tribal access, use, conservation, and co-management of DCPD lands.

DWR Tasks

DWR is primarily a channel for disbursement for moneys that were set aside to pay for some of the cost that PG&E might incur in keeping the open option for extended operations at DCPD. These include, developing and executing contracts that disperse funds for the loaning of money necessary for advancing next steps, compensating operators’ performance, and contracting for external expertise to help with the whole process.

CNRA Tasks

The CNRA is required to submit to the Legislature: a detailed description and plan identifying all actions necessary for extension of DCPD and a Land Conservation and Economic Development Plan that includes a public outreach component. The CNRA, along with all the agencies, are to ensure there is robust stakeholder participation.



**PG&E - Dual Track**

PG&E began the process of decommissioning in 2016, with the approval of the joint proposal in partnership with labor and environmental organizations, that would increase investment in energy efficiency and renewables while retiring DCPD at the end of its current NRC operating licenses. Since that time, PG&E has been working towards obtaining all the approvals needed for shut down of the DCPD.

When SB 846 was enacted in September 2022, PG&E was now tasked with two different actions. The first is continuing the work on the decommissioning of DCP in 2025 when Unit 2 is scheduled to cease operations, and the second is to take the necessary steps to continue operation of DCP past 2025. (see graphic below from PG&E’s presentation to the DCDEP at the December 14, 2022 public workshop) Although SB 846 provides a pathway for continuing operations at DCP, there are a number of assessments, approvals and subsequent legislative actions that would need to occur. Because approval of continued operations at DCP has not yet occurred and PG&E’s commitment to the community was to go directly into decommissioning once the facility is no long in use, proceeding with the work necessary for closure will continue.

The steps that PG&E is working on in order to complete the closure of DCP include, continuing to work with the DCDEP and support stakeholder and public participation on items relating to decommissioning, completing the decommissioning land use permitting that is underway with the County of San Luis Obispo, Coastal Commission and other local and state agencies, working on the decommissioning licensing actions required by the NRC, preparing the triennial cost proceedings (NDCTP) required by the CPUC and continuing to work on activities associated with disposition of the Diablo Canyon lands.

At the same time, PG&E will be pursuing license renewal with Federal and State agencies, completing the requirements for continued operations that were specified in SB 846 and developing an employee retention program.

PG&E will also continue to work with Orano, the contractor recently selected to construct the new Spent Nuclear Fuel storage system on the existing ISFSI area located on-site. This system will need to be in place for either scenario of closure or continued operations.



**Resource Materials**

The following links are offered to assist the public with understanding SB 846 and keeping informed regarding continued operations.

Information	Link
Text of Senate Bill 846	<a href="#">Bill Text - SB-846 Diablo Canyon powerplant: extension of operations.</a>
PG&E Summary of Senate Bill 846 and Status of activities related to the extended operations of DCP	<a href="#">SB-846-PGE-Summary-11_23_22.pdf (diablocanyonpanel.org)</a>
California Energy Commission (CEC) Senate Bill 846 Docket	<a href="#">California Energy Commission : e-comment : Submit Comment</a>
Diablo Canyon Independent Safety Committee	<a href="#">Diablo Canyon Independent Safety Committee (DCISC)</a>

**Spent Nuclear Fuel Management**

SB 846 allow PG&E to request a license extension to operate the DCP beyond 2025. There are many steps (as outlined above) that need to occur before an extension can be granted, including approval by the NRC. If operations are extended, the program for Spent Nuclear Waste Management will need to be modified to reflect on-going operations, as opposed to decommissioning. There may be the need to expand or modify the existing ISFSI if the plant continues to operate. The DCDEP will continue to monitor these efforts as more information becomes available regarding extension of operations, including the important issues surrounding the storage and management of spent nuclear fuel. Click [here](#) for a letter from PG&E to the Executive Director of the CEC that outlines both the available capacity of the existing wet and dry sent nuclear fuel storage and the forecasted amount of spent fuel generated through continued operations.

[Added April 2023]

**E. Diablo Canyon Decommissioning Engagement Panel (DCDEP)**

In 2016 when PG&E announced plans to close the DCP, a partnership with labor and leading environmental organizations was formed to create the “joint proposal.” The joint proposal included a plan to engage the community in a very transparent, robust and collaborative conversation about how DCP will be shutdown. In addition, in 2018, the CPUC directed that PG&E take no action with respect to any of the lands and facilities before completion of a public stakeholder process. The DCDEP was formed to create an avenue for this two-way communication. The meetings and workshops held by the DCDEP allow local community members to provide direct input to PG&E, and subject matter experts to provide information to the panel and the public about DCP decommissioning.

The DCDEP is helping inform PG&E’s site-specific decommissioning plans including future land use and repurposing recommendations. PG&E will consider DCDEP input while ensuring that DCP decommissioning plans remain in compliance with regulatory guidelines and protection of PG&E assets. The DCDEP functions solely in an informational and advisory capacity. PG&E retains complete discretion to accept, modify or decline any recommendations made by the DCDEP, as PG&E is responsible for ensuring the health and safety of the public and is the financial and land

steward of DCPD assets. Final decisions regarding DCPD decommissioning will be made by PG&E in conjunction with the appropriate regulatory agencies.

PG&E is seeking community input through the DCDEP as it prepares the DCPD decommissioning plans and cost estimates that will be the subject of an ongoing regulatory process that began with the filing of the NDCTP on December 13, 2018 with the CPUC. PG&E intends to continue to engage with the DCDEP and solicit input from the public during this multi-year review process.

#### Initial Panel Formation Process

In early February 2018, PG&E announced its intention to form the DCDEP. PG&E employed a robust print, radio and social media advertising campaign to make the public aware of the opportunity to submit an application to become a member of the Engagement Panel. A formation committee, comprised of representatives from the local community and PG&E, developed panel selection criteria, reviewed applications and participated in a facilitated process to reach consensus on a slate of community panel-member recommendations for PG&E's final decision. The formation committee was looking for representatives from the local community who broadly reflect the diverse community stakeholder viewpoints in proximity to DCPD. There are no designated seats for any organization or interest group on the panel. The community members of the DCDEP are unpaid volunteers who are highly engaged and well-informed leaders in the community. Elected officials, PG&E employees and their immediate family members were not eligible for the initial community panel membership. After an in-depth review of 105 applicants, a formation committee assisted in the selection of the initial eleven community members of the DCDEP (the twelfth member is a PG&E representative). The formation committee was comprised of the following individuals:

- Dee Lacey
- Katcho Achadjian
- Ermina Karim
- Rochelle Becker
- Jeff Thomas
- Ken Thompson
- Tom Jones, PG&E
- Stephanie Isaacson, PG&E

*[Amended July 2020]*

#### Reappointment and Vacancy Process

As DCDEP member appointments expire, PG&E opens an application period that lasts a minimum of 30 days. Through advertisements placed in various traditional and social media outlets, new members are sought to fill expiring terms and any other vacancies (e.g.: resignations). Decisions on memberships to be renewed or vacancies filled are made by PG&E representatives, along with panel members not seeking reappointment, consistent with the DCDEP's Charter.

*[Amended April 2022]*

#### Composition of the Diablo Canyon Decommissioning Engagement Panel

The Diablo Canyon Decommissioning Engagement Panel (DCDEP) is comprised of representatives from the local community.

The current member's complete profiles can be found by following this [link](#). 2021-22 DCDEP members are as follows:

Will Almas, San Luis Obispo - Will, currently retired, has lived in San Luis Obispo for over 20 years. His experience includes over 30 years with gas and oil companies and uranium mining and processing companies. This included overseeing remediation projects and the decommissioning and reclamation of mining and processing facilities. *[Added April 2022]*

Dr. Timothy Auran, Avila Beach – Tim has lived on the Central Coast for over 10 years and is currently employed as CEO and interventional radiologist at Radiology Associates in San Luis Obispo. He has knowledge of both radiation therapy and the nuclear industry. *[Added March 2021]*

David M. Baldwin, Atascadero – David is a lifelong resident of San Luis Obispo County and currently works in Public Works Labor Compliance for the Labor Management Compliance Council and is a member of Plumbers and Steamfitters local 403. David was appointed by the governor to the 16th District Agricultural Association California Mid-State Fair Board of Directors, where he currently serves as Chairman of the Finance and Operations Committees.

Dena Bellman, Arroyo Grande - Dena has lived in San Luis Obispo County most of her life and is active in many community-building volunteer efforts. She currently works as the District Planning Chief with the Channel Coast District of California State Parks. Dena brings a strong knowledge of government and community to this decommissioning effort.

Michael Lucas, Morro Bay – Michael, Professor Emeritus (Architecture, Cal Poly), is a twenty-year resident of Morro Bay and served as a Planning Commissioner there for over fifteen years. He brings his knowledge of environmental review, land use and land stewardship to the Panel. *[Added April 2023]*

Robert “Bob” Pavlik, San Luis Obispo – Bob has lived in San Luis Obispo County since 1986 and is currently retired from Cal Trans where he was the Supervising Environmental Planner for the Central Region. He previously served on the City of SLO Cultural Heritage Committee, the BLM’s Carrizo Plain National Monument Advisory Committee and Heritage Shared. *[Added April 2023]*

Charlene Rosales, San Luis Obispo – Charlene is a 35-year resident of San Luis Obispo and is currently the Deputy Director/COVID Manager for Mission Community Services Corporation Women’s Business Centers. She is a member of numerous economic non-profit organizations, as well as serving on the boards of a number of local community groups. *[Added March 2021]*

Linda Seeley, Los Osos – Linda, currently retired, has been a resident of San Luis Obispo County since 1982. She worked as a nurse-midwife and women’s health nurse practitioner. She is a member of San Luis Obispo Mothers for Peace, as well as other environmental interest groups.

Bruce Severance, Grover Beach – Bruce has lived in the South County area for over 25 years. EV and green product designer since 1990 and a licensed green builder, home designer and energy analyst since 2011. He co-founded the Latino Business and Community Council and is also a founding member of the San Luis Obispo Climate Coalition and the Economic Recovery Initiative. *[Added April 2023]*



Mariam Shah, Arroyo Grande – Mariam, has lived on the Central Coast since 2008, and served two terms on the Grover Beach City Council. She currently serves on the Board of the Five Cities Homeless Coalition and brings a passion for keeping the Central Coast accessible for families and people of all income levels to the DCDEP. *[Added April 2022]*

Kara Woodruff, San Luis Obispo – Kara has lived in San Luis Obispo County for nearly three decades and is currently the District Director for Senator John Laird. Kara brings to the panel a strong interest in the conservation of the Diablo Canyon Lands.

Maureen Zawalick, San Luis Obispo (PG&E Representative) - Maureen has over 30 years' experience in the utility and nuclear energy industry and is Vice President of Business and Technical Services for Generation at the Pacific Gas and Electric Company. *[Added March 2021]*

Scott Lathrop (Ex-Officio Member) – Scott has lived in San Luis Obispo County for most of his life. A Chumash Native American, his ancestral roots are in and around Diablo Canyon. He recently retired from a public-school district where he was the Assistant Superintendent of Business Services.

Trevor Keith (Ex-Officio Member) – Trevor is the Director of San Luis Obispo County Planning and Building Department.

**Past Members:**

Jon Franke (PG&E Representative): May 2018 through December 2018

Frank Mecham, Paso Robles: May 2018 through December 2019

Nancy O'Malley, Avila Beach – May 2018 through July 2020

Jim Welsch (PG&E Representative) – January 2019 through October 2019

Alex Karlin, San Luis Obispo – May 2018 through March 2021

Lauren Brown, San Luis Obispo – May 2018 through March 2021

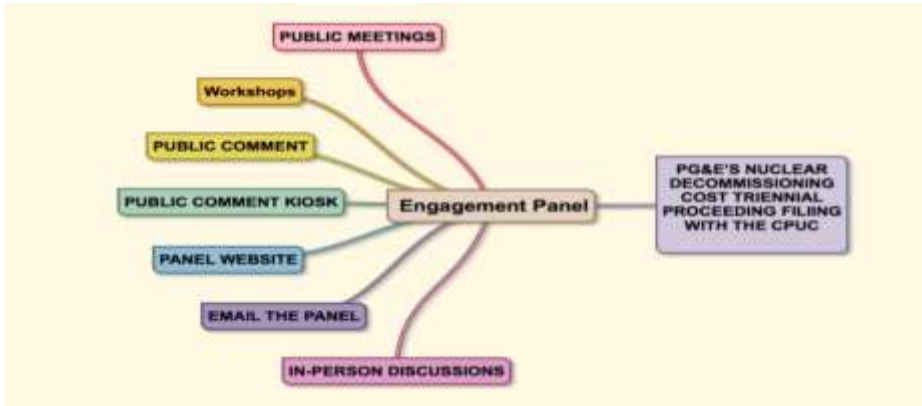
Patrick Lemieux, Morro Bay – March 2021 through May 2022

Sherri Danoff, Avila Beach – May 2018 through May 2022

*[Amended May 2019 / February 2020 / March 2021/April 2022/April 2023]*

# II. Engagement Panel Community Outreach Efforts

The DCDEP held its first public meeting on May 30, 2018. Since that time the DCDEP has conducted a total of twenty-one public community meetings and six public workshops to receive information and listen to the public’s concerns and perspectives. The DCDEP members used numerous pathways to inform the public about the decommissioning process and receive feedback. Since the formation of the DCDEP, PG&E has supported their efforts with targeted media announcements and social media advertising. In addition, PG&E has completed more than 300 tours of the plant site and lands for over 1,600 individuals. Since 2018 there have also over 200 presentations made to the public reaching more than 13,000 members of the public. In 2021, PG&E began developing guide-less virtual tours (videos) of the plant, lands, marina and ISFSI, that have garnered over 14,000 views to date. In 2019, the DCDEP created a website separate from the PG&E website that allows the DCDEP to directly oversee and manage the content. The website can be found at: <https://diablocanyonpanel.org/>.



## A. Community Outreach Activities - 2018

2018 was the first year of public outreach. There was a concentrated effort that included public meetings, workshops, public tours of the site and presentations to community groups. In addition, the DCDEP participated in fact-finding tours and field trips to be more knowledgeable about the DCP, similar decommissioning projects, existing conservation activities and other community engagement panels.

### 2018 Public Meetings and Workshops

The DCDEP conducted seven public meetings in 2018 addressing a range of decommissioning topics. Prior to the first meeting, the DCDEP requested that PG&E identify the decommissioning topics that required public input prior to filing the 2018 NDCTP. At the first meeting, the DCDEP members discussed PG&E’s recommendations and then selected and scheduled the topics to be addressed through 2018.

Prior to each public meeting, PG&E and the DCDEP hosted an open house where the public could view information specific to the meeting topic and speak individually with PG&E technical experts and DCDEP members. Online kiosks were also available where members of the public could ask questions or provide comments. Time on the agenda was also allocated at each public meeting for public comments where members of the public or organizations could express their concerns and make recommendations.

Meetings can be viewed by selecting the Meeting Video link in the table below. The transcript and the agenda and presentation materials for each meeting can also be viewed by selecting the appropriate link below.

<b>Date</b>	<b>Decommissioning Topic</b>	<b>Meeting Details</b>
May 30, 2018	Introduction and Selection of Meeting Topics	<a href="#">Meeting Video</a> <a href="#">Meeting Transcript</a> <a href="#">Agenda &amp; Presentation Slides</a>
June 27, 2018	Regulatory Requirements for the NDCTP	<a href="#">Meeting Video</a> <a href="#">Meeting Transcript</a> <a href="#">Agenda &amp; Presentation Slides</a>
July 25, 2018	Decommissioning Funding	<a href="#">Meeting Video</a> <a href="#">Meeting Transcript</a> <a href="#">Agenda &amp; Presentation Slides</a>
August 29, 2018	Diablo Canyon Lands	<a href="#">Meeting Video</a> <a href="#">Meeting Transcript</a> <a href="#">Agenda &amp; Presentation Slides</a>
September 26, 2018	Repurposing of DCPD Facilities	<a href="#">Meeting Video</a> <a href="#">Meeting Transcript</a> <a href="#">Agenda &amp; Presentation Slides</a>
October 24, 2018	Emergency Planning	<a href="#">Meeting Video</a> <a href="#">Meeting Transcript</a> <a href="#">Agenda &amp; Presentation Slides</a>
November 13, 2018	Draft DCDEP Strategic Vision Report	<a href="#">Meeting Video</a> <a href="#">Meeting Transcript</a> <a href="#">Agenda &amp; Presentation Slides</a>

*Transcription materials provided for meetings only*

In addition to the monthly public meetings held in 2018, the DCDEP held four full-day workshops on Diablo Canyon Lands and DCPD facility repurposing. The purpose of the workshops was to give interested organizations and the public more time than could be allocated at a monthly public meeting to present their ideas and engage in a dialogue with the DCDEP members. A total of twelve organizations made presentations on Diablo Canyon Lands and nine on Facility Repurposing.

The following is a list of the workshop dates and topics. The agendas are available by selecting Agenda and the recorded online video is available online by selecting “View Video.”

<b>Date</b>	<b>Topic</b>	<b>Workshop Details</b>	
August 17, 2018	Diablo Canyon Lands	<a href="#">Agenda</a>	<a href="#">View Video</a>
August 18, 2018	Diablo Canyon Lands	<a href="#">Agenda</a>	<a href="#">View Video</a>
September 14, 2018	DCPD Facility Repurposing	<a href="#">Agenda</a>	<a href="#">View Video</a>
September 15, 2018	DCPD Facility Repurposing	<a href="#">Agenda</a>	<a href="#">View Video</a>

**2018 - Public Tours of Diablo Canyon Lands and Facilities**

In concert with the DCDEP public meeting and workshops on Diablo Canyon lands and facility repurposing, PG&E hosted over 20 3-hour bus tours of the of the lands, coastline and DCPD facilities for the general public during August and September. Over 500 community members

viewed the lands and facilities under discussion by the DCDEP. The tours were narrated by PG&E representatives and supported with videos. In addition, approximately 2,500 people hiked the Pecho Coast and Point Buchon trails during the same time period

**2018 - Presentations to Community Organizations**

DCDEP members reached out to community organizations and service clubs to make presentations and discuss decommissioning activities. Approximately 300 people participated in these presentations which included a 15-20-minute talk illustrated with a PowerPoint presentation and a follow-up question and answer session. The presentations were well received and the questions and answer sessions were very energetic.

<b>Date</b>	<b>Community Group</b>	<b>Approximate # of People</b>
August 13, 2018	Monday Rotary, San Luis Obispo	75
August 30, 2018	United Methodist Men’s Breakfast, San Luis Obispo	15
September 21, 2018	Exchange Club, San Luis Obispo Care Center	40
September 24, 2018	Lions Club, San Luis Obispo	25
October 17, 2018	Rotary de Tolosa, San Luis Obispo	75
November 1, 2018	Economic Committee, SLO Chamber of Commerce	30
December 13, 2018	Retired Active Men, San Luis Obispo	70
<b>Total</b>	<b>7 Community Groups</b>	<b>330</b>

[Amended April 2019]

**2018 - DCDEP Field Trips and Facility Tours**

In addition to monthly public meetings and full-day workshops, the DCDEP members also participated in numerous fact-finding tours and field trips to be more knowledgeable about the DCP, similar decommissioning projects, existing conservation activities and other community engagement panels. The following is a list of fact-finding tours and activities.

<b>Date</b>	<b>Activity</b>	<b>Host</b>
May 16, 2018	Tour of DCP facilities, lands and coastline	PG&E
July 9, 2018	Tour of Marine Mammal Center	Marine Mammal Center
August 15, 2018	Tour of Pacific Wildlife Care Center	Pacific Wildlife Care
September 7, 2018	Tour of CSU Monterey Bay	Cal Poly and CSU System
October 26, 2018	Tour of Pismo Preserve	The Land Conservancy of SLO County
November 16, 2018	Tour of Wind Wolves Preserve	The Wildlands Conservancy
November 29, 2018	SONGS Community Engagement Panel (CEP) meeting	San Onofre Nuclear Generating Station (SONGS) CEP
November 30, 2018	Tour of SONGS and interim storage facility	Southern California Edison

## B. Community Outreach Activities - 2019

The DCDEP conducted three public meetings and three public workshops in 2019 addressing a range of decommissioning topics. All DCDEP public community meetings were live-streamed and video recordings are available to be viewed online. In addition, a written transcript of each meeting was compiled. Videos of the meetings, transcripts, agendas and presentation materials for each meeting can be viewed by selecting the appropriate link below.

Date	Subject	Location	Details	
<b>Workshops</b> February 22, 2019 February 23, 2019	Spent Fuel Storage	Embassy Suites SLO	<a href="#">Agenda</a> <a href="#">Agenda</a>	<a href="#">View Video</a> <a href="#">View Video</a>
<b>Panel Meeting</b> March 13, 2019	Spent Fuel Storage	SLO Govt. Center	<a href="#">Meeting Video</a> <a href="#">Meeting Transcript</a> <a href="#">Agenda &amp; Presentation Slides</a>	
<b>Panel Meeting</b> June 12, 2019	Engagement Panel - Role, Function and Structure	SLO Govt. Center	<a href="#">Meeting Video</a> <a href="#">Meeting Transcript</a> <a href="#">Agenda &amp; Presentation Slides</a>	
<b>Workshop</b> October 17, 2019	Economic Impacts / Opportunities of Decommissioning	SLO Govt. Center	<a href="#">Agenda</a>	<a href="#">View Video</a>
<b>Panel Meeting</b> November 13, 2019	Economic Impacts / Opportunities of Decommissioning	SLO Govt. Center	<a href="#">Meeting Video</a> <a href="#">Meeting Transcript</a> <a href="#">Agenda &amp; Presentation Slides</a>	

[Amended February 2020]

## C. Community Outreach Activities - 2020

The DCDEP conducted three public meetings in 2020. All DCDEP public community meetings were live-streamed and video recordings are available to be viewed online. In addition, a written transcript of each meeting was compiled. Videos of the meetings, transcripts, agendas and presentation materials for each meeting can be viewed by selecting the appropriate link below.

Date	Subject	Location	Details	
<b>Panel Meeting</b> March 11, 2020	Land Use and General Update	SLO Govt. Center	<a href="#">Meeting Video</a> <a href="#">Meeting Transcript</a> <a href="#">Agenda &amp; Presentation Slides</a>	
<b>Panel Meeting</b> June 24, 2020	Transportation of Non- Radioactive / Low-Level Radioactive Waste Materials	SLO Govt. Center (On-Line Meeting)	<a href="#">Meeting Video</a> <a href="#">Meeting Transcript</a> <a href="#">Agenda &amp; Presentation Slides</a>	
<b>Panel Meeting</b> October 28, 2020	Water Resources	SLO Govt. Center (On-Line Meeting)	<a href="#">Meeting Video</a> <a href="#">Meeting Transcripts</a> <a href="#">Agenda &amp; Presentation Slides</a>	

[Amended July 2020, March 2021]

## D. Community Outreach Activities - 2021

The DCDEP conducted three public meetings in 2021. These public meetings covered on-going discussions about spent nuclear fuel management as well as the decommissioning project land use application and CEQA process.

Date	Subject	Location	Details
<b>Panel Meeting</b> May 26, 2021 6:00 PM - 9:30 PM	Spent Nuclear Fuel Storage and Management Update/Project Application CEQA Process	SLO Govt. Center (On-Line Meeting)	<a href="#">Meeting Video</a> <a href="#">Meeting Transcripts</a> <a href="#">Agenda &amp; Presentation Slides</a>
<b>Panel Meeting</b> August 25, 2021 6:00 PM - 9:30 PM	Facility Repurposing Update and the CPUC Ruling on the 2018 NDCTP	SLO Govt. Center (On-Line Meeting)	<a href="#">Meeting Video</a> <a href="#">Meeting Transcripts</a> <a href="#">Agenda &amp; Presentation Slides</a>
<b>Panel Meeting</b> November 3, 2021 6:00 PM - 9:30 PM	Strategic Vision Update / Project Application and the CEQA Process	SLO Govt. Center (On-Line Meeting)	<a href="#">Meeting Video</a> <a href="#">Meeting Transcripts</a> <a href="#">Agenda &amp; Presentation Slides</a>

[Amended April 2022]

## E. Community Outreach Activities - 2022

The DCDEP conducted four public meetings in 2022. These public meetings covered various topics, including the new spent nuclear fuel storage system to be constructed at the existing ISFSI and the status of potential extension of operations at DCPD.

Date	Subject	Location	Details
<b>Panel Meeting</b> April 20, 2022 6:00 PM - 9:30 PM	Spent Nuclear Fuel Management and Storage Overview	SLO Govt. Center	<a href="#">Meeting Video</a> <a href="#">Meeting Transcripts</a> <a href="#">Agenda &amp; Presentation Slides</a>
<b>Panel Meeting</b> May 25, 2022 6:00 PM - 9:30 PM	Spent Nuclear Fuel Management and Storage	SLO Govt. Center	<a href="#">Meeting Video</a> <a href="#">Meeting Transcripts</a> <a href="#">Agenda &amp; Presentation Slides</a>
<b>Panel Meeting</b> August 24, 2022 6:00 PM - 9:00 PM	Status on Potential Extension of Operations at Diablo Canyon	SLO Govt. Center	<a href="#">Meeting Video</a> <a href="#">Meeting Transcripts</a> <a href="#">Agenda &amp; Presentation Slides</a>
<b>Panel Meeting</b> December 14, 2022 6:00 PM - 7:30 PM	Status and Schedule for Potential Continued Operation of Diablo Canyon Power Plant	SLO Govt. Center	<a href="#">Meeting Video</a> <a href="#">Meeting Transcripts</a> <a href="#">Agenda &amp; Presentation Slides</a>

[Amended April 2023]

## F. Public Comments Received on Decommissioning Topics

In response to the significant outreach efforts by the DCDEP and PG&E, more than 1,000 documented comments have been received about the topics that have been the subject of public meetings and workshops. All comments received can be viewed here : [\[View Public Comments\]](#)

[Public Comments Received on Initial Draft Deleted April 2019 / Number of Comments by Topic Deleted February 2020]

# III. Strategic Vision and Goals

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Contained in this section are the strategic Visions and Goals of the DCDEP representing the topics covered from May 2018 through December 2022. The Vision and Goals in this Strategic Vision are based on public input received by the DCDEP via public meetings and workshops and written correspondence and were prepared by the DCDEP using a facilitated process.

The DCDEP recognizes that not all subject areas are covered here. Only those topics that have been discussed to date are in this document. The DCDEP will continue to meet and study other critical issues. These matters, as well as refinements to the subject areas covered in this Strategic Vision, will be contained in future iterations of the Strategic Vision.

The following topics are included in this Strategic Vision as amended through December 2022:

- A. Decommissioning Process
- B. Decommissioning Funding
- C. Diablo Canyon Lands
- D. Repurposing of the Diablo Canyon Facilities
- E. Engagement Panel Structure and Function Review
- F. Emergency Planning
- G. Spent Fuel Management
- H. Economic Impacts / Opportunities
- I. Transportation of Non-Radioactive and Low-Level Radioactive Waste Materials
- J. Water Resources
- K. Decommissioning Land Use Permit and the CEQA Process
- L. New Spent Nuclear Fuel Storage System

The vision statements in this document are the framework around which the goals and recommendations are based. A goal is a description of a desired outcome and the recommendations are the activities needed to meet the goal. The recommendations are contained in Section IV – Recommendations/Implementation Plan. As appropriate, the DCDEP will report on the status of the recommendations. *[Amended July 2020, March 2021, April 2022, April 2023]*

## A. Decommissioning Process

The DCDEP recognizes that the decommissioning of the DCPD will be a lengthy and complicated process involving local, state, and federal regulatory agencies. Decommissioning, which includes the issues of the long-term storage and intended future removal from the DCPD site of spent nuclear fuel, could span several decades and will require the community and stakeholders to remain attentive and engaged for many years. (See Figure 2 - Example Timeline for Decommissioning)

Through these vision statements, goals and recommendations, it is the intent of the DCDEP to make health and safety the first consideration throughout the decommissioning process and to establish and maintain working relationships that encourage information sharing and effective dialogue among all persons and entities with an interest in the decommissioning process.

Recommendations for Decommissioning Process can be found in Section IV of this document.

### **Vision Statements**

- The health, safety and well-being of the local community should be ensured before, during and after decommissioning
- The decommissioning (decontamination) process should begin immediately upon shutdown with a goal of 10 years for completion of radiological decommissioning and decontamination, thus avoiding SAFSTOR (which allows up to 60-year delay in decontamination)
- The decommissioning process should be safe, timely, cost effective and efficient
- The CPUC should continue the DCDEP at a minimum until cessation of operations of the DCP

### **Goals**

#### **1. Diablo Canyon Decommissioning Engagement Panel**

- a. The DCDEP should continue its role of interacting with the public to assure the public's perspectives are understood and considered by PG&E and regulatory agencies
- b. The DCDEP should continue to assist PG&E in seeking out new ideas/opportunities throughout the decommissioning process
- c. The DCDEP should assist the public in understanding what to expect during the decommissioning process
- d. The DCDEP's recommendations and guidance during the decommissioning process should be strongly considered by PG&E and regulatory agencies

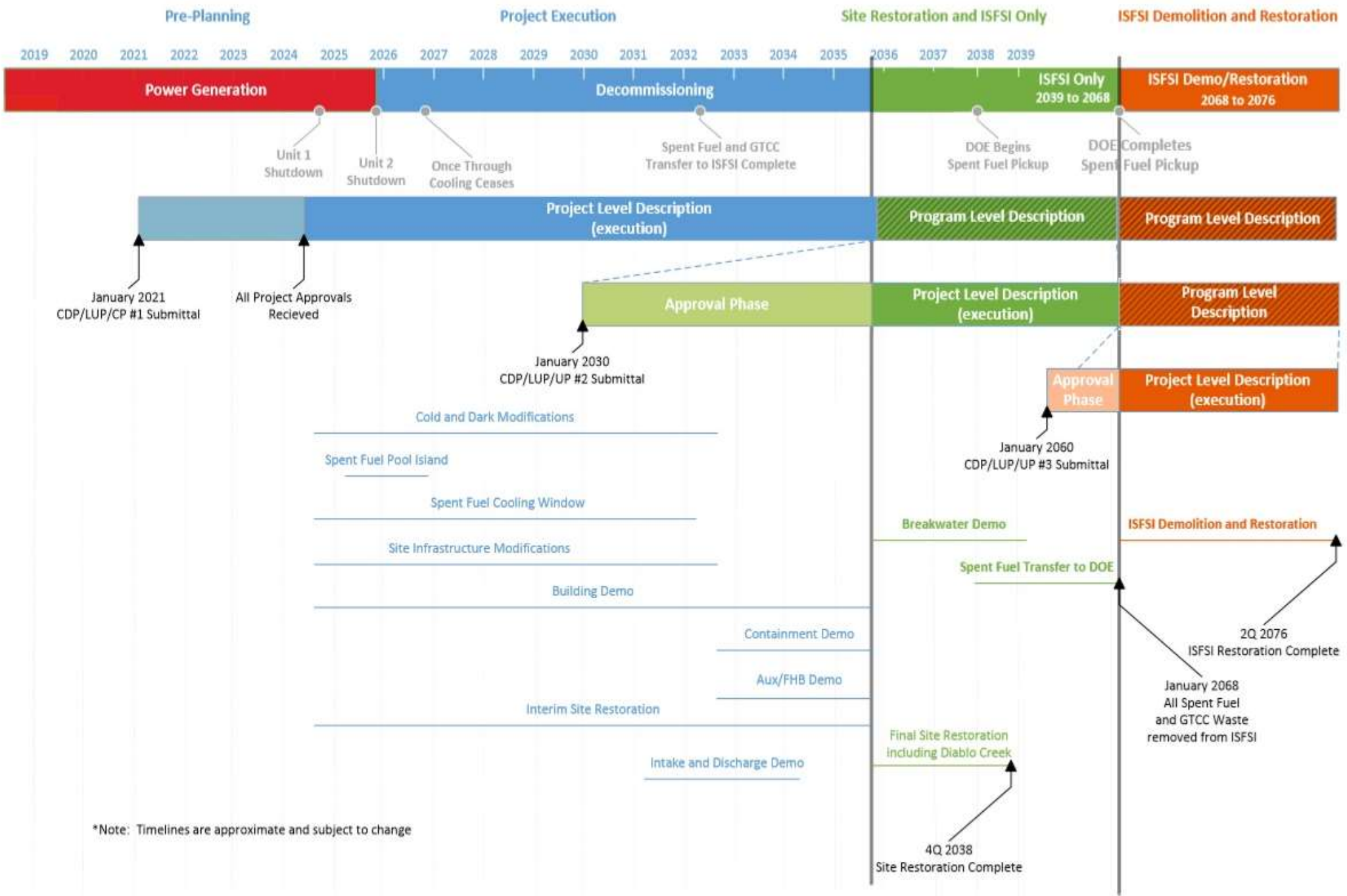
#### **2. Safety**

- a. The highest level of safety during the decommissioning process should be ensured
- b. The highly radioactive spent nuclear fuel should be stored onsite in the safest and most technologically advanced manner possible and be removed from the site as soon as feasible
- c. The highest level of safety regarding the transport of radioactive contaminated materials and eventual removal of spent fuel from the area should be ensured
- d. The traffic impacts associated with decommissioning activities should be minimized through surrounding communities

#### **3. Labor**

- a. The commitment to the use of a highly skilled and trained local workforce for all decommissioning activities should be continued by PG&E





**DIABLO CANYON Decommissioning Engagement Panel**  
**Figure 2 - Example Timeline for Decommissioning**

## B. Decommissioning Funding

Funding for the costs to decommission DCPD are made available through the *Decommissioning Trust Fund*. The use of the Trust Fund for decommissioning is mandated by both Federal and State regulations (see Section I-D of this document for additional information). PG&E has collected monthly fees on customers' electric bills to fund the trust, which are further augmented over the life of the plant from returns on investment in fixed income (bonds) and equity (stocks). PG&E was required by the CPUC to collect and maintain the Trust Fund while the plant is in operation in preparation for DCPD's eventual decommissioning.

The purpose of the Trust Fund is to ensure sufficient funding will be available to decommission DCPD. The Trust Fund currently holds approximately \$2.8 billion, and PG&E has requested additional funding of \$1.6 billion in its Nuclear Decommissioning Cost Triennial Proceeding December 2018 report. The Triennial Report includes a more detailed estimate of costs associated with the decommissioning of DCPD.

The safety of current and future generations is the paramount concern when decommissioning DCPD. Although funding the costs for decommissioning should be guided by the principle of avoiding imposition of undue burdens on ratepayers, the safety of the community, both now and in the future, should never be discounted. The DCDEP recognizes that strategies for decommissioning (including the repurposing of facilities) have an influence on the costs of decommissioning.

Through these vision statements, goals and recommendations, it is the intent of the DCDEP to ensure the health and safety of the community is not compromised and remains a primary consideration, while minimizing impacts to ratepayers.

Recommendations for Decommissioning Funding can be found in Section IV of this document.

### **Vision Statements**

- The health and safety of the community and the environmental quality of the area should be the primary consideration during decommissioning and adequate funding of the Decommissioning Trust Fund should be provided to meet these objectives
- The most cost-effective methods for decommissioning should be investigated by PG&E in order to save ratepayers money
- The formulation of all decommissioning costs and decisions should be transparent to ratepayers and the community
- The existing Decommissioning Trust Fund should be protected, preserved and augmented as appropriate to assure that it remains stable and sufficient in order to adequately finance decommissioning

### **Goals**

#### **1. Funding**

- a. The DCDEP, in conjunction with PG&E, should endeavor to assure that the public clearly understands the funding necessary to safely accomplish decommissioning
- b. The funding necessary for critical advance planning decommissioning activities needed to ensure immediate transition to DECON (decommissioning and decontamination) upon plant closure should be made available to PG&E

- c. The Decommissioning Trust Fund should be adequately funded to cover the reasonable cost of completing all the decommissioning activities, including removal, transportation, and disposal of materials in a way that minimizes risk, cost, and disruption to local communities

## C. Diablo Canyon Lands

The Diablo Canyon Lands are located along the California coast, in an area that has seen virtually no development, other than the power plant and ancillary facilities, which these lands surround. The Diablo Canyon Lands are located in the Irish Hills region of San Luis Obispo County, which has been the subject of significant conservation activity over the last two decades. The over 12,000 acres owned by PG&E (or its affiliates), including a 14-mile stretch of pristine coastline, contain relatively undisturbed grasslands, coastal sage, oak woodlands and bishop pine forests. These areas are currently managed by PG&E using innovative best management practices and a strong land stewardship program. (See Figure 3 – Diablo Canyon Lands)

In 2000, over 75 percent of county voters supported the [DREAM](#) (Diablo Resources Advisory Measure) Initiative. DREAM was an advisory ballot measure that called on county leaders and PG&E to set aside the Diablo Canyon Lands for habitat preservation, agriculture and public use upon closure of the plant. This initiative was unanimously supported by the San Luis Obispo County Board of Supervisors, PG&E and numerous community and environmental organizations.

Through these vision statements, goals and recommendations, it is the intent of the DCDEP to promote the conservation of Diablo Canyon Lands consistent with recent public input at workshops and meetings and the passing of the DREAM Initiative.

Recommendations for Diablo Canyon Lands can be found in Section IV of this document.

### **Vision Statements**

- The 12,000 acres of Diablo Canyon Lands surrounding the DCP are a precious treasure and a spectacular natural resource that should be preserved in perpetuity for the public and future generations, in acknowledgement of its significant resource values
- The public should be ensured access to the Diablo Canyon Lands to the greatest extent possible, while protecting and preserving sensitive habitats, cultural sites and other resources
- The use of Diablo Canyon Lands should be consistent with the safe, secure and monitored storage of spent nuclear fuel, until such time as it is removed from the site
- The use of Diablo Canyon Lands should include activities that are consistent with wildlife and resource protection and visitor enjoyment including multi-use trails for hiking, mountain biking, and equestrian use and managed overnight camping
- The preservation of sacred Native American sites should be assured
- The request for land ownership by the local Native American community should be acknowledged and considered as a valid claim for historical reasons, while bearing in mind the overwhelming public testimony that the Diablo Canyon Lands be conserved and available to the public for managed use

- The conservation activities on Diablo Canyon Lands should be coordinated with owners of other protected properties in the Irish Hills region, including State Parks, the US Bureau of Land Management, the Nature Conservancy, the Land Conservancy of San Luis Obispo County, and the City of San Luis Obispo

## **Goals**

### **1. Land Stewardship**

- a. The excellent stewardship of PG&E in preserving and maintaining the Diablo Canyon Lands should be recognized
- b. The existing biological, geological and archeological data should be made available by PG&E to conservation entities who may be future stewards of the Diablo Canyon Lands
- c. The preparation of a plan for the ongoing management, preservation and managed public access of Diablo Canyon Lands should be developed through a collaborative process with appropriate governmental and non-governmental organizations to assure all available funding is pursued and ongoing stewardship is maintained
- d. The preparation of the management/public access plan should include public input and take into consideration the use of the Diablo Canyon Lands may have on local traffic and safety
- e. The management/public access plan should include a multi-use non-motorized trail system for hikers, mountain bikers and equestrian use, possible overnight camping consistent with public safety, restricted access in the sensitive intertidal zone, rotational grazing, habitat restoration and protection of cultural sites
- f. The 1,200 acres near Point San Luis (See Figure 3) should be deed restricted in perpetuity for conservation and public access

### **2. Land Transfer and Use**

- a. The transfer of the Diablo Canyon Lands to a conservation entity or entities should be promoted to ensure the protection of natural and cultural resources in perpetuity, public education and managed public access
- b. The Diablo Canyon Lands should be conserved prior to the completion of the decommissioning process, as appropriate
- c. The public announcement by PG&E of its intention to collaborate with interested parties to preserve the Diablo Canyon Lands should occur as soon as allowed by the CPUC
- d. The Diablo Canyon Lands should be owned and managed by a conservation entity or entities, such as State or National Parks, the Wildlands Conservancy, the San Luis Obispo Land Conservancy, a Native American non-profit or other governmental or non-profit conservation group experienced in land management, for resource protection and managed public use
- e. The long-term protection of ecological, scenic, and cultural resources and the well-being of local communities should be a primary consideration in determining the appropriate level of public access to the Diablo Canyon Lands
- f. The establishment of at least two multi-use trail extensions of the California Coastal Trail should be pursued which include both a trail along the coast and an interior trail through Wild Cherry Canyon and other protected Irish Hills properties
- g. The coastal section of the Diablo Canyon Lands should be protected to a higher degree, as needed to ensure the conservation of the more fragile marine, tidal, and coastal environment

- h. The interior sections of the Diablo Canyon Lands (including the lands associated with transmission lines) should allow for multiple compatible uses, including hiking, mountain biking, and equestrian use, and connections to the Irish Hills and Montana De Oro trail systems
- i. The use of Diablo Canyon Lands for motorized vehicles (other than in parking areas, access roads and for maintenance and management activities) and night-time recreational use (other than camping as may be allowed) should be prohibited as inconsistent with resource protection
- j. The use of Diablo Canyon Lands for camping should be permitted only to the extent it is consistent with the safety of the community and the protection of cultural and environmental resources
- k. The use of a small portion of the land north of the Harbor Terrace development should be considered for use by the Port San Luis Harbor District for boat storage
- l. The San Miguelito Mutual Water Company lease with HomeFed for waste water facilities should be evaluated for, at a minimum, screening, location and technology, as part of any land transfer of Wild Cherry Canyon
- m. The disposal of Diablo Canyon Lands should recognize PG&E's fiduciary responsibility to their ratepayers and shareholders
- n. The acquisition of Diablo Canyon Lands from PG&E should consider a variety of funding mechanisms including: state bond funds, private donations, decommission-related permit mitigation measures, and compensatory processes via regulatory agencies such as the CPUC

### **3. Cultural Heritage**

- a. The importance and legacy of the Native American community to the Diablo Canyon Lands, including methods to provide acquisition or access to those lands should be explored
- b. The preservation of cultural and archeological sites and artifacts, including burial grounds should be ensured
- c. The transfer, by easement or fee title, of a portion of the Diablo Canyon Lands for exclusive use by the Native American community should be considered, with protection by conservation easement or other such means that would allow limited development consistent with local zoning and the preservation of environmental and cultural resources in perpetuity

# Diablo Canyon Lands

## LAND OWNERSHIP, ZONING AND LAND USE INFORMATION



### Map Legend

- Diablo Canyon Power Plant Location (NRC)
- Diablo Canyon Lands**
- PG&E Fee Parcels
- Eureka Energy Company Fee Parcels
- Leased to PG&E
- Leased to HomeFed (Wild Cherry Canyon)
- Pending Conservation Space (1,200 acres)
- Coastal Zone
- Pecho Coast Trail
- Buchon Trail
- Access Road
- Access Road North

### Reference Table

Symbol	Description
①	GTE Mobiline (Verizon) Site License Agreement for telecommunication equipment
②	California State Lands Commission Lease to PG&E for Water Discharge Channel and Intake Structure
③	Properties Lease to PG&E: Plant (Parcel P), Transmission Lines (Parcel T), (Parcel L) and Road (Parcel R)
④	Grazing and Agricultural License to Mello
⑤	License to Mello for Marre House
⑥	Road Easement to Martin
⑦	Grazing License for Blanchard
⑧	1,200-Acre Deed Restriction Area
⑨	Point Buchon Deed Restriction Area
⑩	License to Blecha for North Ranch House

## D. Repurposing of Diablo Canyon Facilities

The DCPD site comprises more than just the containment structures for the reactors and the turbine building where electricity is generated. The site also has other structures including office buildings, warehouses, training facilities, maintenance shops, a marina and breakwaters, and a desalinization facility which could be maintained and repurposed (See Figure 4 – Existing Facilities). These facilities are all located on the approximate 700-acre “Parcel P,” which is shown on Figure 3 – Diablo Canyon Lands.

There may be benefits to the repurposing of certain non-contaminated facilities, if it can be done in a manner that it is sustainable and does not compromise public safety and the environmental quality of the region. The repurposing of these facilities could allow for the creation of new jobs to replace those lost through the closure of DCPD, decrease the volume of dismantled facility debris transported thereby minimizing the potential traffic conflicts through Avila Beach and on other local streets and highways and create opportunities to minimize the costs of decommissioning by limiting the amount of dismantling and removal.

Through these vision statements, goals and recommendations, it is the intent of the DCDEP to offer repurposing of Diablo Canyon facilities as an alternative to demolition.

Recommendations for Repurposing of Diablo Canyon Facilities can be found in Section IV of this document.

### **Vision Statements**

- The repurposing of facilities should be consistent with the safety and security of the spent fuel storage until such time as it is removed from the site
- The preservation of on-site non-contaminated facilities for repurposing should be explored by PG&E
- The repurposing of facilities should include thorough removal of radiological contamination to comply with regulatory levels as defined by the appropriate agencies
- The repurposing of facilities should consider whether a use can be sustained over time, is consistent with public safety and the continued environmental quality of the region and addresses community traffic concerns
- The repurposing of facilities should consider the conservation of the breakwaters and associated harbor area and the intake and discharge coves and associated marine terraces, to assure the protection of the ecological resources of the area
- The repurposing of facilities should only include land associated with Parcel P that is developed and necessary for a buffer of ongoing decommissioning activities
- The repurposing of facilities should be explored as way to, at a minimum, create new local jobs and promote the establishment of clean, green renewable energy sources
- The repurposing of the transmission lines should be explored for the transmission of wind, wave, solar and/or other clean, green renewable energy
- The preservation of the existing desalinization plant should be explored

## **Goals**

### **1. Existing Facilities**

- a. The buildings and structures should be repurposed, provided a proposed use can be sustained over time, safety is not compromised and the environmental quality of the community is assured
- b. The development of a strategy for management of the facilities should be completed by PG&E at the earliest possible time so potential repurposing tenants can be appropriately determined and advance planning for transfer and reuse can occur
- c. The preparation of a detailed list of assets available for repurposing, including a description of the facility, the type of facility (e.g., office, warehouse, etc.), square footage of the facility, age of the facility, and when the facility would become available for repurposing should be prepared by PG&E
- d. The maintenance of existing facilities by PG&E should occur until such time as the facilities are repurposed or determined to not be viable for repurposing to ensure that the facilities do not degrade over time
- e. The construction of infill development on Parcel P should be allowed provided safety is not compromised and the environmental quality of the community is maintained
- f. The Diablo Canyon Lands associated with Parcel P that are not developed and are not necessary for a buffer of ongoing activities should be released for open space and conservation
- g. The future use of repurposed facilities should not generate a substantial increase in traffic through surrounding communities during times of peak traffic
- h. The continued use of the desalination plant beyond decommissioning should be explored by PG&E to allow for provision of on-site water to repurposing tenants
- i. The potential use of the desalination plant for provision of emergency water to local water purveyors should be evaluated

### **2. Marine Facilities**

- a. The breakwaters and associated harbor should remain in place consistent with the environmental quality and safety of the area and region
- b. The harbor and breakwater areas should be managed and repurposed in a manner consistent with the protection of habitat and wildlife
- c. The harbor should be available as a “safe harbour” to boaters in distress
- d. The discharge cove should be studied by qualified individuals during and after decommissioning to fully understand and remove any radiological contamination to comply with regulatory levels as defined by the appropriate agencies
- e. The long-term health of the marine ecosystem and coastal areas should continue to be monitored by PG&E throughout the decommissioning process

### **3. Specific Uses**

- a. The potential for a public-private collaborative research and development facility (such as a “National Laboratory”) with emphasis on marine sciences, renewable energy development technologies, energy storage, optimum storage for irradiated waste, desalinization and other technology innovation should be further investigated by PG&E
- b. The granting of a long-term lease or purchase with favorable terms for Native American tribal use for office, storage and tribal meetings/gatherings should be considered



- c. The use of the Ontario Road facility and parking as a Visitor Education Center, which highlights local history including Chumash culture, energy education and natural history should be considered
- d. The use of the existing parking lot at the Ontario Road facility for shuttle or bus service to the Diablo Canyon Lands should be considered
- e. The possibility of repurposing of facilities for innovative uses including, but not limited to, wildlife rescue and rehabilitation, wind, wave, solar or other renewable energy, business incubators, clean technology startups, saltwater aquarium, transmission facility projects, energy storage, wastewater recycling, innovative mental health treatment center and California State University and/or University of California research facilities should be evaluated by PG&E



**DIABLO CANYON** Decommissioning Engagement Panel

Figure 4 - Existing Facilities

## E. Engagement Panel Structure and Function Review

The DCDEP was convened by PG&E as a volunteer, non-regulatory body created to foster and encourage open communication, public involvement and education on DCPD decommissioning plans and activities. In 2018, the DCDEP began a public outreach effort to both provide information and listen to the public, and to make recommendations to PG&E and the CPUC regarding various decommissioning activities. In order to be fully effective in conducting these responsibilities it is vital that the DCDEP have optimal structure and function. An internal assessment of strengths, weaknesses and opportunities for improvement and a review of outside resources for *best practices* will be conducted at the public meeting during the second quarter of 2019 (June 12, 2019) after one full year of operation. In addition, two proposals have been forwarded by members of the DCDEP (see links to these documents below). These proposals will also be reviewed at that meeting and decisions regarding possible changes and improvements will be made. These decisions will be forwarded to PG&E and the CPUC as an additional supplemental filing to the 2018 Triennial Report.

In October 2018, DCDEP member Alex Karlin presented a proposal recommending a restructuring of the DCDEP into a Community Advisory Panel created and managed directly under the auspices of the CPUC. His proposal, *“CPUC Should create an Independent Decommissioning Advisory Panel (DAP) in Lieu of the DCDEP,”* can be accessed at this [link](#).

In December 2018, DCDEP member Lauren Brown presented a proposal recommending that the current DCDEP be continued and strengthened. His proposal, *“Proposal to Continue and Strengthen DCDEP,”* can be accessed at this [link](#).

Through these vision statements, goals and recommendations, it is the intent of the DCDEP to evaluate the existing panel structure, study other community engagement panels and make recommendations to be considered by the PG&E and the CPUC.

Recommendations for Engagement Panel Review can be found in Section IV of this document.

### **Vision Statement**

- The community engagement panel was established and should continue to operate to provide direct input on behalf of the local community to PG&E on decommissioning activities that are of concern to the surrounding communities
- The engagement panel should be in a form that would lead to the best possible recommendations on achieving a safe and effective decommissioning of the DCPD, including the management of Diablo Canyon Lands and the disposition of Facilities

### **Goals**

#### **1. Panel Review**

- a. The DCDEP should perform a self-evaluation, looking at strengths, weaknesses and opportunities for improvement in how the goals set in the guiding charter have been fulfilled

- b. The DCDEP should evaluate other community engagement panels created as part of decommissioning efforts in California and other states in order to better understand how those panels are formed, how they have worked and if they have provided improved public outreach to their respective communities
- c. The DCDEP should seek input from local sources such as governmental and regulatory entities, as well as the Diablo Independent Safety Committee, for input on improving the DCDEP
- d. The DCDEP should review the existing guiding charter to determine if changes, additions or amendments should be made based on the information acquired through the efforts outlined in these goals

## F. Emergency Planning

On October 24, 2018, the DCDEP held a public meeting covering the topic of emergency planning. At that meeting the DCDEP received information from the NRC on the decommissioning process and from PG&E and the County of San Luis Obispo Office of Emergency Services on the potential changes to emergency planning during decommissioning.

The current provisions for emergency planning for the DCPD include, but are not limited to, on-site security personnel and facilities, on and off-site monitoring equipment, the County Emergency Operations Center, and an early warning siren system. The DCDEP recognizes that the decommissioning of the DCPD will create the need for changing the existing emergency plans for the DCPD and the community. As the risks related to the radioactive material changes, the Emergency Response Plan also changes. Throughout the decommissioning process, plant security controls remain in place. All the key security features including intrusion detection, response, assessment of alarms and when necessary, off-site assistance, remain in effect. The “security footprint” changes as the spent fuel is moved from the reactor to the spent fuel pool to dry cask storage as the primary purpose of the security is to protect the fuel. In addition, although the NRC involvement may change throughout decommissioning, as described below, the Federal Emergency Management Agency (FEMA) continues to require coordination between local, state and federal agencies relative to emergency planning.

The decommissioning process with the NRC requires two certifications from DCPD. The first is a letter to the NRC stating that operations have permanently ceased. The second is a letter stating that the reactor has been permanently defueled. The plant is officially in decommissioning with these two certifications. The next key item that is submitted to the NRC is the post-shutdown decommissioning activities report (PSDAR). The PSDAR must be submitted prior to the plant shutting down or within two years after its shutdown. The PSDAR contains a description of, and a high-level schedule for, the planned decommissioning activities and allows the NRC to outline the needed resources to inspect during decommissioning. The PSDAR is noticed in the federal register and public comments are requested. A meeting in the vicinity of the site is held in order to receive public comments. The comments are considered by the NRC in their review of the PSDAR. Decommissioning cannot begin until the PSDAR is approved by the NRC. There are also local land use permitting approvals and CPUC requirements that must occur before decommissioning can begin.

The PSDAR also looks at the needed changes for emergency response. The NRC employs a graded approach to emergency planning (see Figure 5 – NRC Decommissioning Emergency Planning Levels). Level one occurs when the plant permanently ceases operations and all the fuel has been moved to the spent fuel pool. During level two, the spent fuel is being moved to the dry cask storage from the pool. The third level occurs when all the fuel is in dry storage and under its own emergency plan. The fourth level is reached when there is no need for emergency planning because the plant is gone and the fuel is gone.

The post-shutdown emergency plan (PSEP) begins after the two certifications have been docketed by the NRC. The PSEP is a transition period and covers approximately 16 months, which is about the time it takes for the spent fuel in the pools to cool or radioactively decay to a point where it is no longer generating enough heat to cause a zirconium fire, which could lead to off-site release of radioactive material that would reach the Environmental Protection Agency’s (EPA) protective action guidelines. During the PSEP, information is provided annually to the public regarding DCCP’s future status and required emergency drills still occur.

Approximately 3 to 5 years later, the permanently defueled emergency plan (PDEP) is in effect. It will allow the DCCP to combine the technical support center, the operation support center and the emergency operations facility into one on-site organization. Drills occur every two years and an off-site radiological emergency response plan is no longer required.

Once all spent fuel has been moved to the dry cask storage, emergency planning consists of the Independent Spent Fuel Storage Installation (ISFSI) Only Emergency Plan (IOEP). At this point, the dry cask storage has its own stand-alone emergency plan and the rest of DCCP is subject to a “hazards only” plan that contains emergency planning for fire protection, personal injury and contaminated personal injury.

Once the fuel is removed from the site, there's no longer any NRC involvement and no emergency planning is required by the NRC.

Through these vision statements, goals and recommendations, it is the intent of the DCDEP to make emergency preparedness a primary consideration throughout the decommissioning process and to assure that the outstanding existing emergency planning readiness continues to be active and fully funded until there is no longer a potential threat to citizens and visitors.

Recommendations for Emergency Planning can be found in Section IV of this document.

### **Vision Statements**

- The highest levels of protection of the plant, the workers, and the public should be maintained both before plant closure and during decommissioning (including spent waste removal and management)
- The community should continue to be informed regarding emergency planning and the safety of the plant throughout the decommissioning process

- The future use of the Diablo Canyon Lands and any repurposed or retained facilities should ensure the continued safety of employees, residents and visitors, including emergency and evacuation planning and be consistent with reasonable and safe levels of traffic through neighboring communities, including Avila Beach and Los Osos
- The NRC should ensure the full oversight of the decommissioning process, with the primary concern being the safety of the DCP, workers, residents of neighboring communities and visitors to the area
- PG&E should assure the retention of qualified, experienced personnel to maintain emergency preparedness

## **Goals**

### **1. Funding**

- a. The CPUC and PG&E should ensure that adequate funding is available to plan, execute, oversee, and communicate a rigorous safety and emergency planning program during the full decommissioning process, until the plant site is fully cleared of all waste, facilities, and other structures that are not suitable for repurposing
- b. The CPUC and PG&E should ensure that adequate funding is available to fully fund and/or reimburse the County of San Luis Obispo and other relevant agencies for all emergency planning and safety activities associated with the decommissioning of the DCP

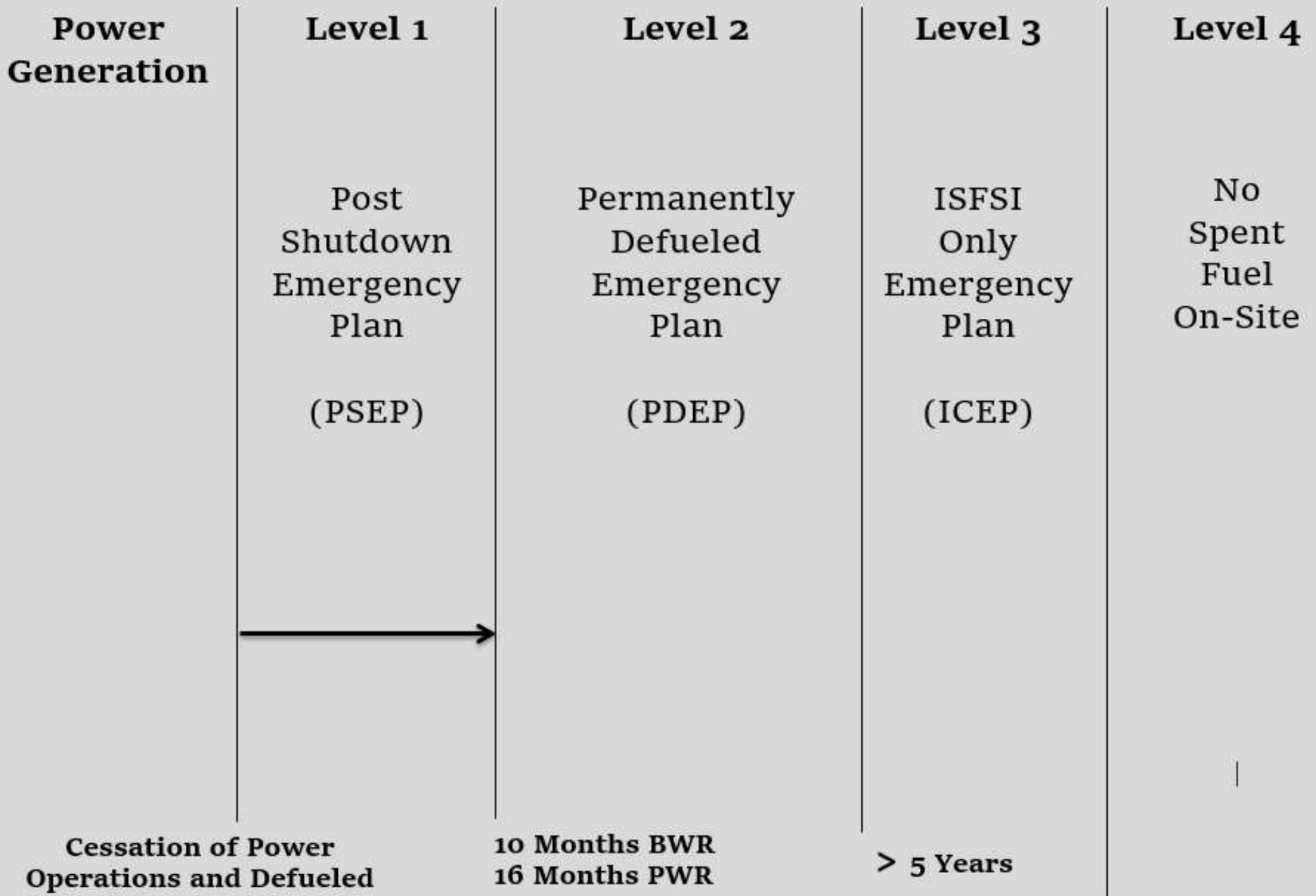
### **2. Emergency and Communications Plan**

- a. The completion of a broad-based, fully integrated safety and emergency plan for the complete decommissioning process should be coordinated by PG&E and the CPUC and should include the County of San Luis Obispo, neighboring communities, and relevant regulatory decommissioning agencies
- b. The workers, residents of neighboring communities and visitors should be kept continually apprised of issues concerning safety of the DCP and environment through a strong, extensive and broad-based communications program provided through PG&E
- c. The future use of the Diablo Canyon Lands and any repurposed or retained facilities should include disaster planning for emergencies, including evacuation

### **3. Demolished Materials (contaminated and non-contaminated)**

- a. The transfer of contaminated and non-contaminated demolition waste materials should be completed with the highest levels of safety for workers, residents and visitors
- b. The transport of demolition waste materials should be overseen by CPUC and completed by PG&E using best practices and best technologies, so as to reduce the impact to local communities in terms of traffic, noise, dust, and other factors
- c. The exploration of alternative means of transport of demolition waste materials, such as by sea, should be explored and used to the extent the methods are determined to be safe, cost effective and support the safety of nearby residents and visitors

*[Added April 2019]*



**DIABLO CANYON Decommissioning Engagement Panel**

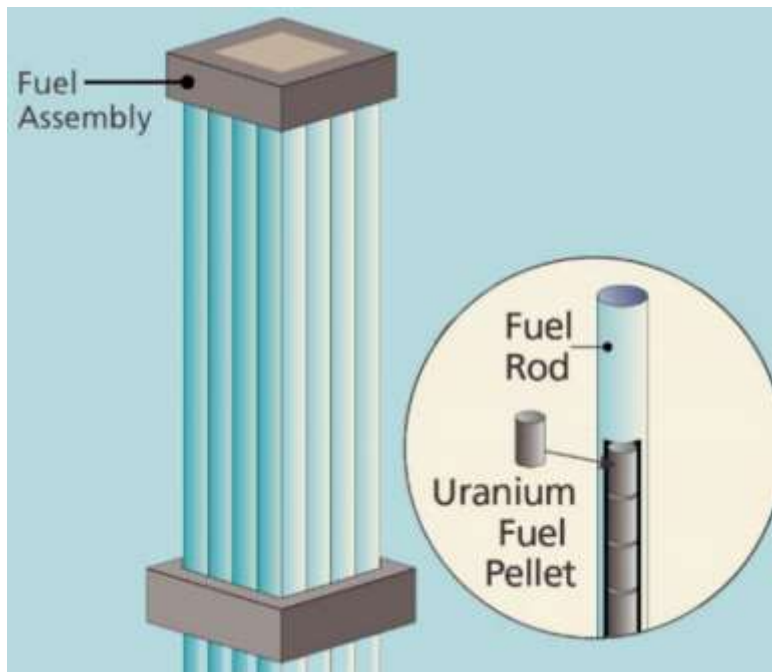
Figure 5 – NRC Decommissioning Emergency Planning Levels

## G. Spent Fuel Management

### 1. *Introduction to Spent Nuclear Fuel and Greater Than Class C Waste (GTCC) at DCP*

#### a. Creation of Radioactive Spent Nuclear Fuel

The electricity produced at the DCP is fueled by uranium, a chemical element found all over the world. The uranium is mined from rock, enriched, and formed into ½ inch sized pellets. The pellets are placed into zirconium alloy-clad rods, which are then grouped together into fuel assemblies (See Figure 6). An 1100 MWe PWR core may contain 193 fuel assemblies composed of over 50,000 fuel rods and some 18 million fuel pellets. The fuel assemblies are then placed into the core of the nuclear reactor. Within the reactor, the nuclear fission (atom splitting) process is initiated. This process produces heat, which boils water to create steam. The steam then turns a turbine, creating electrical energy.



**Figure 6 – Typical Fuel Assembly with Fuel Pellets in Fuel Rods**

After about five years, the nuclear fuel assemblies in the reactor no longer produce sufficient energy and are removed. At that point it is deemed “spent nuclear fuel” and is replaced with new nuclear fuel assemblies. At DCP, about 88 of the 193 fuel assemblies placed in each reactor are replaced during a refueling outage that occurs approximately every 18 months. This refueling process will end before the two DCP nuclear reactors are shut down by 2025.

The unused uranium that is in original new fuel assemblies have only low levels of radiation and thus have low risk associated with its handling. However, once the fuel is used in the fission process (and becomes spent nuclear fuel), the radiation levels are dangerously high – and have the potential to kill an exposed human within minutes. This spent nuclear fuel requires highly specialized and careful handling, not only as it leaves the reactor, but for tens of thousands of years thereafter.



b. High Burnup Fuel

Before it is made into fuel, uranium is processed to increase the concentration of atoms that can split in a controlled chain reaction in the reactor. In general, the higher the concentration of those atoms, the longer the fuel can sustain a chain reaction. And the longer the fuel remains in the reactor, the higher the burnup.

In other words, burnup is a way to measure how much uranium is burned in the reactor. It is the amount of energy produced by the uranium. Burnup is expressed in Gigawatt-Days per Metric Ton of Uranium (GWd/MTU). Average burnup, around 35 GWd/MTU two decades ago, is over 45 GWd/MTU today. Utilities are now able to get more power out of their fuel before replacing it. This means they can operate longer between refueling outages. It also means they use less fuel. High burnup fuel is used at DCP.

High burnup fuel is hotter and more radioactive than low burnup fuel because more uranium was “burned” (that is, split during nuclear fission into smaller atomic fragments and the consequent conversion of some atomic mass of uranium into heat energy.) It is the extra high abundance of these atomic fragments (including isotopes of iodine, cesium, strontium, xenon and barium, plutonium, and many other radioactive isotopes) in high burnup fuel that causes such high levels of radioactivity and accompanying release of more heat energy as further fission processes occur. Because the fuel is very hot, both thermally and radioactively, it must be cooled for a longer period of time in the spent fuel pool before the spent nuclear fuel assemblies can be moved to dry cask storage.

c. Spent Fuel Pools

After being removed from the reactors, the spent nuclear fuel assemblies are shielded and moved to one of two DCP spent fuel pools (See Figure 7). The assemblies are placed within specialized racks in stainless-steel lined, concrete-walled pools filled with borated water, which is continuously circulated. The pools protect the workers and public from radiation exposure and cool the fuel assemblies. The zircaloy cladding (.5 mm. thick) on the hot fuel rods will spontaneously combust in the presence of oxygen and if the fuel rods reach a temperature of 900 degrees Celsius; therefore, the fuel assemblies must constantly be kept under water.

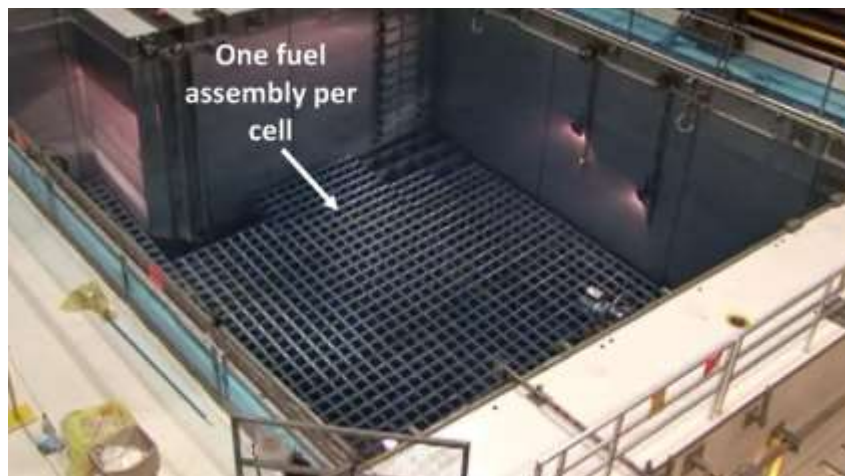


Figure 7 - DCP Spent Fuel Pools

When originally constructed, the spent fuel pools were expected to be used for a low-density configuration of 270 assemblies per pool. As of December 2018, however, there are 744 and 768 assemblies in pools 1 and 2, respectively. By the time DCP is shut down, there will be 1,261 in spent fuel pool 1 and 1,281 assemblies in spent fuel pool 2. The assemblies are held in a checkerboard pattern, where hotter assemblies are surrounded by cooler assemblies. This measure is intended to create additional emergency response time before a catastrophic fire could result in the event the pool water is unexpectedly drained.

Historically, PG&E has removed spent nuclear fuel assemblies from the spent fuel pools after about ten years. As discussed later (Section 2e), this time frame is under analysis and either longer or short storage times for individual assemblies may be used in order to accelerate the total time during which the DCP spent fuel pools are in service.

d. Independent Spent Fuel Storage Installation (ISFSI)

After the spent nuclear fuel assemblies are removed from the spent fuel pools, they are placed in sealed, helium-filled canisters and set into an approximately 20-foot tall, concrete-filled storage cask made of steel. The storage casks are placed within the Independent Spent Fuel Storage Installation (ISFSI) area which is located on-site, inland from the reactors. The casks are bolted to a 7½ foot thick, steel-reinforced concrete pad to ensure seismic stability. This is known as “dry cask storage” (See Figures 8 and 9). DCP employs a cask system called Holtec HI-STORM 100 cask system, each of which holds 32 fuel assemblies. As of December 2018, a total of 1,856 assemblies are stored at the Diablo ISFSI, within 58 casks.



Figure 8: HI-STORM 100SA System



Figure 9: DCP ISFSI Pad in 2017 with 49 Loaded Casks

e. Future Spent Nuclear Fuel Storage Options

When DCP was constructed, there was an expectation that the federal government would create a federal repository for all spent nuclear fuel generated in the United States. As described in greater detail later in this section, plans for the completion of a federal repository at Yucca Mountain are at a standstill because Congress has not yet appropriated funding for the processing of the license application by the NRC. The Trump Administration did allocate

funding for the project in the 2019 proposed budget. The Nevada Governor, state Attorney General, and congressional delegation, as well as leaders from Clark County and the City of Las Vegas, and the vast majority of Nevada’s citizens oppose the Yucca project. In addition, there are numerous legal challenges to the site based on alleged unsuitability, including water seepage and seismic activity.

In 2016 and 2017, two separate companies applied to NRC for licenses to build interim consolidated facilities for the centralized storage of spent nuclear fuel until a federal repository such as Yucca Mountain is opened. In the meantime, spent nuclear fuel will remain at the DCPD ISFSI.

f. Greater Than Class C Waste (GTCC)

In addition to spent nuclear fuel assemblies, another category of highly radioactive materials will exist at DCPD. This waste is known as Greater Than Class C Waste (GTCC). GTCC includes all the materials that have been irradiated during the nuclear fission process, such as the reactor itself, which must be dismantled and removed when the plant is decommissioned. An estimated ten casks will be needed to store the GTCC, which is expected to be ultimately placed at the ISFSI. The existing ISFSI is not sized nor licensed for GTCC, and so PG&E would have to obtain an amended permit and licensing to either construct new storage pad space or reconfigure the existing dry cask placement.

**2. DCPD Spent Nuclear Fuel Storage Program**

a. Current DCPD Spent Nuclear Fuel Management Cycle - From Plant to Pools to ISFSI

A simple graphic helps to summarize the Spent Fuel Cycle at DCPD



Each of the two nuclear reactor vessels at DCPD holds 193 nuclear fuel assemblies. At the end of a cycle lasting approximately 18 months, one-third of the assemblies are replaced with new fuel assemblies. Assemblies that have been used for three cycles (approximately 54 months) are removed and placed in the spent fuel pools. Currently, PG&E keeps fuel assemblies in the spent fuel pools for approximately 10+ years during which time the spent fuel assemblies cool sufficiently to be removed from the pool and placed in specially designed casks to be stored in the ISFSI. In its 2018 Triennial NDCTP filing, PG&E proposes to shorten the time fuel assemblies remain in the spent fuel pools by using a new generation of casks capable of handling higher heat loads. This could allow removal to the ISFSI in seven years or less. The casks were expected to be removed from the ISFSI to a federal repository, such as the Yucca Mountain Nuclear Waste Repository. However, in 2010 the Administration attempted to withdraw the Department of Energy (DOE) application for the Yucca Mountain Nuclear Waste Repository. The U.S. Court of Appeals rejected this attempt, and ordered DOE and NRC to continue processing the Yucca application. This occurred, but the project has now been stymied due to lack of federal funds.

Although a private Consolidated Interim Storage Facility in Texas (discussed later in this section) could be open and available to start accepting DCPD spent nuclear fuel casks as early as 2027, it is likely that some (if not all) spent nuclear fuel casks will remain onsite for many years and perhaps even decades into the future.

b. Description of Spent Fuel Pools

The spent fuel pools at DCPD are built on solid bedrock and constructed with six-foot thick reinforced concrete walls. The pools are lined with stainless steel, are 40 feet deep and designed to withstand the most destructive projected earthquake on the nearby Hosgri fault. The pools are filled with very pure water mixed with boric acid (boron being a neutron-absorbing element). Boric acid is added to the water in order to prevent a self-sustaining nuclear chain reaction. The pools contain a system of racks capable of holding up to 1,324 fuel assemblies that are approximately 14 feet tall and are covered in a minimum of 23 feet of water (sufficiently deep to keep radiation risk to workers at low and acceptable levels). The fuel assemblies that have been removed from the reactor are very hot and continue to release heat for years as a result of radioactive decay of fission products from the original uranium, including:  $^{90}\text{Sr}$ ,  $^{137}\text{Cs}$ ,  $^{99}\text{Tc}$  and  $^{129}\text{I}$  among dozens of other radioactive isotopes. So much heat is produced that it is necessary to have very large compressors and pumps to continuously circulate and cool the water. This is an active cooling process and requires continuous electrical energy to power the compressors, pumps and supplies of water to replace any water lost by evaporation or even a leak caused by some extraordinary event such as earthquake or terrorist attack. Because of the critical nature of this system, DCPD maintains doubly redundant backup systems for compressors and pumps, plus backup diesel generators in event regular power is lost. Large reservoirs of water are maintained on-site to rapidly replace any water in the event of a leak from the spent fuel pools. Even if power is lost altogether, the pools can be filled using simple gravity through a system of pipes with mechanical, hand-operated valves. The emergency reservoirs could cool the spent fuel pools for several days.

An important aspect of the DCPD spent fuel pools operating license is that “hot” (cooled for less than 120 days) spent nuclear fuel assemblies when placed into the spent fuel pool racks must be surrounded on four sides by “cold” (cooled for greater than 1 year) spent nuclear fuel assemblies. This requirement is in place to provide a heat sink for the hot assemblies in the event of a catastrophic loss of water in the spent fuel pools. Having such heat sinks adjacent to the hot assemblies significantly lengthens the amount of time for emergency efforts to replace the water lost from the pool or otherwise address the risk of an uncontrollable spent fuel fire from the loss of water in the pool. This requirement of four adjacent cold assemblies becomes particularly important at the end of power generation when the full load of 193 fuel assemblies from the reactor have to be unloaded into the spent fuel pools all at once. That means that PG&E must have an inventory of at least 772 cold spent nuclear fuel assemblies still in the pool from previous unloading campaigns. The result is that an unusually large number of assemblies will be in the pool after the final unloading campaign. This is what has led to PG&E, in part, to halt the transfer of spent nuclear fuel assemblies to the ISFSI until after end of power generation. The projected number of spent nuclear fuel assemblies stored in pools 1 and 2 at time of Unit 2 shutdown in 2025 is 1,261 and 1,281 respectively, if there are no additional loading campaigns prior to final shutdown.

Once power generation in Units 1 and 2 ceases in 2024 and 2025 and all spent nuclear fuel assemblies have been transferred into the spent fuel pools, then the licenses for operating the pools and other plant equipment convert to possession-only licenses, which allow continuing operation for non-generation purposes. No license renewal is required for this transition.

Also relevant to operation of the spent fuel pools post-power generation is this statement from the DCPD 2018 Triennial NDCTP filing (Volume 1, Chapter 3, Section G.2):

*Several existing plant systems are used to ensure there is adequate cooling of the spent fuel pools. These existing systems could continue to be used for SFP cooling during decommissioning; however, to facilitate safe and efficient decommissioning, the nuclear industry has implemented the SFP Island (SFPI) concept. A SFPI is an independent cooling system for the SFPs that allows the licensee to abandon the in-place plant systems supporting SFP cooling. PG&E plans to develop and install an SFPI to reduce the risk of decommissioning activities impacting the SFPs.*

The NRC deems the spent fuel pools to be a safe storage system for spent nuclear fuel, both in the construction of the pools and in continuing operation. The operation of the pools is continuously monitored by PG&E staff, and reviewed by full-time on-site NRC representatives as well as by the staff of the Diablo Canyon Independent Safety Committee (DCISC) which operates under the auspices of the CPUC.

c. DCPD ISFSI System and Dry Cask Design

The DCPD ISFSI, where the spent nuclear fuel is placed after being cooled in the spent fuel pools, is located 310 feet above sea-level, thus assuring protection from the largest tsunami that would be expected along this section of the California coastline. The installation also is constructed on bedrock, consisting of seven reinforced concrete pads, each 7½ feet thick and approximately 105 feet by 68 feet in size. There are 140 cask locations, each marked by an embedment ring which is used to anchor each cask to the pad. This system is compliant with the seismic requirements of the ISFSI license. As of March 2019, there are 58 loaded casks at the ISFSI. Current projections forecast use of 138 cask locations with two locations being reserved to facilitate aging management activities such as allowing the PG&E transporter access to casks located on the interior of the ISFSI.

Casks for storing spent nuclear fuel assemblies use the concept of “passive” cooling, with ambient air drawn in through openings at the bottom of the casks, circulating upward along the sealed inner unit and discharging out at the top in a chimney effect (which steadily removes the heat that still is being produced as a result of continuing radioactive decay of the fission products from the spent nuclear fuel). Because this system of removing the continuing heat production from the spent fuel is passive and does not depend on any compressors, pumps and assured electrical supply, it is typically considered safer than keeping the spent nuclear fuel assemblies in the pools. There is some concern about possibilities of stress cracks developing in the casks over time. As a result, it is considered critical that PG&E continuously monitor the casks as part of an aging management plan.

The storage cask used by PG&E through 2018 is the Holtec Hi-STORM 100 model that holds 32 fuel assemblies per cask. There are specific guidelines required by the NRC for loading into these casks that require a knowledge of the heat being generated by each fuel assembly. Each relatively hot fuel assembly must be accompanied by a relatively cool assembly. The relative heat is basically a function of how long the assembly was cooled in the spent fuel pools and the degree to which the original uranium atoms have undergone fission to produce the array of highly radioactive fission by-products. A detailed knowledge of each fuel assembly is needed and careful calculations are required to assure that the total amount of heat being emitted does not exceed the capacity of the Holtec cask.

In 2019 PG&E plans to solicit bids from all qualified suppliers for a new generation of casks that have higher heat capacity ratings and could potentially reduce the amount of time required in the spent fuel pools from 10+ years to seven or fewer years.

The ISFSI at DCPD was constructed and is operating under a separate license from the NRC which provides for its use through March 2024. There are spaces for 140 casks to be stored on the ISFSI. PG&E intends to seek a license renewal for an additional 40 years, through March of 2064. If necessary, PG&E will seek a further renewal as 2064 nears. With the lack of a long-term solution to storage of highly radioactive spent nuclear fuel, the spent nuclear fuel will remain on site into the foreseeable future.

For more information about the spent nuclear fuel cycle and storage, please access PG&E’s video at: [Diablo Canyon Used Fuel Management](#)

d. Existing Ten-Year Transfer Program of All Spent Nuclear Fuel to ISFSI

PG&E currently retains spent nuclear fuel assemblies in the spent fuel pools for 10+ years. After this time period, spent nuclear fuel assemblies are loaded into casks for dry storage, transferred to the ISFSI and secured there in a multi-step operation called a loading campaign. The history of these loading campaigns is as follows:

Year	Number of spent nuclear fuel casks loaded and moved to the dry storage pad
2009	8
2010	8
2012	7
2013	6
2015	8
2016	12
2018	9

A total of 58 casks have been loaded and transferred to the ISFSI. As of January 2019, all loading campaigns have been discontinued until the end of power generation. This step is being taken as part of a larger plan to empty the spent fuel pools of all spent nuclear fuel assemblies at an earlier end date than would otherwise be possible if the existing loading campaigns were continued.

e. Proposed Seven-Year Transfer Program of Spent Nuclear Fuel to ISFSI

As a result of the 2015 Triennial NDCTP Filing with the CPUC, PG&E was asked to consider shortening the residence time of the spent nuclear fuel assemblies in the spent fuel pools from 10 to seven years, thus matching standards that have been approved by the NRC and are being adopted more broadly in the industry. PG&E has proposed to do so in its 2018 Triennial NDCTP filing, however this requires use of a new generation of casks that have the capacity to handle higher heat. Any such casks would have to meet the demanding seismic requirements unique to DCP. PG&E is preparing to solicit bids for such new generation casks from all qualified suppliers. Obtaining qualifying bids may be complicated by the fact that any acceptable supplier would have to meet the additional seismic requirements at DCP. The outcome of this bidding process is one that the DCDEP will follow closely. Complicating this process is the need for NRC approvals of any modified cask design. If such approvals were needed, it could incur delays that may threaten the timing in the plans outlined in PG&E's 2018 NDCTP.

f. Alliance for Nuclear Responsibility (A4NR) Objection to the Proposed Seven-Year Transfer Program of Spent Nuclear Fuel to ISFSI

The A4NR has filed an objection to the 2018 NDCTP seven-year campaign. The complaint alleges the following:

1. PG&E failed to adequately collaborate with the California Energy Commission in the preparation of the 2018 NDCTP;
2. The significant build-up spent fuel assemblies in the spent fuel pools is not acceptable; and
3. PG&E should return to the original open (lower density) racking in the spent fuel pools in order to reduce overall number of spent nuclear fuel assemblies in each pool and to improve water circulation, efficiency of cooling and safety.

A4NR's objection and PG&E's response will be considered by the CPUC as a part of its regulatory review of the 2018 NDCTP.

g. High Bridge Associates Finding Regarding Transfer of Spent Fuel

High Bridge Associates (HBA), an independent expert hired by PG&E to help in the preparation of its December 2018 NDCTP, had the following comment regarding PG&E's spent fuel pool transfer program (Volume 2, Attachment A, Page 9 - Findings):

*The most significant finding is the overall fourteen (14) year schedule duration for the decommissioning work from shutdown of Unit 1 to the end of site restoration is longer than the current industry norm. This duration is primarily due to a longer than expected period for fuel cool down and other activities that could be managed so they are off the schedule critical path.*

High Bridge Associates compared DCP against other similar nuclear reactors and stated the following (Volume 2, Attachment A, Page 12 – Overall Schedule Duration Section):

*The first major period examined, DCP's Fuel on Pad period is near the high end of all planned and executed decommissioning schedules. When compared against results from past plants, DCP is above average. Because of DCP's unique*

*seismic profile and operating history, HBA does not expect it to be as short as other plants in this comparison. However, decommissioning project in similar stages of planning to DCPP are several years shorter than DCPP.*

h. Comparison of Existing Spent Fuel Storage Programs in California

There are three existing ISFSIs in California, in addition to the DCPP ISFSI. These are located at Rancho Seco, San Onofre Nuclear Generating Station (SONGS), Humboldt Bay (HBPP). The spent nuclear fuel management at DCPP has more in common with the SONGS facility than that of Rancho Seco or HBPP.

Rancho Seco ISFSI

Rancho Seco is host to 228.8 metric tons of spent fuel (493 spent fuel assemblies) and 13.6 metric tons of GTCC waste from the reactors. Altogether, 22 canisters are stored horizontally at the ISFSI. None of the spent nuclear fuel is classified as high burnup, and so the challenges of spent nuclear fuel storage are less than those posed at the DCPP, where a significant portion of the spent nuclear fuel is classified as high burnup.

HBPP ISFSI

There are six dry casks stored at the HBPP. None of them contain high burnup fuel. The ISFSI at HBPP is an I-shaped, subterranean concrete vault with six cylindrical vault liners poured in place. Each liner with its surrounding concrete is considered a separate cell within the vault. The spent nuclear fuel is able to be stored in this manner because of the age of the HBPP fuel and the low decay heat associated with it. The ISFSI storage casks do not require the normal atmospheric cooling, therefore the casks may be stored underground without fear of overheating.

The concrete vault provides structural stability as well as lateral restraint to resist seismic forces. The concrete vault also provides radiation shielding to lower the potential dose to the public in close proximity to the vault (i.e. along the public trail between the ISFSI and Humboldt Bay.)

SONGS ISFSI

SONGS Unit 1 commenced operation in 1968, and was shut down in 1992. SONGS Units 2 and 3 were taken out of service in 2012 after a radioactive leak from a new steam generator whose design had been modified by the manufacturer, Mitsubishi, without obtaining a license amendment from the NRC. On June 7, 2013, Southern California Edison (SCE) announced its decision to permanently retire SONGS Units 2 and 3. SCE announced in a press release that the decision was driven by regulatory uncertainty concerning the restart of both units and the associated economic impacts. Dismantlement of Unit 1 is essentially complete.

There are two separate ISFSIs at SONGS. The older installation uses horizontally-oriented Areva casks, while the newer ISFSI is employing the Holtec HI-STORM UMAX design, which is vertically oriented but built below grade, just a few feet above the mean tide level. The loading of spent nuclear fuel into the Holtec UMAX casks was halted in August 2018 because of a near-miss during loading of a canister. The 5/8-inch-thick Holtec canister became lodged on an interior rim of the transfer cask and could have fallen 18 feet into the storage cask. Loading has not yet resumed, though it is anticipated to begin again soon. The NRC issued a



violation against SCE and levied a fine of \$116,000. Blame for the near-miss was attributed to Holtec, whose employees were operating the machinery under contract with SCE.

The Areva and Holtec ISFSI installations hold 124 casks, and altogether the site hosts 1,773 tons of spent nuclear fuel. Much of the spent nuclear fuel still housed in the pools can be classified as high burnup, and so it must be cooled for a longer period of time.

The following chart outlines the dry cask storage programs for SONGS, HBPP and Rancho Seco:

	<b>SONGS</b>	<b>HBPP</b>	<b>Rancho Seco</b>
<b>Location</b>	San Diego County, California	Humboldt County, California	Sacramento County, California
<b>Dry Cask Storage System</b>	Areva NUHOMS canister-based system (consists of a dry shielded canister (DSC) and reinforced concrete horizontal storage module (HSM) Holtec UMAX (consists of Multi-Purpose Container (MPC) stored in below-grade reinforced concrete vault)	HI-STAR 100 HB system (consists of MPC-HB and HB overpack stored in below-grade reinforced concrete vault)	Areva NUHOMS canister-based system (consists of a DSC and reinforced concrete HSM)
<b>Canisters Stored</b>	Unit 1: 18 casks of spent fuel and GTCC waste Units 2&3: Projected 124 casks of spent fuel and GTCC waste	6 casks of spent fuel and GTCC waste	22 casks of spent fuel and GTCC waste
<b>NRC License-Type / Year</b>	General Year is N/A since it is a general license	Site-Specific Licensed in 2005	Site-Specific Licensed in 2000
<b>Plant Permanent Shutdown Year</b>	Unit 1: 1992 Units 2&3: 2013	1976	1989
<b>Reference(s)</b>	<ul style="list-style-type: none"> <li>• <a href="#">SONGS Website</a></li> <li>• <a href="#">NRC SONGS Decommissioning Webpage</a></li> <li>• <a href="#">Holtec UMAX Overview</a></li> <li>• <a href="#">SONGS Irradiated Fuel Management Plan</a></li> </ul>	<ul style="list-style-type: none"> <li>• HB ISFSI License Renewal <a href="#">Application</a> and <a href="#">Presentation</a> to NRC</li> <li>• <a href="#">Funding Report</a> to NRC</li> </ul>	Rancho Seco ISFSI License Renewal <a href="#">Application</a> and <a href="#">Presentation</a> to NRC

### 3. DCPD ISFSI Spent Nuclear Fuel Casks

#### a. Current DCPD Licensed Cask Design

The current dry cask storage system at Diablo Canyon uses the Holtec International HI-STORM 100SA overpack, HI-TRAC 125D transfer cask, and Multi-Purpose Canister (MPC) capable of holding 32 fuel assemblies (MPC-32). This system is approved for use by general licensees under NRC Docket Number 72-1014. The canisters are half-inch thick stainless steel nestled within a concrete “overpack” that is 27-1/2 inches thick and lined with a 1-inch thick stainless steel liner around both the inner and outer diameters. No mechanism for inspecting the canisters for cracking or loss of helium currently exists, though research is underway.

When the spent nuclear fuel is transferred to dry storage from the spent fuel pools, it must be shielded against radiation. The fuel assemblies are loaded into the MPC which is inside the transfer cask underwater in the spent fuel pools. The MPC, shielded by the transfer cask, is raised out of the water, dried, filled with helium, sealed, and then carefully moved to the ISFSI, where the transfer cask is removed while the canister is lowered into the concrete overpack. The canister and concrete overpack are moved into place on the ISFSI pad and bolted down. This transfer process is designed to protect workers and the environment from radiation exposure.

b. Upcoming Request for Proposal (RFP) for New Casks

In July 2019, PG&E plans to issue a Request for Proposal (RFP) to begin the process of selecting a new dry cask storage system at the DCPD ISFSI. Because of the high seismic threat at Diablo Canyon, a site-specific dry storage plan must be used. At the DCDEP's informational meeting held on February 22, 2019, three dry cask manufacturers (Orano, Holtec, and GNS) presented information regarding their products to the DCDEP. PG&E has noted that all manufacturers with dry cask storage systems are welcome to submit proposals.

c. Technical Variables Associated with New Cask Design

Relevant to dry cask storage systems is this statement from the PG&E 2018 Triennial NDCTP filing (Volume 1, Chapter 6, Section B.2):

*For a general license, the dry cask vendor performs the licensing to gain the NRC's approval for the dry cask design to be used. However, DCPD is not authorized as a general licensee, but rather uses the system under a site-specific ISFSI license (NRC Docket Number 72-26). PG&E chose to obtain a site-specific ISFSI license to adequately address DCPD site-specific conditions including seismic design basis requirements and the associated impacts to the system's thermal capacity.*

Because design requirements are exceptional for the Diablo Canyon site, dry cask vendors must modify their designs to meet additional safety parameters. Each canister and cask is manufactured to order, and so the process may take some time to complete. The DCDEP will review all of the proposed cask designs submitted to PG&E and will make its recommendation to PG&E based on design safety and longevity. Although the recommendations will be advisory only, the DCDEP feels there is a responsibility to do so.

d. Cask Housing Options

During the DCDEP workshops held on spent nuclear fuel storage, three options for dry spent fuel storage were discussed: open air unmonitored storage, Hardened On-Site Storage (HOSS), and Hardened Extended-life Local Monitored Surface Storage (HELMS).

The system currently used at the DCPD ISFSI is an open air unmonitored system. The dry casks are affixed to 7½ foot thick concrete pads in the open air. The spent nuclear fuel emits radiation (like light from a light bulb) and continues to cool using a passive system: that is, it relies upon a combination of heat conduction through solid materials and natural convection or thermal radiation through air to move decay heat from the spent fuel into the ambient environment. There is no real-time radiation monitoring at each cask. Four radiation monitors (Thermoluminescent Dosimeters or TLD's) are placed at the outer edges of the inner

perimeter of the ISFSI. Eight additional radiation monitors are placed around the exterior perimeter of the ISFSI. TLD's are replaced and the doses read quarterly. Resultant doses are reported in the Annual Radiological Environmental Operating Report. The most recent dose results are from 2017 and can be found in the Annual Radioactive Effluent Report (<https://www.nrc.gov/docs/ML1813/ML18130A025.pdf>. - page 83). Thus far, radiation levels at the ISFSI are as expected.

The HOSS concept is still under development. The principles are as follows:

- Irradiated fuel must be stored as safely as possible as close to the site of generation as possible;
- The facilities are not regarded as a permanent waste solution and should not be constructed underground rendering the waste irretrievable;
- The facility must have real-time radiation and heat monitoring for early detection of problems with containers;
- The amount of releases projected, in even severe attacks, should be low enough so that the storage system would be unattractive as a terrorist target; and
- Placement of individual dry casks in a manner that detection from outside the site boundary is difficult.
- Casks must be:
  - Retrievable
  - Capable of being re-containerized
  - Transportable

The HELMS concept is also under development and has been submitted to the NRC by *Citizens Oversight*, an activist organization based out of San Diego. The following is from the Citizens Oversight website ([citizenoversight.org](http://citizenoversight.org)):

*HELMS stands for Hardened, Extended-life, Local, Monitored Surface Storage. Hardened to deal with the reality of the terrorist and other unpredictable events, Extended-Life to embrace a 1,000-year DESIGN LIFE, 300-year PASSIVE LIFE, while still allowing a 40-year license term. Local, to imply that the waste will likely be moved to perhaps a half-dozen Consolidated Interim Storage (CIS) sites which are near the source of the waste but away from the coastal areas and other waterways. Monitored, by defining and included a standard monitoring electronics package that can provide 7/24 monitoring during the initial decades of storage. Surface, to embrace the fact that a) the waste is simply too hot to place in any geologic repository, b) no geologic repository actually exists, and c) if the SNF is placed in the repository, it would need to be actively ventilated for up to 200 years.*

In Germany, by comparison, dry casks are stored in passively cooled buildings in order to keep them out of sight of terrorists and to protect from potential environmental harm caused by excessive humidity and dust. A monolithic cask body is made of ductile cast iron with machined cooling fins to improve the heat removal. A bolted double lid system – the primary lid and the secondary lid – with metal seals and a permanent pressure monitoring of the interspace allows proof of leak tightness. Each cask has a pressure switch that sounds an alarm when a pressure limit is reached or if the switch doesn't function. That switch sits in the

secondary lid and surveys the helium pressure (higher than inside the cask, so that a leak would go to the inside of the cask and not to the environment) within the space between the primary and secondary lid. The radiation of any individual cask is measured during loading at the power plant and verified upon arrival at the ISFSI and then connected to the pressure switch, which surveys the leak tightness. Radiation is surveyed inside and outside the building, in particular at the fence. Beginning in 1998, Germany has required onsite storage at nuclear power plants to be located in buildings with reinforcement that are 1.2 to 1.4 meters-thick. Japan also stores its spent nuclear fuel casks inside buildings.

e. DCPP Greater than Class C Waste (GTCC) Storage Program

When the DCPP is decommissioned, there will be waste generated from dismantling the reactor pressure vessel internals and appurtenances. This waste is classified as Greater-Than-Class-C (GTCC) Waste. GTCC Waste cannot be shipped off-site like lower class demolition wastes, but must be stored in a long-term repository, similar to spent nuclear fuel. The current ISFSI is not large enough to accommodate an additional approximately 10 casks of GTCC that will be stored onsite with the spent nuclear fuel. As part of the RFP process, PG&E will be evaluating dry cask storage systems for storage of GTCC waste at the DCPP ISFSI until such time as transfer to an approved, off-site facility can occur.

The DCDEP is evaluating the storage of GTCC waste in a holistic manner. In addition to the 58 spent fuel casks already onsite at Diablo Canyon, PG&E plans to add an additional 80 casks after offloading all spent nuclear fuel from the spent fuel pools and adding the GTCC waste. The addition of GTCC waste and the need to contain it in the ISFSI presents an opportunity for a fresh look at spent nuclear fuel storage at Diablo Canyon.

**4. DCPP Spent Nuclear Fuel Security Program**

a. Current Security Measures

Currently, NRC-regulated nuclear facilities, such as DCPP, are considered among the most secure of the nation's critical infrastructure. This security is achieved through multiple approaches working concurrently. DCPP is a strong structure, built to withstand adverse weather and earthquakes. It is also surrounded by open space that is controlled by the utility or its subsidiaries. DCPP is not visible from public roads. Additional security measures include trained and armed security officers, physical barriers, intrusion detection and surveillance systems.

The NRC requires that DCPP, as well as all nuclear power plants, be able to defend against a set of adversary characteristics called the Design Basis Threat (DBT). The details of the DBT are not public. But, in general, it outlines threats and adversary characteristics these facilities must demonstrate they can protect against. The DBT is based on realistic assessments of the tactics, techniques and procedures used by terrorist groups and organizations. The NRC is constantly re-evaluating the threat environment and considers changes to the DBT if necessary. The NRC's security baseline inspection program is the primary way the agency verifies nuclear power plants are operating according to security regulations. Force-on-force security inspections are part of this program. In these inspections, a specially trained mock adversary force "attacks" the facility.

b. Security Measures During Decommissioning

The NRC staff evaluates the overall security and emergency preparedness posture during decommissioning on a site-specific basis. The NRC requires a level of security commensurate with the potential consequences to public health and safety and common defense and security. Each decommissioning power reactor has unique characteristics, such as the age of the fuel, amount of fuel in the pool, pool construction/location, and spent fuel load pattern. Although some of the components of the DCPD security program during operation will remain during decommissioning, the NRC allows for changes based on reduced risks that exist after plant shut down.

c. Proposed Security Measures Beyond Decommissioning

After all the spent fuel has been moved from the pools to dry cask storage, the security program shifts to focus on the ISFSI. The NRC continues to regulate the required security programs through the license it issues for the ISFSI. This remains in place until all spent fuel is removed from the site.

Additional information about how the NRC regulates plant security can be found at <https://www.nrc.gov/reading-rm/doc-collections/fact-sheets/security-enhancements.html>

**5. DCPD Inspection and Monitoring Program for ISFSI**

a. NRC Mandated ISFSI Monitoring

NRC-mandated radiation monitoring requirements are not specific. The following is excerpted from *Inspection Procedure 60855 – Operation of a Spent Fuel Storage Installation*:

*Review radiological records for the loading of several recent casks to confirm that radiation levels measured on the casks were within limits specified by the TS or CoC and consistent with values specified in the SAR. Contamination incidents since the last inspection should be reviewed to verify the licensee is continuing to maintain effective control of contamination during work activities.*

*Review the environmental dosimetry records since the last inspection for the areas around the ISFSI pad to verify that accumulation of casks on the ISFSI pad have not caused dose rates in the area to exceed 10 CFR Part 20 limits without posting the area. Verify that workers in nearby buildings are not experiencing elevated dose rates that would be inconsistent with the principles of ALARA (as low as reasonably achievable) and that areas accessible by the public are not exceeding doses to the public specified in 10 CFR Part 20.*

b. NRC Mandated ISFSI Inspection

Below is an excerpt from the NRC document NUREG-1927, Revision 1, Standard Review Plan for Renewal of NRC Specific Licenses and NRC Certificates of Compliance (CoC) for Dry Storage of Spent Nuclear Fuel:

*Both the specific-license and the CoC renewal applications must contain requirements and operating conditions (fuel storage, surveillance and maintenance, and other requirements) for the ISFSI or DSS that address aging mechanisms and aging effects that could affect structures, systems, and*

*components relied upon for the safe storage of spent fuel. Renewal applications must include (1) time-limited aging analyses, if applicable, that demonstrate that structures, systems, and components important to safety will continue to perform their intended function for the requested period of extended operation, and (2) aging management programs for management of issues associated with aging that could adversely affect structures, systems, and components important to safety. Licensees and applicants are encouraged to meet with the NRC staff at public pre-application meetings to discuss their proposed plans for the renewal application.*

c. PG&E Monitoring of the DCPD ISFSI

PG&E has chosen to use a “bounding” radiation dose measurement each year as a direct measurement of the amount of radiation exposure at the plant. For the eight Thermoluminescent Dosimeters (TLD) outside the perimeter of the ISFSI, PG&E has chosen to use this method of dose measurement:

*Direct Radiation (line-of-sight plus sky-shine)*

*Direct radiation to a member of the public has been evaluated per 40 CFR 190 to ensure members of the public did not receive more than 25 mrem per year to the whole body. The 2017 Land Use Census did not identify any members of the public that live in a location that can receive direct radiation from the DCPD site.*

*Instead of calculating dose to a hypothetical member of the public at the site boundary, direct radiation for 2017 was calculated for the operators of the makeup water treatment plant located near the site boundary and approximately 200 meters from the both the ISFSI and the centerline between the Unit 1 and Unit 2 plant vent exhausts. The makeup water operators have been estimated to spend a maximum of 2920 hours a year at their work location.*

*The makeup water plant is unique at Diablo Canyon because it is near the northern site boundary and receives direct radiation from multiple plant sources. The makeup water plant operators work to support plant operation within the owner-controlled area and outside the protected area, but inside the site boundary. Therefore, they are not evaluated to be members of the public not associated with the nuclear fuel cycle as defined in 40 CFR Part 190.*

*Because of these factors, dose received by makeup water plant operators is considered bounding – a maximum greater than the dose that could be received by any real member of the public in the unrestricted area. The 2017 dose calculated for the makeup water operator as a receptor was 4.7 millirem. This is approximately 1/5 of the 25 millirem limit from 40 CFR Part 190 that would apply to members of the public not associated with the nuclear fuel cycle due to activities inside the site boundary.” (Page 23 - 2017 Annual Radioactive Effluent Release Report)*

For the area within the ISFSI, the radiation monitoring is as follows:

- TLDs are placed inside body phantoms (a block of human tissue equivalent material. to represent the human body)
- Background radiation is subtracted using control TLDs.
- TLDs are exchanged and read out quarterly.
- Resultant doses are reported in the Annual Radioactive Effluent Release Report.
- Radiation to members of the public in 2017 are reported in the 2017 Annual Radioactive Effluent Release Report- DCL 18-028.

The most recent report on radiation releases from Diablo Canyon is available in the 2017 Annual Radioactive Effluent Report. <https://www.nrc.gov/docs/ML1813/ML18130A025.pdf>

d. PG&E Inspection of the DCPD ISFSI

Below is a summary of the current ISFSI inspections completed at the DCPD:

**Daily Inspection**

- PG&E's Operations Services conducts daily checks to see that cask inlets and outlets are clear and undamaged
- Radiation dosimeters are worn by staff during inspections and any changes in dosimetry readings are recorded

**Monthly Inspection**

Monthly inspection is performed by maintenance staff for:

- Cask fastener integrity
- Inlet and outlet screen integrity

**Annual Inspection**

Annual engineering inspection performed to assure:

- Painted surfaces are relatively free of corrosion, and chipped, cracked or blistered paint
- Nameplates are present, legible, and in good general condition
- Lid surfaces are relatively free of dents, scratches, gouges or other damage
- Lid lift hole plugs are installed
- Lid retention studs are installed
- Lid holes are in good condition
- Anchor hardware is installed, and visible portions are in good condition.

**Voluntary Electric Power Research Institute, Inc. (EPRI) Inspection.**

EPRI is an American independent, nonprofit organization that conducts research and development related to the generation, delivery, and use of electricity to help address challenges in electricity, including reliability, efficiency, affordability, health, safety, and the environment.

DCPD performed a voluntary EPRI inspection as a proof-of-technology verification in January of 2014 to help EPRI validate accessibility and inspection technologies for viewing canister exterior surfaces. The following is from the EPRI Report (3002002822):

- The inspection provided remote access to the canister surface to collect surface samples, take temperature measurements, and obtain visual evidence of the surface condition.
- The chemical analysis results confirmed very low chloride concentrations, less than 5 mg/m<sup>2</sup>, despite being located close to the ocean.
- Sea salt aerosols were identified in some of the dust samples, indicating that the chlorides from the ocean are being transported inside the overpack to the canister surface, although very slowly as indicated by the low concentration.
- The measured temperatures, ranging from about 120°F (49°C) near the bottom of the canister to well over 200°F (93°C) on the top, indicate that most of the canister is above the temperature where CISCC is expected to occur, yet the coolest areas near the bottom of the canister may already be below this threshold. One of the 2 year-old canisters tested was surprisingly cooler near the bottom than was expected, indicating vulnerability to deposition of salts from the sea air.
- Visual inspection found a small amount of dust on the top surface; however, the sides were free of visible dust and debris, and there was no sign of gross degradation.

## **6. Permanent Federal Spent Nuclear Fuel Storage Facility Proposal**

### a. History of Federal Nuclear Waste Repository

When the nuclear industry was first developing, the National Academy of Sciences released a study in 1957 recommending that the best means of protecting the environment and public health and safety would be to dispose of the nuclear waste in rock deep underground.

In 1982 the federal government enacted the Nuclear Waste Policy Act (NWPA) which mandated the creation of a federal “repository” for spent nuclear fuel disposal. The NWPA calls for a “permanent deep geologic disposal of high-level radioactive waste and spent nuclear fuel.” The law specified that the disposal facility should begin accepting spent nuclear fuel in 1998. The NWPA law specifies that Environmental Protection Agency (EPA) would set the human health protection standards that such a repository must meet, the Department of Energy (DOE) would identify a site that it believes complied with EPA’s standards, and the NRC would decide, after a full adjudicatory proceeding, whether or not the site chosen by DOE actually satisfies EPA’s standards. If so, the facility would be built. If not, DOE would select an alternative site, and the process would begin again. The NWPA process specifies that public interest groups and State and local authorities could challenge and litigate the DOE and NRC decisions.

### b. Yucca Mountain Nuclear Waste Repository

After extensive research, DOE identified a site in Nevada called Yucca Mountain that it believed met the EPA health protection standards. In 2008, the DOE applied to the NRC for a license to construct the Yucca Mountain Nuclear Waste Repository. However, the project has been a hotly debated national topic. The majority of Nevadans, including the Governor and state Attorney General, as well as the state’s congressional delegation, leaders from Clark County, the City of Las Vegas, and the Western Shoshone Nation, continue to oppose the project. Only the local county in which Yucca Mountain site is located, Nye County, supports the development of the repository.



In 2010, the Obama Administration directed DOE to withdraw the Yucca Mountain application. This decision was challenged by states where spent nuclear fuel was accumulating. In 2013, the U. S. Court of Appeals for the District of Columbia rejected the DOE withdrawal and ordered DOE and NRC to resume processing the Yucca Mountain license application. DOE and NRC restarted the Yucca process, but soon ran out of money because the Obama Administration would not appropriate funding for the project. More recently, the budgets that were proposed by the Trump Administration for 2018 and now 2019 included approximately \$120 million to restart the Yucca Mountain licensing process. The 2018 Budget proposal did not pass. The 2019 Budget proposal is currently pending in Congress.

If the Yucca Mountain Nuclear Waste Repository licensing process at the NRC resumes, it will be litigated for several years. And even if the project were approved by NRC (and the federal courts), it is unlikely that Yucca Mountain would begin accepting spent nuclear fuel before 2050.

c. Prospects for Completion

This leaves all nuclear power plants in the US without any designated long-term federal disposal site. As a result, most nuclear power plants, including DCP, must store their spent nuclear fuel, indefinitely, on site in dry cask storage systems made of steel and concrete casks. The prospects for completion of Yucca Mountain Nuclear Waste Repository or any other such permanent repository in the near future are low and there is currently no approved funding for further development. However, there was a Bill in the last Congress (the Nuclear Waste Policy Amendment Act of 2017) that directs the DOE to develop a federal Consolidated Interim Storage Facility (CISF) to be used until the development, construction and operation of a permanent federal nuclear waste repository is developed. That bill (HR 3053), passed the House of Representatives by 370 – 72, but Senator Heller (R- NV) prevented it from coming to a vote in the Senate. Senator Heller has since lost his seat. A similar Bill could be introduced in the current Congress.

PG&E reached a settlement agreement with the DOE in 2012 for yearly reimbursement for the costs of on-site storage of spent nuclear fuel and yearly claims are submitted to the DOE. This means that, until Yucca Mountain Nuclear Waste Repository or another federal repository opens, the federal government (taxpayers), not PG&E nor its ratepayers, pays the costs of storing spent nuclear fuel on the DCP site.

## **7. Consolidated Interim Private Spent Nuclear Fuel Storage Facility (CISF) Proposals**

a. Texas and New Mexico CISF Proposals

As an interim measure until the federal government opens a permanent federal spent nuclear fuel repository, two private entities have submitted applications to the NRC for Consolidated Interim Storage Facilities (CISF). These CISFs would be large ISFSIs, located either above or below grade. Holtec International submitted an application for a CISF in Lea County, New Mexico in 2017 which may be approved as early as 2021. Holtec stated to the DCDEP that, once the license is issued, the facility could be constructed and open to accept spent nuclear fuel within 2 or 3 years. In 2016 another company, Interim Storage Partners, LLC submitted an application for a CISF in Andrews County, Texas with an estimated approval date of 2022.

Legal challenges to building CISF's in both New Mexico and Texas are currently on appeal at the NRC. The Governor of New Mexico, both U.S. Senators, and two of three New Mexico Congressional representatives have expressed their opposition to building a CISF in their state, whereas local elected officials are supportive of the project. In Texas, local government officials have expressed their opposition to the proposed CISF, whereas Federal officials support it

b. Timeframe for Readiness

Both of these pending CISF proposals are seeking a specific license from the NRC under 10 CFR Part 72 and are not co-located with a power reactor. The NRC is currently performing a technical review of all the safety and environmental protection aspects of the proposed CISFs. If approved, the license could be valid for up to 40 years.

Once these privately owned and operated CISFs are licensed and constructed, the decision as to which commercial nuclear power plants get to send their spent nuclear fuel to the CISF first has not yet been decided. The DOE has an informal Acceptance Policy Ranking for a federal repository, which states that the oldest fuel from a particular location should be transported first. However, it is not known if this approach would apply to the CISFs.

At the federal level, Representative Mike Levin (D- San Juan Capistrano) has introduced HR 2699 – the Nuclear Waste Policy Amendments Act of 2019, which would give priority to waste from: (1) decommissioned plants or those in the process of being decommissioned, (2) sites located near dense population centers and (3) locations where an earthquake hazard is present. Levin’s legislation would supersede the “oldest first” principle, which is not codified under any law or regulation but has been accepted by some in the industry. If Levin’s bill becomes law, the old standards would be replaced and new criteria would be established to determine which sites would move to the front of the queue for transporting used spent nuclear fuel to a CISF or permanent federal repository. This new standard may accelerate the transfer of spent nuclear fuel from DCPD due to its location near fault lines.

c. DCDEP Position on CISF

Although the recommendations put forward in the Vision Statement include support of CISF and the desire to transfer spent nuclear fuel to these facilities if available, DCDEP member Linda Seeley has presented an opposition paper entitled “*Opposition to Consolidated Interim Storage*” recommending the spent nuclear fuel remain at the DCPD site until such time as a permanent federal repository exists. Her paper can be accessed at this [link](#).

## **8. Transportation of GTCC Waste / Spent Nuclear Fuel**

a. Transportation Impacts of Spent Nuclear Fuel

The transportation related impacts of decommissioning which could include moving both radiologically contaminated and non-contaminated demolition materials (and GTCC waste and spent nuclear fuel in the future) over the local highway and rail systems are of critical importance to the county and in particular, the community of Avila Beach. It is imperative that the movement of demolition materials, GTCC waste and spent nuclear fuel be done safely and with limited impacts to surrounding communities.

b. Transportation Casks and Canisters

At the DCP, the existing dry casks overpacks in use for spent nuclear fuel storage do not meet the NRC's transportation cask specifications. Transporting spent nuclear fuel from DCP to either a CISF or a federal repository must be preceded by transferring the multi-purpose spent fuel canisters from existing overpacks to transportation casks

As part of the RFP process being used to select a new dry storage system at the DCP ISFSI, PG&E is not requiring that future casks that are evaluated be designed and licensed for both storage and transportation, but is not opposed to assessing casks that meet this criterion. As part of the RFP, PG&E is looking at canisters that meet the transportation requirements for eventual transfer to a transportation cask, if they are not already in a licensed transportation cask.

In order to learn more about the potential transportation issues, the DCDEP has scheduled a public meeting on **November 13, 2019** dedicated to the topic of transportation. After hearing from the public at that meeting, and from pertinent agencies before, at or following the meeting, the DCDEP will develop a background section and formulate Visions, Goals and Recommendations specific to transportation.

Through these vision statements, goals and recommendations, it is the intent of the DCDEP to assure that the management of DCP spent nuclear fuel is done in a safe and secure manner for the community, workers and the environment.

Recommendations for Spent Nuclear Fuel Management can be found in Section IV of this document.

**Vision Statements**

- The protection of human health and safeguarding the community, workers and the environment should be the primary considerations in the management of spent nuclear fuel at DCP
- The amount of spent nuclear fuel kept in the spent fuel pools at any one time is recognized as a complex issue, but should always be the amount that would create the lowest possible threat to the community
- The primary consideration in choosing a dry cask storage system should be the health and safety of workers and the community and the ongoing protection of the environmental quality of the area
- The constant changes to the site and use of contractors creates potential security exposure, thus a highly trained security force should be a continued focus during decommissioning
- The creation of a permanent, deep, geological repository for spent nuclear fuel by the federal government should be completed as set forth in the Nuclear Waste Policy Act of 1982
- The spent nuclear fuel should be moved away from Diablo Canyon as soon as safely feasible, in a manner that minimizes impacts to the adjacent communities and any other impacted communities
- The current ISFSI site should be either repurposed for another use or converted to open space after regulatory approvals are met

- The ownership of the DCPD should stay with PG&E throughout the decommissioning process to preserve the existing connection with the community and the local workforce

## **Goals**

### **1. Risk Analysis**

- a. The range of alternatives for offloading spent nuclear should be evaluated through an independent risk assessment to determine potential risks to workers, the community and the environment

### **2. Dry Cask Storage System**

- a. The next generation of dry cask storage systems for the ISFSI should be chosen using the Request for Proposal (RFP) process and should take into consideration industry advancements in dry cask storage technology
- b. The ISFSI should use a site-specific dry cask storage system that takes into consideration the seismic risks at DCPD
- c. The dry cask storage system chosen for the ISFSI should take into consideration the health and safety of the workers, as well as the continued protection of neighboring communities and the regional environment
- d. The evaluation of a next generation dry cask storage system should consider the benefits and costs of a system that is suitable for both storage and transportation

### **3. Dry Cask Loading**

- a. The loading and movement of any new dry cask storage system should involve extensive worker training and leverage the experiences of other ISFSI operators

### **4. Aging Management Program**

- a. The development of an Aging Management Program for the ISFSI should be completed by PG&E as soon as possible and should incorporate the best available technology as it evolves in the industry
- b. The Aging Management Program should include special consideration for the management and inspection of the older canisters that have been in use since 2009
- c. The ISFSI should be regularly inspected and continually monitored in order to protect the workers, community and the environmental quality of the area

### **5. Security**

- a. The NDTCP should include an accurate budget for comprehensive security measures during all phases of decommissioning

### **6. Offsite Repository for Spent Nuclear Fuel**

- a. The spent nuclear fuel and GTCC waste stored in the DCPD ISFSI should be safely transported to either a Consolidated Interim Storage Facility or permanent repository located offsite as soon as possible
- b. The spent nuclear fuel and GTCC waste, if transported by truck, should not generate a substantial increase in traffic through surrounding communities during times of peak traffic

## 7. DCPD Ownership

- a. The DCPD should continue to be owned and operated by PG&E in order to preserve the relationships that are present today with local workers and contractors, neighboring communities and local governments and remain the overseer of the on-site spent fuel management process

*[Added May 2019]*

## H. Potential Economic Impacts/Possible Economic Development Opportunities

The closure of DCPD will impact the local economy. In addition to the loss of jobs and opportunities for jobs in the area, local governments are impacted by the loss of unitary taxes. Currently, DCPD, which employs about 1,500 PG&E workers, is the second largest employer in San Luis Obispo County and provides a large economic base to the area. Unitary tax currently provides funding to 70+ governmental agencies, including the County, Cities and School Districts.

Since PG&E announced the closure, a number of measures have already occurred to soften the economic impact to local government. These include the Joint Proposal, Senate Bill 1090 and Senate Bill 968 as described in this section. These efforts have allowed for local government to ease into the potential impacts.

The Joint Proposal and Senate Bills have also provided PG&E with funding for a job retention program so that a well-trained workforce will remain in place to safely operate the plant until shutdown. There is also funding for job retraining programs to provide opportunities for plant employees to remain in the area or with the company in different jobs.

PG&E formed the DCDEP and through public workshops and meetings has begun planning for the shutdown of operations. This includes actions necessary to safely retire the plant and looking at approaches for preservation and future public use of the Diablo Canyon Lands, as well as repurposing the site for alternative uses.

This section of the Strategic Vision describes the efforts currently underway to address potential economic impacts of the closure of DCPD, as well as potential opportunities for economic development.

### ***Joint Proposal***

California's energy landscape is changing dramatically. State policies that focus on renewables and energy efficiency, coupled with projected lower customer electricity demand in the future, will result in a significant reduction in the need for the electricity produced by DCPD beyond 2025. Reflecting this change, PG&E partnered with labor and leading environmental organizations in 2016 on the Joint Proposal that would increase investment in energy efficiency and renewables, while retiring DCPD at the end of its current Nuclear Regulatory Commission (NRC) operating licenses, which expire in 2024 and 2025.

The parties to the DCPJ Joint Proposal include PG&E, International Brotherhood of Electrical Workers Local 1245, Coalition of California Utility Employees, Friends of the Earth, Natural Resources Defense Council, Environment California, California Energy Efficiency Industry Council and Alliance for Nuclear Responsibility.

Recognizing that the procurement, construction and implementation of a greenhouse gas (GHG) free portfolio of energy efficiency and renewables would take time, the parties to the Joint Proposal agreed to support PG&E in obtaining the state approvals needed to operate DCPJ to the expiration of its current NRC operating licenses. This avoids an early shutdown of DCPJ and the associated negative economic and social impacts, including having to replace the plant's output required to meet customer demand with non-GHG-free resources. The Joint Proposal also supports for a successful transition for DCPJ employees and the greater San Luis Obispo County community.

The Joint Proposal represented a significant milestone in the planning to help meet California's clean energy vision. This unique approach with a diverse set of stakeholders tackled a complex issue in a collaborative and successful manner whose goal is the orderly transition and retirement of Diablo Canyon Power Plant. More specifically, it helps protect local communities, support employees and ensure that other GHG-free resources will replace the output of Diablo Canyon.

The Joint Proposal included an \$85 million community impact mitigation program to support the community with its transition and provide funding to support essential public services that the plant and the local community rely upon. It also included a DCPJ employee program that would provide incentives to retain employees during the remaining operating years of the plant, and a retraining and development program to facilitate redeployment of a portion of plant personnel to the decommissioning project or other positions within the company.

**Senate Bill 1090**

In September 2018, Governor Brown signed Senate Bill (SB) 1090 which implements key objectives of the Diablo Canyon Joint Proposal. SB 1090 included Community Impact Mitigation Funds intended to ease into post-Diablo Canyon economy. The CPUC enacted the rate changes ordered in SB 1090 when it issued D.18-11-024 on December 7, 2018. Collectively, D.18-01-022, SB 1090, and D.1811-024, authorized up to \$352.1 million for DCPJ employee retention programs, and \$85 million for community impact mitigation programs.

The following summarizes the funding approved with this bill:

<b>\$10 million - Economic Development Fund</b>	<b>\$75 million - Essential Services and Stabilization Fund</b>
\$3.84 million - County sole use	\$27.9 million - County total
\$1.7 million - Economic Development	\$12.1 million - General Fund Mitigation
\$1.0 million - Housing revolving funds	\$5.4 million – Housing
\$948,000 - Infrastructure	\$4.5 million – Safety
\$192,000 - City of Grover Beach	\$4.1 million - Infrastructure
\$400,000 - Regional Economic Funds	\$1.9 million - Economic Development
\$5.76 million - Coalition of Cities (all incorporated cities excluding Grover Beach)	\$47.1 million - 70+ governmental entities including cities and school district

### Economic Development Fund

\$10 million was allocated to a fund for implementing regional economic development and job creation. The funds are to be spent solely for the purposes of economic development and impact mitigation purposes. Of the total amount, \$400,000 will be dedicated for regional economic strategy efforts. Of the remaining amount, \$5.76 million will be allocated to the Coalition of Cities and \$3.84 million to the County.

Of the County's amount, \$192,000 will be allocated to the City of Grover Beach. The County and each of the cities will prepare annual reports that enumerate and describe the expenditures from the Economic Development Fund and assess the results and effectiveness of the economic development measures or programs resulting from such expenditures. The reports will be provided to PG&E, the CPUC and the public.

### Essential Services and Stabilization Fund

Currently, about 80 governmental entities receive unitary tax, which is used to fund general operations of essential public services to the people of San Luis Obispo County. Of those entities that receive the tax, 71 will be negatively impacted by the closure of Diablo Canyon and will realize a reduction in unitary tax funding.

\$75 million will be distributed to the County in nine equal, annual installments of \$8,333,333 through 2025. The County will redistribute the funds to the 71 entities. Currently, the San Luis Coastal Unified School District (SLCUSD) and the County's General Fund are the two largest recipients of the existing unitary taxes per the allocations set by the Board of Equalization. The SLCUSD will receive about \$4 million annually for nine years and the County General Fund will receive \$3.1 million. Per the agreement, \$2 million of SLCUSD's share of each of the first five installment payments will be deposited into the account of SLCUSD's designated educational foundation.

### **Senate Bill 968**

In September 2016, Senate Bill (SB) 968 was signed by Governor Brown. This bill requires and funds the preparation of an assessment of the adverse and beneficial economic impacts, and net economic effects, that could occur, and of potential ways for the state and local jurisdictions to mitigate the adverse economic impact, upon the closure of Diablo Canyon. The study was to be completed no later July 1, 2018 and was required to be conducted by an independent third party.

In June 2019, an Economic Impact Assessment of the prospective closure of DCPD was released to the public. The report ("Berkeley Report") was prepared for the CPUC by David Wells Roland-Holst, Drew Behnke, Samuel Evans, Liam Frölund and Annie Yi-Chen from the Department of Agricultural and Resource Economics at University of California – Berkeley.

The goal of the Berkeley Report was to identify potential ways for state and local jurisdictions to mitigate any adverse economic impacts and plan accordingly. Currently, DCPD, which employs about 1,500 PG&E workers, is one of the largest employers in San Luis Obispo County and provides a large economic base to the area that will be lost with the closure of DCPD. The study was intended to help identify potential opportunities for state and local jurisdictions to mitigate any adverse economic impacts and plan accordingly. Economic impacts were evaluated for DCPD closure, including shutdown of operations, actions necessary to safely retire the plant and make the site eligible for alternative use, and the implementation of SB 1090 (described earlier in this

section). The Berkeley Report presented a five-part assessment: 1) general economic impact assessment; 2) local stakeholder consultation; 3) local stakeholder survey; 4) real estate market assessment; and 5) bond market assessment. It also offered recommendations covering four areas: Civil Society, Local Governments, the CPUC and PG&E.

The Berkeley Report concluded that the closure of DCP, decommissioning, and funding provided under SB 1090 will present the economy in San Luis Obispo County with both positive and negative economic impacts. Taken together, the report determined that net effect of these factors will be much smaller than previous estimates for DCP closure. Plant closure will induce short term reductions in local employment and expenditures associated with the cessation of electricity production. This negative outcome is expected to decrease local economic activity in San Luis Obispo County. On the other hand, DCP will not close in a vacuum; the plant will not immediately shut down, nor will all employees immediately leave the region. Furthermore, there are positive economic impacts to consider both before and after the plant closes. Before the plant closes, funding from SB 1090 will offer significant stimulus to the San Luis Obispo County economy. After the plant closes and the bulk of significant decommissioning expenditures begin, the report estimated that local output can be expected to increase.

In general, the assessment found that the closure of DCP would appear to present as many opportunities as it does challenges. The assessment found that the overall economic impacts of closure will be relatively modest, but that significant adjustments can still be expected. Adaptability of the local economy in San Luis Obispo County will depend on community resilience, cohesion, and foresight. The recommendations in the report provided some general insights about how to mitigate adjustment costs, capture more economic benefit from investments to retire the site, and improve public awareness. The recommendations contained in the Berkeley Report offered proactive and coordinated strategies that the authors believed would allow San Luis Obispo County to secure a basis for more inclusive and sustainable economic prosperity.

The following summarizes the conclusions and recommendations of the Berkeley Report:

- Overall economic impact of the closure of DCP is relatively modest (reduction of \$77 million per year for decade – which equates to 0.6% of the regional gross product)
- Some adjustments are needed in the local economy to address the closure
- There is potential to advance a diversified economic growth but only if social barriers and economic segmentation can be overcome
- There is the need for inclusive community dialogue to advance strategic planning
- New businesses that support a highly-skilled workforce should be aggressively welcomed
- Local governments should reconsider high impact fees that deter affordable housing
- Local governments should increase efforts to coordinate across jurisdictions
- The establishment of Public – Private Partnerships should be facilitated
- PG&E should prioritize local contracting during decommissioning

The text of the full report can be found by clicking here:

[https://www.cpuc.ca.gov/uploadedFiles/CPUC\\_Website/Content/Utilities\\_and\\_Industries/Energy/Energy\\_Programs/Electric\\_Costs\\_and\\_Rates/Nuclear/FINAL\\_SB%20968%20Diablo%20Canyon%20Economic%20Impact%20Assessment.pdf](https://www.cpuc.ca.gov/uploadedFiles/CPUC_Website/Content/Utilities_and_Industries/Energy/Energy_Programs/Electric_Costs_and_Rates/Nuclear/FINAL_SB%20968%20Diablo%20Canyon%20Economic%20Impact%20Assessment.pdf)



### ***DCPP Job Retention and Retraining***

There are approximately 1,300 employees currently employed at DCPP. About 90 percent of these employees are participating in the employee retention program that was put in place in 2016. This assures that well-trained personnel will continue be in place to safely operate the plant until closure.

By making the announcement to not relicense DCPP in 2016, a nine-year time frame was created to design a program to retrain and redeploy the employees currently working at DCPP. Through the approval of the Joint Proposal, \$11.3 million in funding will be set aside for the development of retraining and redeployment programs starting in 2021.

DCPP has created the framework for the retraining/redeployment program, which they call the *Pathways to Your Future* program. The program was named for the five pathways that are included in the program that help employees pick their next employment “path”. The five pathways include: staying on with PG&E, working in decommissioning at DCPP, moving on to another nuclear power plant, finding a job in another industry or retirement.

When the funding is available in 2021, it will be used to support many programs, but the major cost centers will be additional funding for education, apprenticeships and job training programs

### ***Workshop and Public Meeting on Economic Impacts and Opportunities***

On October 17, 2019 and November 13, 2019, the DCDEP held a workshop and public meeting covering the topic of Economic Impacts and Opportunities of the closure of DCPP. Included in the workshop were presentations from the County of San Luis Obispo, the Fort Ord Reuse Authority, and the Hourglass Project.

The workshop held on October 17, 2019 can be found by following this link:

<https://diablocanyonpanel.org/meetings/2019-panel-meetings/#10-17-19-panel-workshop>

The public meeting held on November 13, 2019 can be found by following this link:

<https://diablocanyonpanel.org/meetings/2019-panel-meetings/#11-13-19-panel-mtg>

#### ***County of San Luis Obispo***

The County of San Luis Obispo’s presentation included information about the way in which the funding received from Senate Bill 1090 had been defined for use by the Board of Supervisors. In addition, it was noted that there was a potential role for the County of San Luis Obispo Workforce Development Board to assist with potential economic impacts prior to and during the closure of DCPP. The Workforce Development Board is part of the public workforce system that supports economic expansion and development of talent in the local workforce. The Workforce Development Board uses local labor market information to develop strategies to focus resources on high growth industries in the area. The Workforce Development Board contracts with service providers for employment and training activities for youth, adults and dislocated workers. Services under the Workforce Development Board also include Rapid Response and Layoff Aversion programs to assist employers and their employees during downsizing or business closures. The Workforce Development Board oversees funding provided through the Workforce Innovation and Opportunity Act and can apply to the Department

of Labor for National Dislocated Worker grant funding (120 days prior to layoffs occurring). These funds can be used for career development, training and supportive services.

#### Fort Ord Reuse Authority

The Fort Ord Reuse Authority was established to provide oversight of Monterey Bay economic recovery from the closure and reuse planning of the former Fort Ord military base. The former Fort Ord is located on the California coastline near the Monterey Peninsula consisting of 45 square miles/28,000 acres. The Reuse Authority exercises planning, financing, and monitoring responsibilities under state law to pursue reuse of the Fort Ord facilities in the best interest of the region.

The Fort Ord closure announcement occurred in 1991, generating a mixture of disbelief, economic impacts, and excitement about potential reuse. The Army base had been part of the history of Monterey County on the Monterey Peninsula since 1917. Within months, a series of meetings were initiated to discuss recovery from significant closure impacts by creating a vision for reuse. The meetings included broad community participation including residents, businesses, government, special districts, and others. From those meetings, it was agreed that reuse should focus on Education, Environment, and Economic Development ("the three E's of Fort Ord Reuse").

Initial efforts to organize governance for reuse faltered. The late Senator Henry Mello sponsored special legislation to establish a local agency charged with the task of planning, financing, and implementing reuse. That agency was entitled the "Fort Ord Reuse Authority", formed in 1994. The Fort Ord Reuse Authority has a governing body of 13 voting members and 12 non-voting members and is comprised of representatives from cities, the county, special districts, public educational institutions, the military, and state and federal legislators.

The Reuse Authority is scheduled to close its doors on June 30, 2020. A transition plan, including a methodology for allocating assets/liabilities; a methodology for infrastructure improvement timing; and the creation of an entity structure to implement obligations and financing options, is currently being developed.

There are a number of similarities between the reuse of Ford Ord and the potential reuse of DCP. The presentation stressed that it is important to expand upon and leverage what the local community already does well and to promote very active community involvement and buy-in.

#### Hourglass Project

Hourglass Project is a new alliance of business leaders committed to building a resilient, inclusive and prosperous Central Coast economy. The project arose out of concern that Central Coast Region is on a path to economic stagnation. The Hourglass Project focuses on more than San Luis Obispo County, they are seeking a regional approach to drive economic transformation in a three-County area (northern Santa Barbara, San Luis Obispo and southern Monterey). Hourglass has partnered with Deloitte US as a strategic and implementation partner.

Hourglass is collaborating with government entities, private industry, academia and philanthropic organizations. With \$300,000 grant from San Luis Obispo County (using Senate Bill 1090 funds), Hourglass was publicly launched in November 2018 and a CEO hired in February 2019.

Hourglass has identified the following regional challenges within the four lines of effort based on consultations with city managers, regional representatives, a workforce poll and interviews.

#### Business Development

- The startup ecosystem lacks regional support
- Businesses find it challenging to attract and retain talent due to cost of living
- There is limited access to venture capital

#### Infrastructure

- The region lacks a cohesive, shared utility model across the region (e.g. broadband and water)
- There is no master transit or transportation plan for the Central Coast Region
- Existing transportation infrastructure does not meet current regional needs

#### Housing

- There is a lack of affordable housing
- Zoning is currently restrictive to alternative housing options

#### Education Pipeline

- There is a minimal pipeline from undergrad or graduate school to be employed in the area with a high-paying, relevant career
- There is no local, accessible California State University institution

The Hourglass Project engaged over 100 regional leaders in four sub-regions through five immersive strategy labs. These conversations were designed to engage community members from the public sector, private sector, education and key stakeholder organizations in order to develop a comprehensive overview of regional assets, opportunities and priorities. These inputs are being used by Hourglass to inform a strategy for the region's path forward.

One of these labs covered the closure of DCP. It was held on June 14, 2019. No one from the DCDEP was invited to attend the lab or provide information about the workshops and public meetings that had been held by the DCDEP to obtain community input regarding the closure of DCP. Hourglass did recognize that the DCDEP had brought the surrounding community together through a number of stakeholder workshops to identify the potential reuse of the site. However, they noted that an actual plan for reuse had not yet been developed. In this lab the Hourglass Project convened key leaders in the community to identify a path forward to develop a unified ask for the site on behalf of the community and to determine a shared development model and risk-sharing approach.

Recommendations from the Hourglass Project will be forthcoming later in 2020. The DCDEP anticipates a more active role with the Hourglass Project relative to the reuse of the DCPD site, with a focus on assuring that any future reuse plans include conservation

of the 12,000-acre Diablo Canyon Lands for use by the public, preservation and protection of any Native American sites, and reuse focusing on the already developed and disturbed areas of Parcel P with uses that are supported by the surrounding communities and the county citizens.

### ***Repurposing of the DCPD (Parcel P)***

In 2018, the DCDEP held workshops and a public meeting about the potential for repurposing the 700-acre DCPD site (Parcel P) for alternative uses. There were a number of presentations from various individuals and groups about what the site could be used for in the future once it has been decontaminated and decommissioned. In addition, the community weighed in and indicated support for repurposing of the site for other uses.

This Strategic Vision contains visions, goals and recommendations regarding repurposing in Section IV-D. There will need to be ongoing discussions and efforts made regarding the potential reuse of the site (the developed and disturbed areas of Parcel P). This will include ongoing discussions with the County of San Luis Obispo and the work that is underway by the Hourglass Project and any other local and regional economic entity.

Through these vision statements, goals and recommendations, it is the intent of the DCDEP to create an environment after the closure of DCPD that promotes a successful and sustainable economy while reflecting a future that embraces our community values and builds upon existing economic drivers.

Recommendations for Economic Impacts and Opportunities can be found in Section IV of this document.

### **Vision Statements**

- The decommissioning and decontamination process should begin immediately upon shutdown thus avoiding SAFSTOR in order to limit economic impacts and provide economic opportunities
- The activities associated with decommissioning should promote a successful and sustainable economy while reflecting a future that embraces our community values and builds upon existing economic drivers, including agriculture, education, technology and tourism
- The County of San Luis Obispo and San Luis Obispo Council of Governments should play a leadership role in supporting and promoting economic development
- The policies of local government should support and promote the retention of existing local businesses and workforce during and beyond the closure of DCPD
- The funds provided to local governmental entities for economic development through Senate Bill 1090 should be used to promote and support local economic activities
- The conservation of, and sustainable access to, the 12,000-acre Diablo Canyon Lands should be embraced and promoted as a vital part of local economic health

- The safest possible storage of highly radioactive spent nuclear fuel should be undertaken to protect economic stability

## **Goals**

### **1. Decommissioning**

- a. The permitting for decommissioning should be completed efficiently, while allowing for substantial public input, in order to not create delays in the decontamination process

### **2. Repurposing**

- a. The 12,000-acre Diablo Canyon Lands surrounding the plant should be conserved and made available for public use as soon as possible, to promote regional tourism and the economic vitality of neighboring communities
- b. The evaluation of existing reuse and redevelopment projects in California should be used to ascertain successes and drawbacks of repurposing and its impact on local economic development
- c. The potential reuse and repurposing of the already disturbed and developed areas of Parcel P should be supported by PG&E throughout the decommissioning process
- d. The storage of spent nuclear fuel on site should be accomplished in the safest manner possible to allow for repurposing and reuse of existing infrastructure, as well as the development of new uses on the already disturbed areas of Parcel P

### **3. Local Government**

- a. The retention and promotion of existing businesses, as well as the establishment of new businesses and industries that offer diverse living wage/head of household jobs that have growth potential and are clean and green, should be supported by local governments

### **4. Local Labor**

- a. The use of local labor and local businesses should be used during decommissioning to reduce impacts due to the loss of local jobs and job opportunities

*[Added February 2020]*

## **I. Transportation of Non-Radioactive and Low-Level Radioactive Waste Materials**

Decommissioning of the DCPD will involve the shutting down and demolition of multiple structures and facilities on the plant site. A majority of the demolished materials will need to be transported away from the plant site and disposed at landfill sites in conformance with local, state and federal regulations. This section of the Strategic Vision addresses the transportation of clean and low-level radioactive wastes. The transportation of radioactive spent nuclear fuel and Greater Than Class C Waste will be covered in the next section.

Traditional demolition waste such as concrete, metal, building materials, aggregate and glass, or clean waste (no detectable radiation) are proposed to be removed from the plant site, as is low-level radioactive waste (items that have become contaminated with radioactive material or have become radioactive through exposure to neutron radiation). The 2018 NDCTP proposed truck transportation for waste removal and estimated that 1,361,335 tons of non-radioactive, low

activity radioactive waste, and Class A, B, and C waste would need to be removed. 684,000 tons of that is concrete from the removal of the Marina Breakwater. Keeping the breakwater in place would reduce the amount of demolition materials to 677,335 tons which would significantly decrease the number of truck trips needed to remove the demolition materials. Relying solely on trucks for removing waste materials from the power plant site (excluding the breakwater and spent fuel) would entail an estimated 70,000 2-way truck trips.

### ***Risk Analysis***

Removal of demolition materials can be completed using trucking, trucking to a rail yard and transfer to rail cars, or barging to a location and transferring to rail cars or trucks, or a combination of any of these methods. Public comment to the DCDEP from neighboring communities and the county at large revealed a concern about the impacts of only using trucks to move demolition materials through the county. Due to these concerns, the DCDEP requested that PG&E consider alternative transportation routes and methods (including truck, barge and rail) for removal of the demolition materials. Specifically, the DCDEP asked whether barging the materials from the site could be considered. In response to this question, PG&E collaborated with the B. John Garrick Institute for the Risk Sciences of UCLA to conduct an analysis of risks associated with, among other things, removing waste materials from the power plant by barging instead of trucking.

UCLA's Garrick Institute completed the report entitled "Transportation Risks Associated with the Decommissioning of Nuclear Power Plants: Methodology and Application to Diablo Canyon Power Plant" in May of 2020.

The UCLA Transportation Risk Analysis considered three methods to remove the demolition materials from the site: the southern truck route, the northern truck route and the barge route. The analysis also considered the risks associated with the removal of the breakwater versus leaving it in place. In comparing the routes, as well as the breakwater alternatives, the analysis considered "conventional transportation risks" which are accidents, injuries and fatalities using the TRAGIS software developed by the U.S. Department of Energy. The analysis also considered non-incident and accident related risks from potential radiological releases using the RADTRAN software developed by Sandia National Laboratories.

In general, the analysis found that barging had the lowest risk compared to trucking and rail transport, rail transport is less risky than trucking, leaving the breakwater in place reduced overall risk by almost 50 percent and a combination of barging and keeping the breakwater in place lowers the fatality risks by more than 40 percent, with a corresponding reduction in injury risk of 32 percent and accident risk of 9 percent.

A summary of the report from the DCDEP and the text of the full report can be found here: <https://drive.google.com/file/d/1dHkwXPIpcag7GHV7QqbCuA-EVoOU3yOQ/view>

### ***Public Meeting on Transportation of Non-Radioactive/Low-Level Radioactive Waste Materials***

On June 24, 2020, the DCDEP held a public meeting covering the topic of the transportation of non-radioactive materials and low-level radioactive wastes. Included in the public meeting were presentations from PG&E on the 2018 NDTCP proposed modes, routes and volumes of waste; the UCLA Garrick Institute on the Transportation Risk Analysis; the County Planning and Public Works

Departments on local transportation issues and the role of the California Environmental Quality Act (CEQA) in mitigating transportation issues for proposed projects; and the California Highway Patrol (CHP) and the California Department of Transportation (Cal Trans) on establishing highway routes and enforcement. In addition, a written presentation by the California Coastal Commission staff was read into the record.

The June 24, 2020 public meeting video and presentation materials can be found be following this link:

<https://diablocanyonpanel.org/meetings/2020-panel-meetings/#6-24-20-panel-mtg>

Previous sections in this Vision Statement included visions, goals and recommendations regarding the transportation of both radiological and non-radiological materials off-site. These visions, goals and recommendations are still applicable and should be implemented in addition to the visions, goals and recommendations included here.

Through these vision statements, goals and recommendations, it is the intent of the DCDEP to assure that the safest method of transporting demolition materials from the site is considered and put in place in a manner that minimizes the impacts to neighboring communities and the county at large.

Recommendations for Transportation of Non-Radioactive Materials and Low-Level Radioactive Wastes can be found in Section IV of this document.

### **Vision Statements**

- The highest level of safety regarding the transport of demolition materials off-site should be ensured
- The methods chosen for transporting materials off site should minimize impacts to the surrounding communities and the environment
- The waste materials should be reused on-site in order to minimize the quantity needed to be removed in order to complete decommissioning

### **Goals**

1. The transportation of demolition waste materials should be completed ensuring the highest levels of safety for workers, residents, visitors and the environment
2. The transport of demolition waste materials should use best practices and best technologies, so as to reduce the impacts of traffic, noise, dust, and other factors on workers, residents, visitors and the environment
3. The various methods to transport demolition waste materials should be explored, including by rail and barge
4. The exploration of keeping and re-using clean demolition waste materials on-site to the maximum extent feasible should be considered to minimize the amount of waste that needs to be transported off-site

*[Added July 2020]*

## J. Water Resources

Water resources at the DCPD include both the natural waters of the marina and intertidal area, as well as the fresh water produced through the desalination plant. Protection of marine resources and the ability to have fresh water on-site are two very important issues when looking at the potential for repurposing facilities for new uses and allowing public access to the Diablo Canyon lands, including the coastal areas.

### ***Public Meeting on Water Resources***

On October 28, 2020, a public meeting covering the topic of DCPD Water Resources was held by the DCDEP. The topics covered were:

- Existing Breakwaters and Marina
- Marine and Intertidal Resources
- Seawater Desalination

Presentations were made by the California State Lands Commission (CSLC) about the public trust doctrine and how this affects use of sovereign lands defined as extending from the high watermark to three nautical miles into the ocean, by biologists on the special undisturbed nature of the marine resources in the area of DCPD and about the desalination facility currently located on-site. Presentations by the speakers can be found here:

[2020 Panel Meetings – Diablo Canyon Decommissioning Engagement Panel \(diablocanyonpanel.org\)](https://diablocanyonpanel.org)

### ***Existing Breakwaters and Marina***

In 2018, the DCDEP held two workshops and a public meeting that covered the potential of repurposing certain facilities at the DCPD. There may be benefits to the repurposing of certain non-contaminated facilities, including the creation of new jobs, decreasing the volume of debris needing to be transported off-site (therefore decreasing the truck traffic through Avila Beach and other communities) and potentially lessening the costs of decommissioning.



Figure 10 - East and West Breakwater and Harbor Area



As part of this Strategic Vision, the DCDEP made recommendations relative to repurposing. These include retaining the breakwaters and associated harbor, as well as exploring opportunities for repurposing the harbor in a manner that preserves that the sensitive marine habitat in the intake and discharge coves and associated marine terraces.

There are two breakwaters, which are known as the east and west breakwaters. The breakwaters were constructed to protect the large water pumps and intake structure from excessive water surges. They also created a protective cove for small boats and the ability to use barges to bring materials and equipment in and out of the DCP site. PG&E and the Department of Fish and Game have studied the marine resources in the marina area since the construction of the breakwaters. The breakwaters have suffered little damage since their completion in 1972, with the exception of the 1981 storms that damaged the west tip and tore out approximately 200 feet of the west terminal end. Since completion of the repairs, the breakwaters have not suffered additional damage, including during the 2003 San Simeon earthquake. Current maintenance of the breakwaters consists of an annual inspection. If left in place, ongoing maintenance of the breakwaters would continue to be required.

Leaving the breakwaters in place would alleviate the need to remove 684,000 tons of materials at a cost of approximately of \$230 million (2018 dollars). Leaving the breakwaters in place during decommissioning will allow for the use of barges to remove decommissioning debris from the site, reducing truck traffic through neighboring communities. In addition, if the breakwaters remain in place after decommissioning, there will continue to be a protective cove and marina area that could be used by small boats and provide habitat for established marine species.



**Figure 11 - Use of Barges to Bring in Materials - 1994**

The California State Lands Commission (CSLC) is responsible for managing California sovereign tide and submerged lands and the beds of navigable waterways on behalf of the public, acting as trustee under the public trust doctrine. Generally, the landward boundary of sovereign lands is the ordinary high watermark for tidal waterways. The ordinary high watermark is typically measured by the mean tide line. For the DCP, this includes the west and east breakwaters, boat dock, water intake facilities, cooling water discharge channel and office, maintenance, electrical and storage facilities.

The public trust doctrine requires that sovereign lands be used to benefit the statewide public, not just residents of the area where the land is located. The CSLC determines what uses are allowed on sovereign lands on a case-by-case basis and has the discretion to approve or deny any proposed use of sovereign land. The CSLC is required by statute to receive a fair market rental rate when leasing sovereign lands. The California constitution prohibits the sale of public trust lands.

The CSLC approved a lease with PG&E for the lands that include the west and east breakwaters, boat dock, water intake facilities, cooling water discharge channel and associated office, maintenance, electrical and storage facilities. The current lease (Lease No. PRC 9347.1) for continued use of these areas was approved by the CSLC on June 28, 2016 and expires on August 26, 2025, unless terminated sooner (as allowed under the lease).

The current lease modifies the original lease with provisions specific to the termination of the operation of the DCP. The current lease was issued with the understanding that PG&E will not continue operation of the DCP past August 26, 2025. The lease does not give PG&E any rights of holdover with respect to the lease premises under the lease or any common law principles. It restricts PG&E's use of the lease premises beyond August 26, 2025 for any purpose, other than for uses consistent with a Decommissioning and Restoration Plan authorized by CSLC. The lease also requires the removal of any improvements and restoration of the area in accordance with a Decommissioning and Restoration Plan, however, it also notes that the CSLC (as delegated the authority to do so by the State of California) may waive this obligation if doing so is in the best interests of the state.

The CSLC is aware that PG&E is exploring options for the reuse of the leased premises. and staff is open to discussing and exploring new opportunities to, and concepts for, repurposing the existing lease facilities at DCP. These include the potential to transfer of the lease to a new user, PG&E maintaining the lease and subletting to a new user or multiple new users, or a combination of these options over the duration of the decommissioning project.

### ***Marine and Intertidal Resources***

In 2018, the DCDEP held two workshops and a public meeting on the future of the Diablo Canyon Lands, including the coastline. The DCDEP has recognized the public consensus that the Diablo Canyon Lands be transferred away from PG&E upon the closure of the plant, conserved in perpetuity, and made available for public access through visions, goals and policies in the Diablo Canyon Lands section of this Strategic Vision. The challenge moving forward is to ensure that in the course of opening this coastline to the public, the tidepools and other ecological and cultural resources of the coastline (and land), be protected from being "loved to death" and make certain that they are conserved in perpetuity for future generations to protect and enjoy.

The intertidal area or zone is anywhere where the ocean meets the land, from steep rocky ledges to sloping, sandy beaches. This area includes many habitat and species types that have adapted to an environment with extremes – the salinity of the water can vary considerably, as can the temperature as it is exposed to direct sunlight or inundated by salt water. Intertidal zones have high biodiversity and can host a plethora of rare and fragile species, which have been threatened and destroyed by coastal development and over-exposure to human activity.

The DCPD lies adjacent to fourteen miles of the intertidal zone. The dominant feature of Diablo's intertidal zone are the healthy and unusually biodiverse tide pools, which have been the subject of extensive study by PG&E and its consultants. The tide pools have remained largely undisturbed and intact because of the absence of significant human activity during PG&E's operation of the plant and by prior owners/inhabitants (including 10,000+ years by the Chumash).



Figure 12 - Diablo Canyon Tidepools

Just beyond the intertidal zone, certain areas off-shore of the Diablo coastline are protected marine areas, known as the Point Buchon State Marine Conservation Area and the Point Buchon State Marine Reserve. These areas aim to “protect the diversity and abundance of marine life, the habitats they depend on, and the integrity of marine ecosystems. The Marine Life Protection Act recognizes that a combination of Marine Protected Areas (MPAs) with varied amounts of allowed activities and protections (marine reserves, marine conservation areas, and marine parks) can help conserve biological diversity, provide a sanctuary for marine life, and enhance recreational and educational opportunities. [California Marine Protected Areas (MPAs)]. MPAs can also provide scientific reference points to assist with resource management decisions, and protect a variety of marine habitats, communities, and ecosystems for their economic and intrinsic value, for generations to come.”

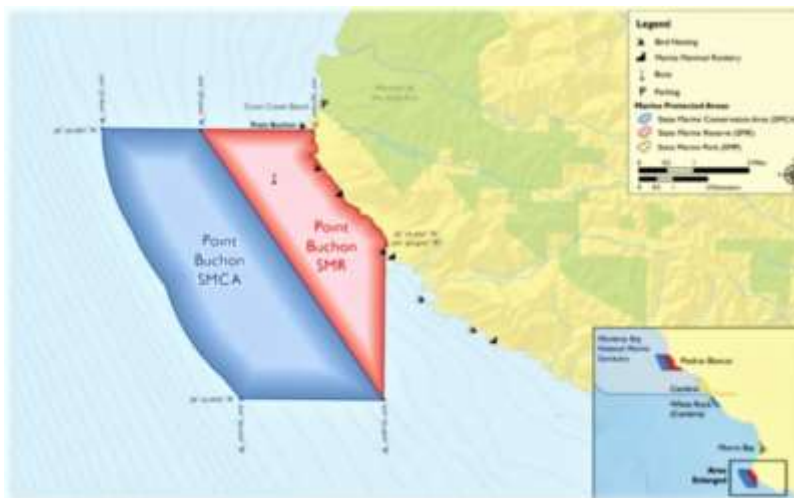


Figure 13 - Marine Protected Areas

There have been numerous marine studies completed over the years, including studies on the cooling water discharge, effects of intake systems, endangered species monitoring, and Diablo Canyon land management. In total, PG&E’s studies of the land and coastline include over 340 reports and papers by scientists and engineers from PG&E, its consultants, federal and state resource agencies, and academia.

Presentations made at the public meeting by two biologists extremely familiar with the coastline at the DCP, described the resources contained along the Diablo coastline, including the federally threatened black abalone, the protected sea palm, the owl limpet, and other fragile intertidal species. Information was provided on the negative impacts of human trampling on tidepools as evidenced by the difference between the adjacent State Park’s Montana de Oro’s Corralina Cove when it was fully accessible to the public (a bare rocky shoreline) and after it had a “year of rest” from such disturbances (a return of a rich assemblage of tidepool flora and fauna). Intertidal studies performed on behalf of PG&E (by PG&E consultants and Cal Poly), including studies on intertidal areas on property north of the plant which were opened for public access via the Point Buchon Trail, confirmed an impact to owl limpet and other species populations due to even minimal human trampling.

A primary concern in the intertidal area during plant operation is related to the intake and discharge of water (for plant cooling operations) at the Diablo Cove. The DCP Receiving Water Monitoring Program (RWMP) began in the 1970’s. The RWMP intertidal sampling compared data from areas directly affect by the water discharges (which experienced elevated temperature relative to intake sea water) with data from areas that were outside the discharge area. The RWMP studies indicated a significant marine impact by discharged waters, including decreases in algae cover and a change in the composition of species.

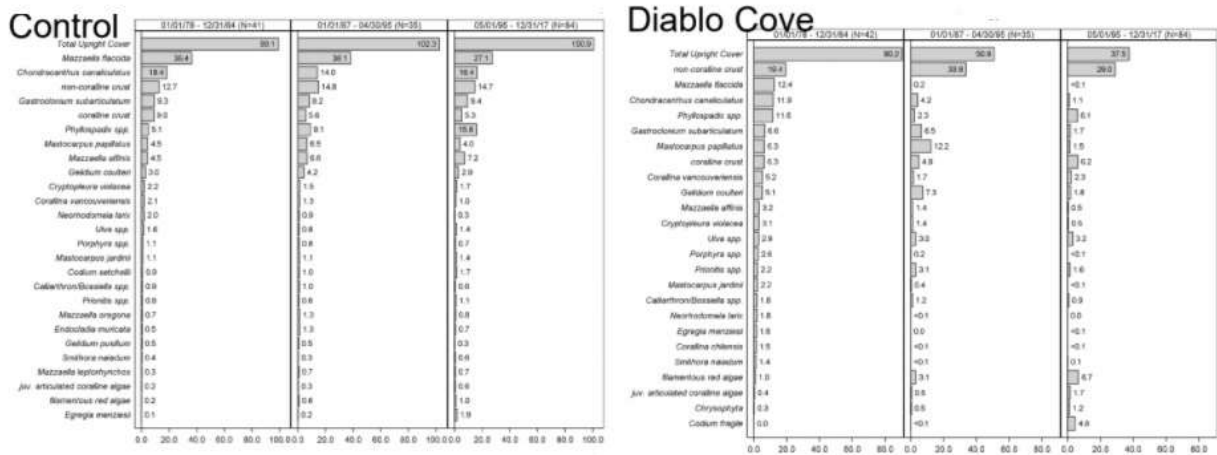


Figure 14 - RWMP Intertidal Results

In preparation for decommissioning, PG&E consultants also undertook studies of areas such as the intake cove breakwaters and the rock around the intake cove shoreline, which had not before been conducted. The studies revealed that the biological communities in these areas were not affected by the water discharge.

### ***Seawater Desalination***

In 2018, the DCDEP held two workshops and a public meeting that covered the potential of repurposing certain facilities at the DCP. Part of this discussion was how fresh water to support new uses would be provided to the site after decommissioning. The DCDEP recommended in this Strategic Vision that PG&E explore maintaining the desalination plant beyond decommissioning to allow for provision of on-site water to repurposing tenants, and potentially for other uses.

DCPP currently uses a desalination plant to provide water for dust suppression, fire protection, plant operations and drinking water. The desalination plant was initially commissioned to provide a source of fresh water to the power plant, independent of any local available groundwater resource. A reliable specialized filtered water source is needed on-site to provide fresh, deionized water of high purity to top-off two loops of the reactor.

A desalination plant takes ocean water and converts it to fresh water. The DCP desalination plant can process up to approximately 1,000 gal/min of sea water, which produces approximately 450 gal/min of fresh, drinking water. The rest is returned to the ocean as a brine of increased salinity compared to the average ocean water. Currently, this outflow is mixed with the effluent of the reactor's once-through cooling loop, which at full power circulates approximately 1.7M gal/min. While the plant is operating, the desalination brine outflow is diluted by a factor of more than 1,000, before returning to the ocean. In addition, while the cost of electrical energy to run desalination plants is typically an important decision factor when considering it as a source of fresh water, because the DCP plant uses electricity generated by the plant itself, this concern is currently eliminated.

The decommissioning of DCP poses two immediate problems for the future of the desalination plant. First, the loss of the power plant's once-through cooling loop currently used to dilute the desalination plant brine outflow close to shore means that a new, separate pipe system would need to be installed to discharge the brine far from shore. This will likely require a separate environmental impact assessment, and incur new cost. Furthermore, the 2015 California Ocean Plan recommends that for desalination plants: "The preferred technology is to commingle brine with wastewater that would otherwise be discharged to the ocean".

Second, the loss of 'free' electrical power from DCP to support the desalination plant means that either a new source of cheap electrical energy must be found to continue its operation, or that the cost of the water produced will have to reflect this additional expense.

Desalination plants are considered to be a mature technology, so that the existing DCP facility (a reverse osmosis setup) remains competitive in terms of cost operation with any other modern plant. Periodic maintenance of such plants is a routine requirement and the DCP desalination plant has recently been overhauled, including the replacement of the desalination membranes. These membranes represent an area where research and development is promising significant improvements in efficiency. High efficiency membranes could reduce operational costs by up to 30% potentially making the cost of this reliable fresh water supply feasible for the community.

The County of San Luis Obispo conducted a feasibility study, in 2016, to examine the possibility of connecting the desalination plant to the aqueduct system feeding the 5-Cities area, with a direct link to Lopez Lake. This study was carried out during the last major drought in the area, but interest in the project waned when the drought ended.

The City of Pismo Beach is in the process of permitting a new fresh water system, called “Central Coast Blue”. [<http://centralcoastblue.com/advanced-water-purification-demonstration-facility/>] This system works on the basis of recycling and reclaiming wastewater. It does not however, address the potential shortfalls associated with a severe drought, such as may be expected with the increased effects of global warming in the near future. This system may be ideal to combine with the existing DCPD desalination plant in order to handle potential shortfalls in a severe drought and provide wastewater effluent to combine with the brine effluent from the desalination plant in order to satisfy the 2015 California Ocean Plan.

The DCPD desalination plant could be relocated in order to facilitate combining the Central Coast Blue system with a desalination plant. Moving the plant would reduce the length of pipeline required to be constructed.

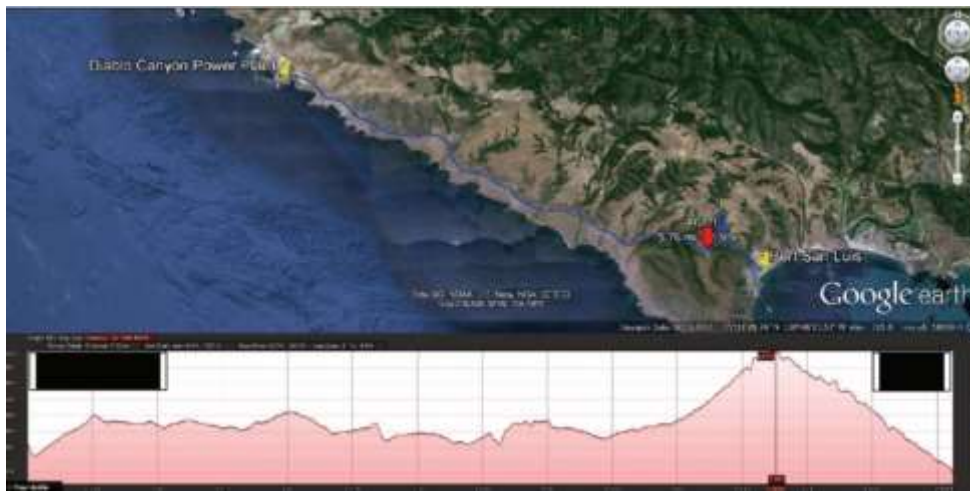


Figure 15 - Pipeline Path Required to Link Desalination Plant to the Aqueduct at Port San Luis

There may also be the possibility of partnering the desalination plant with other entities beyond the 5-Cities aqueduct. Several water managing entities exist in the area, which may benefit from an additional source of fresh water in their supply.



Figure 16 - Possible Regional Partners

The water resource requirements of San Luis Obispo County need to be recognized as an ongoing concern that will only be exacerbated in the coming years, because of global warming and intermittent drought conditions. Long term solutions to the county's water needs must take into account both the environmental and economic impact of the solutions proposed. The maintenance of the desalination plant beyond decommissioning would not only provide a potential solution to long term county-wide water supply issues, but would also provide a reliable source of water to allow for repurposing on the DCPD site.

Through these vision statements, goals and recommendations, it is the intent of the DCDEP to protect the delicate intertidal area while allowing limited public access and evaluate options for provision of water supplies to the site to enable repurposing of Diablo Canyon facilities as an alternative to demolition.

Recommendations for Water Resources can be found in Section IV of this document.

### **Vision Statements**

- The conservation of the breakwaters and associated harbor area and the intake and discharge coves and associated marine terraces should be considered to assure the protection of the ecological resources of the area, limit the amount of demolition debris, reduce the impact to neighboring communities and create opportunities for repurposing
- The Diablo Canyon Lands and coastline, and in particular the intertidal zone of the Diablo Coast, are a precious community and ecological treasure and should warrant the strongest of protection efforts to ensure their conservation in-perpetuity
- The desalination plant represents a proven facility that has been in operation for over 40 years, and its potential capacity for supplying the Central Coast, as well as the DCPD site, with a significant and reliable source of fresh water should be considered fully and not disposed of lightly

### **Goals**

#### **1. Breakwaters and Marina**

- a. The breakwaters and associated harbor should remain in place in order to provide opportunities for repurposing and to limit demolition debris and its need to be transported off-site
- b. The harbor and breakwater areas should be managed and repurposed in a manner consistent with the protection of habitat and wildlife
- c. The harbor should be considered for use as a protected area for boaters during inclement weather
- d. The lease with CSLC should be modified as necessary to allow the breakwaters and harbor areas to remain in place beyond decommissioning
- e. The facilities associated with the harbor located on the land should be preserved where appropriate to allow for repurposing as a public marina or educational/research marina facility, consistent with the long-term protection of marine resources

## **2. Intertidal Zone/Marine Resources**

- a. The discharge cove and intertidal areas should be studied by qualified individuals during and after decommissioning in order to continue to monitor the health of the marine resources
- b. The management of the Diablo Canyon Lands, including the fragile intertidal zone, should be undertaken by a successor entity in a manner that will protect the areas from “trampling” and other human activity that could irreparably damage the resource
- c. The public should be ensured access to the Diablo Canyon Lands to the greatest extent possible, while assuring that such access will not threaten the biodiversity and health of the intertidal zone and other fragile marine resources
- d. The impact that public access has had on other tidepool regions of the state should be carefully considered to understand how negative impacts have occurred and how it can be prevented along the Diablo Coast

## **3. Desalination Facility**

- a. The installation of the latest in high efficiency polymer membranes should be considered by PG&E as part of its future regular maintenance in order to retrofit the existing plant, bring it to the forefront of desalination technology, and reduce its operational costs significantly
- b. The County of San Luis Obispo should engage in and where possible actively participate in, the permitting for potential windfarms being considered near DCPD in order to obtain preferential rates for the energy required to operate the desalination plant
- c. The potential for optimizing the location of the desalination plant closer to Avila Beach and the existing Port San Luis Harbor should be evaluated as a way to reduce the length of pipeline necessary to, connect to an existing local and/or regional water purveyor
- d. The DCPD desalination plant should be marketed nationally to potential investors and operators in order to gauge interest in continued operation beyond decommissioning
- e. The potential of partnering the DCPD desalination plant with other water purveyors in the area should be evaluated

*[Added March 2021]*

## **K. Decommissioning Land Use Permit and the CEQA Process**

Before any work can be completed on the decommissioning of DCPD, various permits will need to be issued from multiple regulatory agencies. The primary permit is a Land Use Permit/Local Coastal Permit issued by the County of San Luis Obispo.

### ***Public Meeting on the Land Use Permit and the CEQA Process***

On November 3, 2021, a public meeting covering the topic of the processing of required land use permits for decommissioning and the California Environmental Quality Act (CEQA) process was held by the DCDEP.

A presentation was made by the County of San Luis Obispo Department of Planning and Building. This presentation outlined both the land use permit and CEQA processes and how the public can participate in these processes. Presentations by the speakers can be found here:

[Slo-Span - \(cal-span.org\)](http://cal-span.org)



### ***Decommissioning Land Use Permit***

The decommissioning of DCP requires approvals from federal, state, and local jurisdictions. The DCP is located in both the Coastal Zone and Inland areas of San Luis Obispo County, with portions of the Project located within the “original jurisdiction” of the California Coastal Commission (CCC) and portions within the coastal appealable area. (See Figure 17 – Agency Jurisdiction) The Local Coastal Program (LCP), Coastal Zone Land Use Ordinance (CZLUO) and Inland Land Use Ordinance (LUO) are the regulatory documents that apply to the site. Section 23.01.031 of the CZLUO requires a Coastal Development Permit (CDP) for development projects, including decommissioning programs involving placement or removal of material in the coastal zone in accordance with the California Coastal Act. Section 23.02.034 of the CZLUO requires a CDP to enable public review of significant land use proposals and ensure proper integration into the community. Section 22.62.060 of the County’s LUO requires a Conditional Use Permit (CUP) for significant land use proposals outside the coastal zone. These land use permits will need to be issued by the County of San Luis Obispo.

Examples of other permits that are required include, but are not limited to a: Coastal Permit from the California Coastal Commission for areas within original jurisdiction, new lease or lease amendment from the California State Lands Commission (CSLC), Section 404 permit from the United States Army Corps of Engineers (USACE), National Pollutant Discharge Effluent System (NPDES) permit from the Central Coast Regional Water Quality Control Board (CCRWQCB), General Construction Activities Permit from the California Division of Occupational Safety and Health (Cal OSHA) and an Encroachment Permit from the County of San Luis Obispo Public Works Department. (See Figure 18 - Anticipated Approvals and Authorizations for DCP Decommissioning.)

### ***Lead Agency under CEQA***

In consultation with County of San Luis Obispo, CCC and CSLC representatives, the County was identified as the appropriate Lead Agency. The Lead Agency, as defined by CEQA, is the public agency that has the primary responsibility for carrying out or approving a project. Because the DCP is located within unincorporated San Luis Obispo County, the County has jurisdiction over a large majority of project-related activities both within and outside of the coastal zone. Additionally, the County maintains an approved LCP, which gives the County jurisdiction to approve and deny projects within the coastal zone outside of original jurisdiction.

### ***Federal Preemption***

DCP’s decommissioning is unique in the County. Because DCP is a nuclear power plant, regulated by licenses granted by the Nuclear Regulatory Commission (NRC), the NRC has exclusive jurisdiction over the radiological aspects of decommissioning. This preemption prohibits state and local jurisdictions from imposing any regulatory requirements related to radiation hazards or nuclear safety. PG&E is required by its NRC operating license to implement detailed plans and procedures to ensure that radiological releases are minimized or avoided.

Due to federal preemption requirements, these plans and procedures are generally outside the County’s and State of California’s authority. Further, federal preemption applies to issues concerning the handling, storage, transport, disposal, and monitoring of Spent Nuclear Fuel and high-level radioactive waste.

### ***Land Use Application Submittal***

On March 29, 2021, PG&E submitted a Development Plan / CDP application consistent with the CZLUO (Title 23 of the County Code) and a CUP consistent with the LUO (Title 22 of the County Code). Submission of these land use permit applications to the County triggers CEQA review of decommissioning project activities. Several State and local agencies will rely on the findings contained in the CEQA review to support issuance of their permits related to the decommissioning.

After PG&E submitted its land use permit application to the County, the County conducted an application completeness review. This is done to assure that all the information necessary to complete the processing of an application has been submitted. On April 28, 2021 and August 9, 2021, the County requested additional information from PG&E. PG&E responded by providing additional information on July 8, 2021 and October 6, 2021, and on October 27, 2021, the land use permits were determined to be complete and were accepted for continued processing by the County.

### ***The CEQA Process***

Once PG&E's application was accepted for processing, the CEQA process began. In this case, PG&E had already agreed to the preparation of an Environmental Impact Report (EIR). An EIR is a document that informs the public and decision-makers of any significant environmental impacts that may be caused by the project. Mitigation measures are identified to reduce any potential significant environmental impacts to a less than significant level and project alternatives are developed to further reduce or avoid any potential significant environmental impacts. In cases where potential significant environmental impacts cannot be reduced to less than significant levels, the decision-making authority tasked with making a decision on the project may choose to adopt a statement of overriding considerations, meaning that the net benefit of the project is greater than the net negatives caused by any significant environmental impacts.

As stated earlier, San Luis Obispo County is acting as the Lead Agency. The County of San Luis Obispo has entered into a contract with Aspen Environmental for preparation of the EIR. PG&E is responsible for the costs associated with the preparation of the EIR. Aspen is responsible for coordination with both Responsible and Trustee Agencies during the preparation of the document. A Responsible Agency under CEQA is a public agency with some discretionary authority over a project, but which has not been designated the Lead Agency. A Trustee Agency under CEQA, is a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California. A Trustee Agency may also be a Responsible Agency if it has discretionary authority over a project. Figure 17 outlines many of the Responsible and Trustee Agencies associated with this project.

The EIR will evaluate PG&E's proposed DCPD Decommissioning Project which includes:

- Phase 1 (2024-2031)
- Phase 2 (2032 –2039)
- Phase 3 (beginning in approximately 2039) - DCPD Future Site Re-Use Concepts
  - County Driven Analysis
  - Not part of PG&E Proposed Project
  - Included for high level analysis of possible uses after decommissioning

### Step 1 - Notice of Preparation / Scoping Meetings

The Notice of Preparation (NOP) is the first step in the EIR process. The NOP was issued by the County of San Luis Obispo on October 28, 2021. The purpose of the NOP is to solicit early input from agencies, organizations and the public on the scope and content of the environmental information to be included in the Draft Environmental Impact Report (DEIR). It is important that a clear project description be developed for the NOP. PG&E submitted a detailed project description, along with a number of supporting documents that will be used in the NOP. The NOP also identifies the Scoping Comment Period.

There are multiple opportunities for public participation during the preparation of, and decision-making on, the EIR. The first of these are the scoping meetings held during the Scoping Comment Period. The purpose of scoping meetings is to inform the public that the Lead Agency is evaluating a project under CEQA and to solicit public comment regarding the type and extent of environmental analyses to be undertaken. The public is encouraged to provide comments based on local environmental knowledge on issues that need evaluation, feasible alternatives to the Proposed Project and mitigation measures to avoid or reduce impacts of the Proposed Project.

The Scoping Comment Period for the decommissioning project ran from October 28, 2021 to December 6, 2021. Scoping Meetings were held on November 9, 2021 (in the morning and afternoon), December 1, 2021 (in the morning and afternoon) and December 4, 2021 (in the afternoon). After the scoping process, all public comments will be organized and considered in the preparation of the DEIR by Aspen.

### Step 2 – Preparation of the DEIR / Public Comment on the DEIR

Following the scoping process, Aspen began preparation of the DEIR. This process can take several months, depending on the complexity of the project and the number of types of impacts identified. The next opportunity for the public participation is the Public Review Period for the DEIR. The DEIR will be released for public comment for a minimum of 45 days. The County will issue a DEIR Notice of Availability outlining the length of the Public Review Period and how the public can comment on the DEIR. ***It is important for the public to take this opportunity to provide comments on the DEIR, as those comments will inform the Final Environmental Impact Report (FEIR).***

### Step 3 – Final Environmental Impact Report (FEIR)

The FEIR consists of: (1) the DEIR and any revisions to the DEIR; (2) comments and recommendations received on the DEIR; (3) the responses of the Lead Agency to each of the comments received on the DEIR (Response to Comments); (4) a list of persons and agencies who made comments on the DEIR; and (5) any other information added by the Lead Agency.

### Step 4 - Public Hearing on the FEIR and the Proposed Project

The final step in the process is for the County to Certify the EIR and make a decision on the Proposed Project. This occurs through holding public hearings on the FEIR and the Proposed Project. There will be notices in the newspaper and on the County Planning and Building Website announcing when these meetings will occur. In addition, the public can sign up to receive emails about the County's environmental and hearing process for DCPP decommissioning at [Diablo Canyon Power Plant Decommissioning - County of San Luis Obispo](#).

There will be an opportunity to provide written materials to the decision-making authority or to speak directly to the decision-making authority during the public hearings.

In order to Certify the EIR, the decision-making authority will need to certify that: (1) the FEIR has been completed in compliance with CEQA; (2) the FEIR was presented to the decision-making authority of the Lead Agency and that the decision-making authority reviewed and considered the information contained in the FEIR prior to approving the project; and (3) the FEIR reflects the Lead Agency's independent judgment and analysis. Where one or more significant environmental effects of the project were identified in the FEIR, the decision-making authority must adopt Findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. A typical rationale would be that changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the FEIR.

Where a significant effect cannot be avoided or substantially lessened, a Statement of Overriding Considerations would be required. CEQA requires the decision-making authority to balance, as applicable, the economic, legal, social, technical, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technical, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable." When the Lead Agency approves a project which will result in the occurrence of significant effects which are identified in the FEIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the FEIR and/or other information in the record. The Statement of Overriding Considerations must be supported by substantial evidence in the record.

### ***Project Decision***

The Proposed Project will be subject to detailed Conditions of Approval if the project is approved by the decision-making authority. These include: (1) required permits from local and state agencies; (2) specific actions that PG&E must complete during defined time frames throughout decommissioning; (3) mitigation measures that lessen significant impacts; (4) a mitigation monitoring program; and (5) on-going operational conditions that apply for the life of the project.

If the Proposed Project is approved by the decision-making authority, the Lead Agency is required to file a Notice of Determination (NOD) within 5 working days after approval of the project by the lead agency. The NOD must contain specific information about the Project, EIR preparation, Findings, and where the FEIR can be examined. The NOD will be filed with the San Luis Obispo County Clerk and the State Clearinghouse. A NOD filed with the State Clearinghouse is available for public inspection and is posted for a period of at least 30 days.

If the Proposed Project is denied, specific Findings supporting that decision will need to be made by the decision-making authority. The FEIR does not need to be certified prior to taking action to deny the project.

### ***Appeals***

Actions by the Planning Commission, to approve or deny a permit application, may be appealed by any aggrieved person (including the general public and the applicant). In this case, any Planning Commission action to approve the Development Plan / CDP and the CUP for the DCPD decommissioning may be appealed to the Board of Supervisors.

Within the time limit applicable to the decision being appealed, an appellant would need to file a completed appeal form and pay any required fees. Staff would then review the appeal, and develop a recommendation based on the merits of the appeal as they relate to applicable ordinances and regulations. A staff report would then be prepared for review by the Board of Supervisors. A public hearing would be held to weigh the merits of the appeal as they relate to applicable ordinances and regulations and a decision made.

Because portions of the Project are located in the Coastal Zone, any decision to approve the CDP by the Board of Supervisors can then be appealed to the CCC. A decision by the Board of Supervisors to deny the application is not appealable to the CCC. Also, if a Planning Commission decision to approve the application is not appealed to the Board of Supervisors, that decision is not appealable to the CCC. If appealed to the CCC, a staff report is prepared by CCC staff. A public hearing would be held on the Project. If the project approval is upheld, there may be additional conditions placed on the Project by the CCC. The decision of the CCC is final and this decision does not return to the County of San Luis Obispo for any further action.

Although this process is complicated, there are many opportunities for the public to provide input to the County of San Luis Obispo and other local and state agencies about the DCPD decommissioning. Through these vision statements, goals and recommendations, it is the intent of the DCDEP to assist the public in their participation in the land use permitting and CEQA process and encourage public participation throughout this process.

Through these vision statements, goals and recommendations, it is the intent of the DCDEP to assure that the decommissioning land use permit be processed in an efficient manner with comprehensive public involvement.

Recommendations for Decommissioning Land Use Permit and the CEQA Process can be found in Section IV of this document.

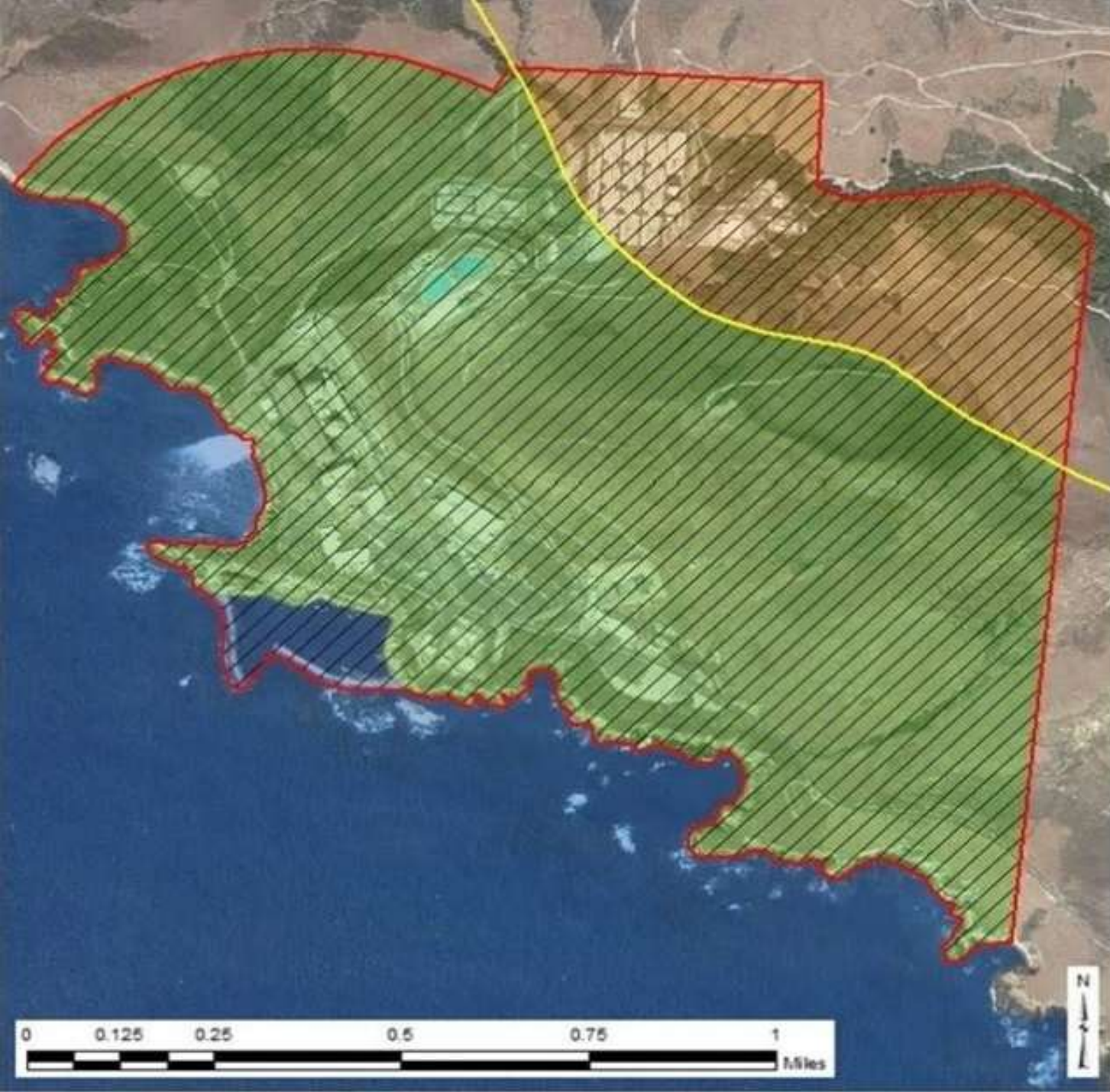
### ***Vision Statements***

- The review of the land use permit and the completion of the CEQA review should be accomplished in a manner that ensures an efficient and collaborative process that includes comprehensive public involvement
- The DCDEP should, where possible, assist the public with providing input on behalf of the local community to the County and PG&E during the DCPD decommissioning land use permit and CEQA process
- The FEIR should take into consideration and advance the goals of this Strategic Vision, including the conservation of, and sustainable public access to, the Diablo Canyon Lands.

**Goals**

1. The land use permit and CEQA process should occur as efficiently as possible, while allowing for substantial public input, in order to not create delays in the decontamination / decommissioning process
2. The DCDEP should continue to encourage public participation throughout the land use permitting and CEQA process
3. The environmental impacts that may occur during decommissioning should be fully evaluated in the EIR and appropriate mitigations considered, consistent with this Strategic Vision and in furtherance of the conservation of, and sustainable access to, the Diablo Canyon Land

*[Added April 2022]*



**LEGEND:**

-  Coastal Zone Line
-  Nuclear Regulatory Commission\*
-  San Luis Obispo County\*\*
-  California Coastal Commission† & San Luis Obispo County
-  California Coastal Commission & California State Lands Commission††

\*10 Code of Federal Regulation 50;  
750-acre site  
 \*\*Title 22 of San Luis Obispo County Code  
 †Title 14, Division 5.5 of the  
California Code of Regulation (CCR)  
 ††Title 2, Division 3, Chapter 1 of CCR

*Agency Jurisdiction  
 Diablo Canyon Power Plant  
 Avila Beach, California*

**DIABLO CANYON Decommissioning Engagement Panel**

Figure 17 – Agency Jurisdiction

**Figure 18 - Anticipated Approvals and Authorizations for DCPD Decommissioning**

Agency	Permit / Approval / Consultation	Covered Activity	Decommissioning Phase
<b>Federal</b>			
U.S. Environmental Protection Agency (USEPA)	Review of site remediation plans	Concurrence on license termination plan under specific circumstances defined in the NRC/USEPA.	I, II
	Lead Notification	Submittal of notification of lead abatement activities.	I, II
U.S. Army Corps of Engineers (USACE)	Section 404 Permit	Any activity that might result in a discharge of excavated or fill material into wetlands, streams, rivers, and other federal jurisdictional waters.	I
	Section 10 Rivers and Harbors Act Permit	Any activity that might result in an obstruction or alteration of any navigable water of the U.S. that is under USACE jurisdiction.	I
U.S. Fish and Wildlife Service (USFWS)	Endangered Species Act (ESA) Section 7 Consultation	Any plan or activity that is impacting federally listed plants, animals, or their habitat.	I, II
National Marine Fisheries Service (NMFS)	Consultation – ESA, Marine Mammal Protection Act and Essential Fish Habitat Assessment.	Activity would adversely affect critical habitat for listed anadromous fish species and essential fish habitat. Any plan that is impacting a federally listed plant or animal or their habitat or direct impacts to federally listed anadromous species. Essential Fish Habitat Assessment required for issuance of other federal authorizations. Potential for Incidental Take Authorization under the Marine Mammal Protection Act	I
Department of Interior – Bureau of Land Management (BLM)	Right-of-Way-Sundry	Right-of-way for construction and maintenance of breakwaters and construction of the coffer dam for removal of the intake structure under the Intake Structure Removal Alternative.	I, II



<b>Agency</b>	<b>Permit / Approval / Consultation</b>	<b>Covered Activity</b>	<b>Decommissioning Phase</b>
U.S. Coast Guard	Notice to Mariners and Removal of Navigational Buoys	Transport of hazardous and non-hazardous materials by water. Marine vessel movements associated with intake and discharge structure demolition activities.	I, II
U.S. Department of Transportation	Hazardous Materials Safety Permit from Federal Motor Carrier Safety Administration	Transport of radioactive materials on highways.	I, II
Union Pacific Railroad	Right-of-Entry	Projects involving temporary use of railroad property.	I, II
<b>State</b>			
California Coastal Commission (CCC)	License Termination, CZMA review, application and certification through CCC	Federal review required for local actions to determine consistency with CZMA Plans.	I, II
	CDP	Any decommissioning activity that involves “development” in the coastal zone.	I, II
California State Lands Commission (CSLC)	Lease or Lease Amendment/Quit Claim or Lease Termination Agreement	A new lease or amendment to lease No. PRC 9347.1 will be required for the disposition of the discharge structure as part of decommissioning and for retention and repurposing of the breakwaters and intake structure. Furthermore, restoration of marine habitats will be necessary following demolition of the discharge structure.	I, II
California Air Resources Board	Portable Equipment Registration Program	Any plan that involves use of portable equipment over 50 horsepower.	I, II

Agency	Permit / Approval / Consultation	Covered Activity	Decommissioning Phase
California Office of Historic Preservation	Section 106 Consultation pursuant to the National Historic Preservation Act	Any plan that involves earth work near an archeological site or may affect a historic building or property.	I, II
California Department Toxic Substances Control	RCRA Permit, Consultation on final site Remediation Plan	Cleanup pursuant to Voluntary Cleanup Agreement or Corrective Action pursuant to RCRA. Any plan that involves hazardous material remediation.	I, II
California State Water Resources Control Board (SWRCB)	Once-through Cooling (OTC) Policy	OTC policy – Oversight of impingement and entrainment issues.	I, II
Central Coast Regional Water Quality Control Board (CCRWQCB)	Waste discharge requirements	Discharges of waste to water on land that could affect the quality of waters of the state.	I, II
	National Pollutant Discharge Effluent System permit	Discharges of waste to surface waters deemed waters of the United States.	I, II
	Construction storm water general permit	Ground disturbance of one or more acres.	I, II
	Section 401 Water Quality Certification	Any activity that would result in impacts to State waters. Required if a 404 permit is required from the USACE.	I
California Department of Fish and Wildlife (CDFW)	Streambed Alteration Agreement	Activities that would substantially divert or obstruct the natural flow of a stream; substantially change or use any material from the bed, channel or bank of a stream; or deposit debris, waste or other material.	I
	License for Kelp Removal	Surface canopy kelp harvesting.	I, II

Agency	Permit / Approval / Consultation	Covered Activity	Decommissioning Phase
	Special Use Permit	Removal of Benthic Kelp from the DCPD Intake Cove Exclusion Zone. Activities potentially impacting the Point Buchon Marine Protected Area.	I, II
	Incidental Take Permit	Take of California List Species.	I
California Department of Transportation	Transportation permit for state highways	Heavy haul or oversize loads.	I, II
California Highway Patrol (CHP)	CHP Escort	For transport requiring a CHP escort, depending on width of load and route taken.	I, II
California Division of Occupational Safety and Health (Cal OSHA)	Cal-OSHA General Construction Activities Permit	Construction or demolition of structures greater than 36 feet in height, or to erect and place scaffolding, vertical shoring, or falsework intended to be more than 36 feet high when completed	I, II
Out of State Transportation Permits	As Applicable	Any transportation permits required for out of state transportation (waste disposal, etc.)	I, II
<b>Local/Regional</b>			
San Luis Obispo County Planning and Building Department	Coastal Development Permit (CDP)	Any decommissioning activity that involves “development” in the coastal zone. Covers onshore facilities to the Eastern Coastal Zone (approx. to the western edge of 500kV switchyard).	I, II
	Conditional Use Permit/Minor Use Permit	Any decommissioning activity that involves a new use outside the coastal zone.	I, II
	Major Grading Permit	For grading or excavations >5,000 cubic yards (cy).	I, II
	Grading Permit	Minor grading permits for grading or excavations >50 cy and <5,000 cy.	I, II
	Demolition Permit	Demolition of one or more structures.	I, II
	Building Permit	Construction of one or more structures.	I, II

Agency	Permit / Approval / Consultation	Covered Activity	Decommissioning Phase
San Luis Obispo County Environmental Health Department	Permit to Operate (PTO)	Operation of underground and above ground petroleum storage tanks, hazardous materials handling, hazardous waste generation, Spill Prevention Control and Countermeasure Plan, or Hazardous Materials Business Plan.	I, II
San Luis Obispo Air Pollution Control District	Authority to Construct (ATC)	Any activity that may cause the release of air contaminants. Construction of the Rad Wastewater Processing Facility and Waste Management Facility.	I, II
	PTO	Use of any article, machine, equipment, or other project, the use of which may cause, increase, eliminate, reduce or control the release of air contaminants. Contaminated soil management and operation of diesel-powered construction equipment.	I, II
	National Emission Standards for Hazardous Air Pollution (NESHAP) Notification	Demolition of any kind of structure or asbestos-containing material disturbance. Includes demolition of concrete structures, buildings, thermal insulation, pipelines, etc.	I, II
San Luis Obispo County Public Health Department	Non-Community Drinking Water System Permit	Authorization to Operate Non-Community Drinking and Domestic Water System.	I, II
San Luis Obispo County Public Works	Transportation	Heavy haul or oversize loads on County roads.	I, II
	Encroachment Permit	Work within County roads.	I, II
San Luis Obispo Fire Marshal's Office	Plan review	Decommissioning activities, including building demolition and fire protection, comply with all fire protection requirements, including California Fire Code.	I, II

Agency	Permit / Approval / Consultation	Covered Activity	Decommissioning Phase
Santa Barbara County Planning & Development Department – Energy, Minerals and Compliance Division	Revision to Betteravia Park Development Plan Zoning Clearance	Modifications and use of the SMVR-SB (Betteravia Industrial Park) site	I
City of Santa Maria	Potentially a zone change, specific plan amendment, and use permit	Modifications and use of the SMVR-SM (Osburn Yard) site	I

*[Added April 2022]*

## L. New Spent Nuclear Fuel Storage System

### **1. Background**

Sections III.G. and VI.G. of this Vision Document contains background information on the management of Spent Nuclear Fuel including how spent fuel is: created at DCP, stored in spent fuel pools and moved to dry casks and secured into the future. This section was created in May of 2019 and represents the processes being used at that time.

Those sections also include a discussion of a proposal in the 2018 NDCTP for decreasing the time of final transfer of spent fuel from the spent fuel pools to dry cask storage from a 10 year program to a 7 year program.

The DCDEP made recommendations at that time relating to the RFP that was being developed by PG&E for the new dry cask storage system including: completion of a risk assessment evaluating a range of alternatives for offloading spent fuel, the potential for a more rapid offload of spent nuclear fuel from the spent fuel pools to dry cask storage than the 7 year program proposed in the 2018 NDCTP, consideration of the unique seismic risks at DCP, use of advances to improve the shielding and confinement of spent nuclear fuel and the heat capacity of the canisters and minimization of dose rates to workers to the greatest extent achievable.

Also, recommendations relative to the pre-operational training of personnel in cask loading for the new system and the development of Aging Management Program for the ISFSI, including inspections were also included.

Each of these recommendations were included in the RFP and in the review of proposals that were submitted.

### **2. Existing Dry Cask System Inspections**

DCP currently employs the Holtec HI-STORM 100 cask system. Each cask holds 32 fuel assemblies. There have been seven loading campaigns completed for 1,856 fuel assemblies in 58 casks. The storage casks are placed within the ISFSI area which is located on-site, inland from the reactors 310 feet above sea level. The casks are bolted to a 7½ foot thick, steel-reinforced concrete pad to ensure seismic stability. This is known as “dry cask storage”.

There are routine inspections of the dry cask system that occur regularly including:

- Overpack and vent inspections
- ISFSI storage pad concrete inspections
- Radiation surveys
- Pre-service inspections for transportation equipment

Formal inspections of the ISFSI were conducted in 2014 and 2021. In 2014, a visual inspection of accessible surfaces of two multi-purpose canisters (MPC's) by remote means was completed. In 2021, accessible surfaces of both MPC's and overpacks were visually inspected by remote means. There were a total eight casks and overpacks inspected, including radiation monitoring. In addition, visual inspections of above grade accessible surfaces of the ISFSI storage pads and structural concrete were completed.

Inspections of the MPC and overpack noted that they are in overall good condition, there are no anticipated challenges to safety or intended functions prior to next inspection and degradation rates versus margins indicate no need to shorten proposed 5-year inspection frequency. The inspections of the MPC found that corrosion rates demonstrate that corrosion will not propagate through-wall over the 60-year license. Inspections of the overpack noted that corrosion and divot/gouge depths are less than maximum allowable, and there has been no base metal penetration from paint chipping/ coating damage.

Inspections of the soil and concrete at the ISFSI show that the soil will not cause pre-mature aging of the concrete and no immediate corrective action was needed for the concrete to continue to perform its intended function of supporting the existing dry cask system.

Radiation Monitoring at the ISFSI was performed. Dose rates were measured at the upper overpack vents in normal configuration. The highest measured dose rate was 1.2 mrem/hr (3.9% of licensed value). This equates to approximately 0.018 mrem/hr for a person standing at the ISFSI fence (minimum 40 ft from closest overpack). This is more than 20 times lower than a dental x-ray.

The 2014 inspection report can be found [here](#). The 2021 inspection report can be found by following this [link](#).

### **3. Request For Proposals (RFP) - New Dry Cask System**

In 2020, an RFP was issued by PG&E to solicit proposals for a new dry cask storage system. The RFP included results from an independent risk analysis that evaluated a range of alternatives for off-loading spent fuel. In addition, the technical specifications of the RFP were reviewed independently by the CEC and the feedback provided was incorporated into the final RFP that was distributed to all entities with a viable United States licensing and manufacturing capacity.

PG&E evaluated and scored each of the bidder proposals using the following criteria:

- Public safety and technical capabilities: 40%
- Safety (industrial and occupational): 15%
- Commercial terms (long-term capability): 20%
- Pricing: 20%
- Supply chain responsibility and sustainability: 5%

The bid evaluation team from PG&E was made up of experienced, cross-functional personnel representing: engineering and geosciences; licensing, fuels and dry cask storage/transfer, material handling and transportation, sourcing, project controls and financing. The CEC also participated in the technical review of bidder proposals. In addition, an expert advisory board made up of former NRC and industry experts, was convened to review the selection process decision.

On April 6, 2022, Orano USA was announced as the successful vendor. The scope of the contract for the new system includes; engineering and licensing of Orano’s NUHOMS® system, design of a new dry storage facility for greater than Class C (GTCC) waste, fabrication of storage canisters, construction and installation of onsite concrete storage modules and pool-to-pad transfer operations. Included in Orano’s proposal is a reduction of time from 7 years to approximately 4 years, to offload of spent nuclear fuel from the spent fuel pools to dry cask storage and Orano is in the process of a license amendment that would allow further reduction of that timeframe.

**4. New Dry Cask System**

Orano’s NUHOMS® EOS system is a horizontal dry cask storage system and is currently in use in the U.S. The system is currently licensed by the NRC, however the system is subject to further NRC safety reviews as Orano looks to enhance the system’s capabilities. The system is a technically robust dry cask storage system that meets site specific requirements. The horizontal design creates a low center of gravity which allows for the system to withstand earthquakes without the risk of tipping over. The canisters feature redundant welded lids, state-of-the-art precision welding procedures and low risk horizontal transfer processes. The gap-free, side-by-side arrangement of massive concrete storage modules achieves high-performance self-shielding, stability, and protection.

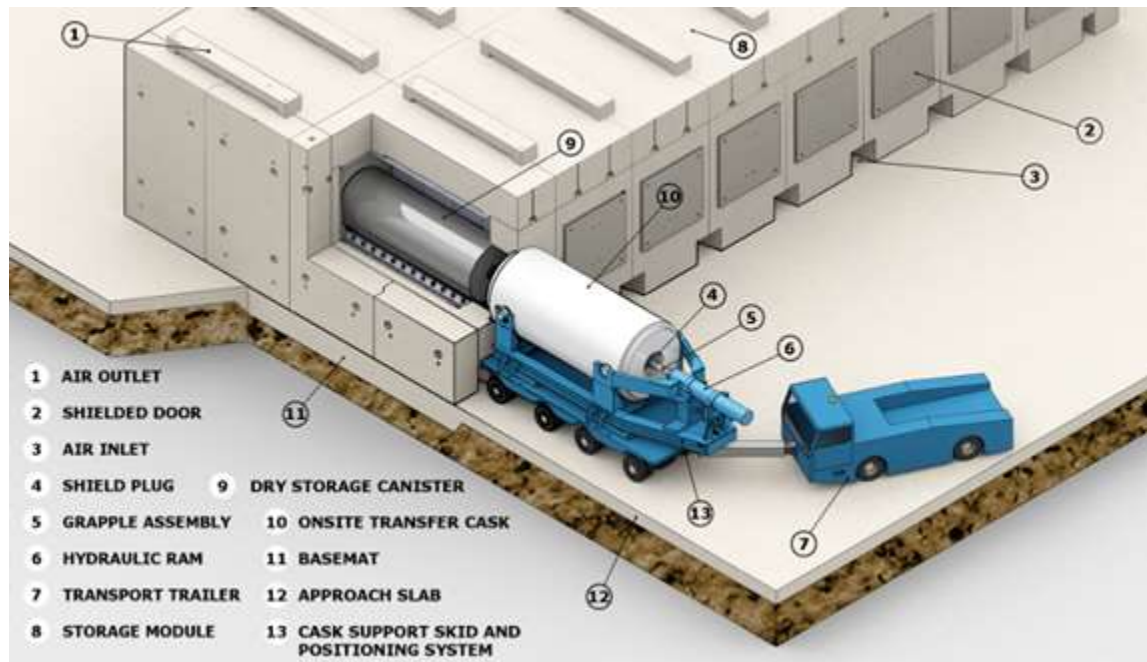


Figure 19 - NUHOMS® Used Fuel Storage System

The horizontal orientation enables an efficient and timely loading and unloading process with no suspended drop risks. In addition, the horizontal transfer process always supports canister from below. Several design features enable Orano’s NUHOMS® EOS Dry Shielded Canister to safely load hot fuel assemblies, including: basket material treatments and coatings that allow for optimum heat conduction from the fuel assemblies to the canister shell and a horizontal posture that helps passively cool the canister in the middle, where the fuel heat is



hottest, with strong air flow convection. In addition, the canisters are designed to be unloaded and contents transferred if that need arises.

a. Earthquake Safety

The NUHOMS® EOS System approved by the NRC includes provisions to employ the methodologies documented in the Advanced NUHOMS® System Updated Final Safety Analysis Report (UFSAR) that was implemented at SONGS for seismic stability. The added seismic resilience is based on bolting the individual NUHOMS® modules together into groups using high-strength, robust steel rods. Anchoring is not needed due to the NUHOMS® low center of gravity-to-base ratio. This allows the NUHOMS® systems to minimally shift to help absorb extreme seismic energy. Analyses completed by Sandia Labs evaluating horizontal and vertical dry storage systems showed that rectangular horizontal systems will not tip over or significantly shift during extreme seismic events.

b. NRC Amendment

EOS System is certified by the NRC for storage with a maximum heat load of 50 kW per Dry Shielded Container (DSC). In order to allow for the earlier offload of the hottest fuel assemblies at DCPD a license amendment from the NRC is necessary. If approved by the NRC, the amendment would permit an increase of the heat load per DSC from 43.6 kW to 48.2 kW, an increase of the heat load per Fuel Assembly from 0.6 kW to 1.7 kW maximum per assembly without changing the overall maximum heat load of 50 kW for the canister.

As part of the decommissioning of DCPD, moving spent fuel from the pools to the ISFSI more quickly has a number of benefits including: earlier deliverable of the decommissioning project, earlier dismantlement of site structures, the ability to repurpose the site sooner and lower costs for the rate payers.

c. Construction of System

Orano's NUHOMS® EOS system will be located within the existing ISFSI. The existing ISFSI operates under a separate license from the NRC. The ISFSI license will expire in 2024. PG&E is currently pursuing a license renewal with the NRC.



Figure 20 - NUHOMS® Used Fuel Storage System shown in the existing ISFSI

The new horizontal system will require physical modifications to the existing ISFSI as it was constructed to support the vertical system currently in use. As an example, the metal rings and bolts that were used to seismically secure the upright dry cask system that currently exists on site, will need to be removed so that the new horizontal system can be constructed.

The concrete overpacks are called Horizontal Storage Modules. These modules will be cast on site, poured in place and will take about a year to construct. The canisters are built of durable stainless steel at Orano's fabrication facility in North Carolina and will not be delivered until the modifications to the ISFSI and construction of the Horizontal Storage Modules are complete.

#### Off Loading Campaigns

Orano uses a highly-trained team that offers a comprehensive solution to managing used fuel efficiently and cost-effectively with minimal risk. The four-day individual canister loading campaign led to lower dose exposure to the loading crew. To date, the team has moved more than 20,000 fuel assemblies without incident and has more than 80 consecutive loadings on schedule and on budget. Orano has a training facility in North Carolina that with life-size models. Training consists of a five-week program where every aspect of loading in real time is completed.

#### d. NUHOMS® Loading Process

Each individual canister loading campaign is a four-day process. [Click here](#) to watch a video of the process.

**Day 1:** Load used fuel assemblies into the canister underwater inside a transfer cask in the used fuel pool. Each assembly's heat load determines calculated placement within the canister basket to ensure heat load requirements are fulfilled. The canister is removed from the pool inside a transfer cask and the cask is decontaminated as it's removed from pool.

**Days 2 and 3:** The two lids are welded closed, dewatering occurs (not pressurized like prior system), tested and verified. This is the last time the canister and transfer cask will be vertical. The transfer cask is laid down on transfer trailer. The loaded canister is always supported, there are no unsupported lifts that occur during transfer or loading.

**Day 4:** The canister is transferred on the transfer trailer in the transfer cask to the on-site storage module. The transfer trailer has seismic bracing and is designed to precisely back up to the NUHOMS® EOS module opening. The canister is then pushed out of the transfer cask into module on slick rails. Any potential scoring is already calculated and evaluated within the NRC licensing process to not affect canister safety performance. The interior concrete design of the module naturally supports canister so there is no way for the canister to fall or drop inside the module. The module door is then bolted onto the front and the transfer cask and transfer vehicle return for the next canister.

**Future Offsite Storage:** When offsite storage is available, the removal process is the same as loading. The stored canister is pulled directly from the module into a transport cask for offsite shipment.

e. [Aging Management Program / Inspection Program](#)

As part of an Aging Management Program, the NUHOMS® module is designed to enable a 100 percent inspection of the stored canister's surface and the inside of the module using crawler robots. To date, inspections have shown no material degradation or concerns with the NUHOMS canisters or modules after more than 20 years of operation. [Click here](#) to watch a video of the inspection process.

**5. Spent Nuclear Fuel Management – Extended Operations**

DCPP is in the process of requesting a license extension to operate the plant beyond 2025 in compliance with Senate Bill 846 (as outlined in Chapter 1 of this Strategic Vision). If DCPP is granted an extension by the NRC, the program for Spent Nuclear Waste Management will be modified to reflect on-going operations. In addition, there may be the need to expand or modify the ISFSI from what is envisioned today (with operations ceasing in 2025) if DCPP continues to operate. The DCDEP will continue to monitor these efforts and will remain up-to-date about potential changes necessary to management of Spent Nuclear Fuel if operations are continued, in order to provide the community with information about this important issue.

Through these vision statements, goals and recommendations, it is the intent of the DCDEP to assure that the Spent Nuclear Fuel is safely stored on site until off site storage becomes available.

Recommendations for Spent Nuclear Fuel Management can be found in Section IV of this document.

**Vision Statement**

- The primary considerations in the management of spent nuclear fuel at DCPP should be the safeguarding of the community, workers and the environment
- The installation of the new dry cask system chosen through the RFP process, should be completed in an expeditious manner, while assuring the safety of workers and the protection of the environment
- The existing dry cask system, as well as the new dry cask system, should be regularly inspected to ensure protection of the community, workers and the environment
- The potential modifications to the existing ISFSI, if needed for continued operations, should be accomplished in a manner that includes input from the community and uses the best technology available to protect the community, workers and the environment

### **Goals**

1. The new dry cask system chosen through the RFP process, should be installed in a manner that ensures earthquake safety, ease of regular inspections and future transport of the spent nuclear fuel off site
2. The development of an Aging Management Program for the ISFSI that includes both the existing dry cask and the new dry cask systems should be completed by PG&E as soon as possible, incorporating the best available technology as it evolves in the industry
3. The DCDEP should be kept informed regarding any potential modifications to the existing ISFSI, if needed for extended operations.

*[Added April 2023]*

### **M. Future Topics**

In 2023, the DCDEP will hold public meetings covering a variety of topics. Future sections of the document will be prepared as topics are covered by the DCDEP and revisions to the document will be forwarded to the CPUC at least once per year.

# IV. DCDEP Recommendations and Implementation Plan

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Contained in the section are the recommendations of the DCDEP. The recommendations in this section will become activities as part of an implementation plan that will be tracked by the DCDEP. A report that provides the status of each of the recommendations will be produced yearly, or as needed.

## A. Decommissioning Process Recommendations

### 1. **Diablo Canyon Decommissioning Engagement Panel**

- a. Recommend to the CPUC that public meetings and workshops continue to be held and public input received by the DCDEP throughout the decommissioning process
- b. Recommend to the CPUC that a report be prepared each year by the DCDEP reflecting the public input received over that time frame
- c. Recommend that the CPUC consider formally expanding the charter of the Diablo Canyon Independent Safety Committee to include any technical support that may be requested of them by the DCDEP
- d. Recommend that the CPUC consider extending the existence of the Diablo Canyon Independent Safety Committee beyond conclusion of power generation at the DCPD so that their independent and valuable technical and safety expertise would continue to be available to the DCDEP and to the communities in San Luis Obispo County during the decades of decommissioning

### 2. **Safety**

- a. Recommend to PG&E that decommissioning (decontamination) begin immediately upon plant shutdown with a goal of 10 years for completion of radiological decommissioning and decontamination and that SAFSTOR not be considered
- b. Recommend to the CPUC that the spent fuel stored on-site be monitored at all times by PG&E or other entity as appropriate (before and during DECON) using real-time radiation monitoring
- c. Recommend to the CPUC that the implementation of technologically advanced storage methods for spent fuel occur as soon as such methods are identified and determined to be feasible
- d. Recommend to the CPUC that PG&E thoroughly research and investigate the potential for both ship and truck transport of dismantled facilities from the site and the data communicated to the DCDEP
- e. Recommend to PG&E that the transport of demolished facilities (including radiological demolished materials) through surrounding communities be avoided during times of peak traffic
- f. Recommend to PG&E that the possible future transport of spent fuel to an off-site storage facility through surrounding communities be avoided during times of peak traffic
- g. Recommend that PG&E research the safest method of transport and consider any new technological innovation in compliance with all applicable regulations

### **3. Labor**

- a. Recommend the use of non-discriminatory project labor agreements that incentivize local contractors hire from the local workforce for decommissioning activities, be implemented by PG&E at the earliest possible time
- b. Recommend to PG&E that non-discriminatory project labor agreements incorporate a continued commitment to supporting the local workforce and maintain programs that support the highest level of safety and training

## **B. Decommissioning Funding Recommendations**

### **1. Funding**

- a. Recommend that the CPUC assure that the Decommissioning Trust Fund will provide adequate funding to ensure the protection of the health and safety of the community throughout the decommissioning process
- b. Recommend that the CPUC assure that the Decommissioning Trust Fund will provide adequate funding to allow for critical advance planning decommissioning activities needed to continue in order to allow immediate transition to decommissioning when the plant ceases power generation
- c. Recommend that the CPUC ascertain if PG&E has adequately researched and considered costs and community impacts of both land and sea transport of facility components from the site
- d. Recommend that the CPUC assure that the Decommissioning Trust Fund will cover the reasonable cost of completing all the decommissioning activities, including removal, transportation and disposal in a way that minimizes risk and disruption to local communities and cost to ratepayers

## **C. Diablo Canyon Lands Recommendations**

### **1. Diablo Canyon Decommissioning Engagement Panel**

- a. Recommend that a letter to the CPUC be prepared seeking its permission for PG&E to proceed with conservation discussions (including property appraisals and Memorandum of Understanding) for the Diablo Canyon Lands, including Wild Cherry Canyon, with conservation entities, notwithstanding its “no action” order contained in Section 13 of Decision 18-01-022 dated January 11, 2018

### **2. Land Stewardship**

- a. Recommend that the CPUC direct PG&E to ensure that a management/access plan for the Diablo Canyon Lands is developed when transferring land that at a minimum includes, a multi-use non-motorized trail system for hikers, mountain bikers and equestrian use, restricted access in the sensitive intertidal zone, rotational grazing, habitat restoration, protection of cultural sites and consideration of minimizing traffic through surrounding communities times of peak traffic

- b. Recommend that PG&E make all existing biological, geological and archeological data available to conservation entities upon land transfer
- c. Recommend that PG&E complete the deed restriction for the 1,200 acres near Point San Luis (see Figure 3) that would preserve the property in perpetuity for conservation and public access

### **3. Land Transfer and Use**

- a. Recommend that the CPUC ensure that transfer of Diablo Canyon Lands that are subject to their authority is to a governmental, Native American non-profit and/or land conservancy entity or entities that are experienced in land management for the purposes of resource conservation and managed public access
- b. Recommend that PG&E publicly announce its intention to collaborate with interested parties to conserve the Diablo Canyon Lands as soon as allowed by the CPUC
- c. Recommend that a conservation entity or entities reinstate negotiations with PG&E/Eureka Energy and HomeFed and sign an option agreement or Memorandum of Understanding for the acquisition of land interests on Wild Cherry Canyon for public or non-profit conservation ownership and management
- d. Recommend that a conservation entity or entities begin the appraisal process of Wild Cherry Canyon, so that funding sources can be identified and pursued
- e. Recommend that a conservation entity or entities coordinate with the Land Conservancy of San Luis Obispo County, the Nature Conservancy, State Parks, Bureau of Land Management, the Andre Ranch owners, and PG&E on the design and creation of at least two multi-use trails that would include an interior trail and a coastal trail (including an extension of the California Coastal Trail)
- f. Recommend a conservation entity or entities begin negotiations with PG&E/Eureka Energy on the acquisition of the Diablo Canyon Lands (outside of Wild Cherry Canyon), for public or non-profit conservation ownership and management
- g. Recommend that PG&E evaluate the use of a small portion of the land north of the Harbor Terrace development for use by the Port San Luis Harbor District for boat storage

### **4. Cultural Heritage**

- a. Recommend that the CPUC ensure any future owners of Diablo Canyon Lands develop management/access plans that ensure the protection, preservation of, and education about, cultural heritage and sacred Native American sites
- b. Recommend that the CPUC ensure that any land transfer to Native Americans be subject to a conservation easement that would allow limited development consistent with local zoning and the preservation of ecological, environmental and cultural resources
- c. Recommend that PG&E and the Native American community explore ways that both the goals of conservation and managed public use of the Diablo Canyon Lands and the needs of the local Native Americans can be achieved

## **D. Repurposing of Diablo Canyon Facilities Recommendations**

### **1. Existing Facilities**

- a. Recommend that the CPUC encourage PG&E to repurpose as many buildings and assets as is sustainably viable without compromising public safety, and considering community traffic concerns and the continued environmental quality of the region
- b. Recommend that PG&E, in conjunction with possible future tenants or owners, and with the assistance of County Planning and Building, undertake a coordinated scoping effort to determine allowable uses, carrying capacity of existing infrastructure and potential improvements that could support repurposing
- c. Recommend that PG&E develop a strategy for management of the facilities at the earliest possible time and set up a process for receiving proposals and negotiating terms for repurposing specific parts of that infrastructure so potential repurposing tenants can be appropriately determined and advance planning for transfer and reuse can occur
- d. Recommend that PG&E prepare a list of all buildings and assets available for repurposing, including detailed descriptions of the facility, the type of facility (e.g., office, warehouse, etc.), square footage of the facility, age of the facility, and when the facility would become available for repurposing
- e. Recommend that PG&E maintain remaining facilities not needed to facilitate decommissioning until such time as the facilities are repurposed or determined to not be achievable for a sustainable repurposing tenant, to ensure that the facilities do not degrade over time
- f. Recommend that construction of infill development on Parcel P be allowed provided safety is not compromised and the environmental quality of the community is maintained
- g. Recommend that PG&E identify undeveloped lands on Parcel P which could be released for open space and conservation, and release those lands as soon as feasible
- h. Recommend that the CPUC require PG&E or a successor interest incorporate into leases the requirement that new uses not generate substantial additional traffic through surrounding communities during times of peak traffic
- i. Recommend that PG&E evaluate maintaining the existing desalination plant while not compromising environmental quality

### **2. Marine Facilities**

- a. Recommend that PG&E retain the breakwaters and associated harbor and explore opportunities for repurposing the harbor consistent with the environmental quality and safety of the area and region
- b. Recommend that PG&E require management of the harbor be accomplished in a manner that preserves the natural habitat, allows for long term maintenance and creates a safe harbour for boaters in distress
- c. Recommend that PG&E continue to monitor and study the harbor throughout the decommissioning process to ensure the sensitive marine habitat is preserved and radiological contamination complies with regulatory levels as defined by the appropriate agencies



### 3. Specific Uses

- a. Recommend that PG&E investigate the potential for a public-private collaborative research and development facility (such as a National Laboratory) with emphasis on marine sciences, renewable energy development technologies, energy storage, optimum storage for irradiated waste, desalinization and other technology innovation as soon as possible
- b. Recommend that PG&E consider granting a long-term lease or purchase with favorable terms for Native American tribal use of existing facilities for, at a minimum, an office, storage and tribal meetings/gatherings
- c. Recommend that PG&E consider use of the Ontario Road facility and parking as a Visitor Education Center, which highlights local history including local Native American culture, energy education and natural history
- d. Recommend that the existing parking area at the Ontario Road facility be maintained for shuttle or bus service to the Diablo Canyon Lands
- e. Recommend that PG&E investigate the possibility of repurposing of facilities for innovative uses including, but not limited to, wildlife rescue and rehabilitation, low impact water-based recreation uses, wind, wave, solar or other renewable energy, energy storage, business incubators, clean technology startups, saltwater aquarium, transmission facility projects, wastewater recycling, innovative mental health treatment center and California State University and/or University of California research facilities

## E. Engagement Panel Structure and Function Review Recommendations

### 1. Engagement Panel Review

- a. Recommend that the DCDEP hold a public meeting in the second quarter of 2019 (June 12, 2019) to complete: (1) a self-evaluation of strengths, weaknesses and opportunities for improvement relative to fulfilling the goals outlined in the guiding Charter; (2) a review of the charter itself, taking into consideration community input; (3) an examination of examples of other community engagement panels established for decommissioning efforts; (4) a discussion with governmental, regulatory agencies and others about their role in the decommissioning process for DCPD; and (5) a review of the Karlin and Brown proposals that have already been received
- b. Recommend that the DCDEP forward the conclusions and recommendations of the self-evaluation to the CPUC for inclusion as an additional supplemental filing to the 2018 Triennial Report
- c. Recommend that the DCDEP commit to a process of continuous improvement, with similar reviews scheduled regularly

## **F. Emergency Planning Recommendations**

### **1. Funding**

- a. Recommend that the CPUC and PG&E ensure that adequate funding is available to plan, execute, oversee, and communicate a rigorous safety and emergency planning program until such time as the plant site is fully cleared of all waste, facilities, and other structures that are not suitable for repurposing
- b. Recommend to the CPUC that PG&E, the County of San Luis Obispo, neighboring communities, and relevant regulatory decommissioning agencies receive adequate funding to enable a coordinated, broad-based, fully integrated safety and emergency plan for the complete decommissioning process
- c. Recommend that the CPUC and PG&E ensure that adequate funding is available to fully fund and/or reimburse the County of San Luis Obispo for all emergency planning and safety activities associated with the decommissioning of the DCPD
- d. Recommend that the CPUC and PG&E ensure that adequate funding is available for continued protection and security of the dry cask storage system until such time as it is removed from the site
- e. Recommend that the CPUC ensure that funding is available to provide 24-hour real time monitoring of radiation levels at each dry cask as long as spent waste remains on site
- f. Recommend to the CPUC that PG&E be provided the funding to at a minimum maintain the early warning siren system until all spent fuel is moved into a robust dry cask storage system and potentially until the spent fuel is removed from the site

### **2. Emergency and Communications Plan**

- a. Recommend that a broad-based, fully integrated safety and emergency plan for the entire decommissioning process be completed by PG&E which includes coordination with the CPUC, the County of San Luis Obispo, neighboring communities, and relevant regulatory decommissioning agencies
- b. Recommend that a robust communications program be provided by PG&E, including the preparation and completion of the PSDAR and the PSEP, to keep the workers, residents of neighboring communities and visitors continually apprised of issues concerning safety of the DCPD and environment
- c. Recommend that CPUC and PG&E prepare emergency plans that include disaster planning, potential evacuation procedures and emergency measures for the future use of the Diablo Canyon Lands and any repurposed or retained facilities

### **3. Demolished Materials (contaminated and non-contaminated)**

- a. Recommend that the CPUC require that PG&E evaluate the safety and cost effectiveness of various demolition waste material transport alternatives, including by road, rail and sea
- b. Recommend that the CPUC and other regulatory agencies ensure that transportation of demolition waste material by road/truck be completed consistent with the safety and well-being of neighboring communities, taking into consideration dates and times to avoid peak traffic and to reduce the burden of noise and dust
- c. Recommend that emergency plans be prepared to address potential issues arising from vehicle accidents during the transport of demolition waste material

*[Added April 2019]*

## **G. Spent Fuel Management Recommendations**

### **1. Risk Analysis**

- a. Recommend that PG&E, after consultation with the California Energy Commission (CEC) regarding the scope, hire a risk assessment consultant before the end of 2019 to complete an independent risk assessment of a range of alternatives for offloading spent nuclear fuel
- b. Recommend that PG&E be transparent in any decision-making regarding the offloading of spent nuclear fuel and any new dry cask storage system, including collaboration with the CEC, DCISC, risk analysis consultants and stakeholders, in addition to the NRC

### **2. Dry Cask Storage System**

- a. Recommend that PG&E begin the RFP process before the end of 2019 for a new dry cask storage system which could support a more rapid offload of spent nuclear fuel from the spent fuel pools to dry cask storage, if an independent risk assessment deems this to be feasible and safe
- b. Recommend that PG&E thoroughly investigate and research all potential dry cask storage system designs in order to determine the best site specific system that takes into consideration the unique seismic risks at DCPD and the fact that the length of time the spent nuclear fuel and GTCC waste will be stored on site cannot be estimated at this date
- c. Recommend that PG&E select a dry cask fuel storage system that uses advances in the materials, manufacturing and engineering of dry cask storage systems in order to improve the shielding and confinement of spent nuclear fuel and the heat capacity of the canisters
- d. Recommend that PG&E select a dry cask storage system that would allow for 24-hour radiation monitoring, full inspection capability, be fully retrievable, have the capability to either repackage or repair a damaged cask and be licensed for transportation
- e. Recommend that the new dry cask system minimize dose rates to workers to the greatest extent achievable

### **3. Dry Cask Loading**

- a. Recommend that all PG&E staff and any outside contractors involved with cask loading receive ample pre-operational training and testing, based on lessons learned in other ISFSIs, prior to implementation of any new dry cask storage system
- b. Recommend that any outside contractors involved with cask loading have experience with the system and be fully trained, vetted and adequately supervised

### **4. Aging Management Program**

- a. Recommend that PG&E develop an Aging Management Program for the ISFSI as soon as practicable, possibly before such program is required to be prepared
- b. Recommend that PG&E conduct a future feasibility assessment of the benefits and costs of enclosing the existing ISFSI, including a climate-controlled environment alternative
- c. Recommend that if stress corrosion cracks or other degradation is found, this should be identified early and appropriate corrective actions taken immediately, which may include enclosing the ISFSI in a structure, and any such experience and information be shared transparently with regulators, other ISFSI operators and the community

- d. Recommend that PG&E continue to participate in research and collect data on the potential degradation of canisters used in the dry cask storage system and make any results available to regulators, other ISFSI operators and the public
- e. Recommend that PG&E have an onsite facility or other means in place to deal with potential leaks from spent fuel canisters and the ability to repackage the spent fuel if necessary

**5. Security**

- a. Recommend that PG&E accurately budget for, and the CPUC support the funding of, comprehensive security measures for all phases of decommissioning
- b. Recommend that ongoing training of the security force, security drills and coordination with local law enforcement continue to exceed the minimum required by the NRC in order to maintain a highly trained, site specific security force
- c. Recommend that PG&E transfer spent nuclear fuel from DCPD as soon as either a CISF or permanent repository is developed in order to save ratepayers the cost of indefinite security

**6. Offsite Repository for Spent Nuclear Fuel**

- a. Recommend that the spent nuclear fuel and GTCC waste stored in the DCPD ISFSI be transported to a permanent government repository located offsite as soon as possible, presuming a safe transportation method for such movement is developed and followed
- b. Recommend that PG&E move the spent nuclear fuel and GTCC waste stored in the DCPD ISFSI to a Consolidated Interim Storage Facility (if a permanent federal repository is not available) as soon as such site becomes operational, presuming a safe transportation method for movement is developed and followed
- c. Recommend the spent nuclear fuel and GTCC waste, if transported by truck, avoid times of peak traffic through Avila Beach and other impacted communities
- d. Recommend that transfer of ownership of spent nuclear fuel be formalized prior to any shipment from the DCPD to an off-site storage facility
- e. Recommend that PG&E advocate for the establishment of an offsite storage solution, either a Consolidated Interim Storage Facility or a Permanent Federal Repository

**7. DCPD Ownership**

- a. Recommend that PG&E continues to own the DCPD and manage the decommissioning process, including the on-site management of spent fuel, in order to ensure continuity, avoid SAFSTOR, preserve local jobs, and allow for continued robust community involvement

*[Added May 2019]*

## H. Potential Economic Impacts/Possible Economic Development Opportunities Recommendations

### 1. Decommissioning

- a. Recommend that PG&E and the County ensure an efficient and collaborative permitting process that includes comprehensive public involvement, in order to prevent any delays to the start of decommissioning and decontamination immediately upon shutdown and precluding SAFSTOR which could have potentially severe local economic impacts

### 2. Repurposing

- a. Recommend that local governmental entities and PG&E review and consider other repurposing programs (including the Fort Ord Reuse Authority and the Concord Reuse Project) for guidance on successful economic development measures and pitfalls to be avoided
- b. Recommend that PG&E and the County actively engage with decision makers at the UC, CSU, and Community College systems, to promote the potential repurposing of facilities to advance the educational mission of those entities and provide local economic enhancement
- c. Recommend that any regional entity, such as the Hourglass Project, Economic Vitality Corporation or similar organization, collaborate with the DCDEP in the development of repurposing strategies and ideas that are supported by the local community
- d. Recommend that PG&E undertake a detailed and thorough analysis of the existing facilities on Parcel P and their potential for repurposing given site constraints and the potential conflicts created by management of spent nuclear fuel and other demolition waste and activities
- e. Recommend that PG&E undertake an analysis of the potential for construction of new facilities on already disturbed areas of Parcel P to support repurposing of existing on-site facilities
- f. Recommend that PG&E, the County or a regional entity consider having a design competition to crowdsource creative repurposing ideas to improve awareness of the opportunity for reuse of the DCP site and stimulate out of the box thinking and ideas
- g. Recommend that PG&E consider the repurposing of the facilities on Parcel P, the conservation and public access of the Diablo Canyon Lands and the recommendations relative to dry cask systems in this Strategic Vision when choosing a new spent nuclear fuel storage management system
- h. Recommend that PG&E consider making facilities available outside of the DCP property (ex: Energy Education Center, Kendall Road) for repurposing early in the decommissioning process

- i. Recommend that PG&E, the County, and the local land conservancy engage with State Parks and other potential management entities as soon as possible to create, and begin implementing, a conservation and public access plan for the Diablo Canyon Lands to stimulate economic growth in the tourism sector

### **3. Local Government**

- a. Recommend that the County of San Luis Obispo evaluate whether the hiring of a skilled economic specialist position (with a focus on the development of new, and retention of existing, businesses in the region) would lead to definite and measurable positive economic results
- b. Recommend that local governments perform an analysis of existing policies and fees to determine whether any changes should be made to encourage business to relocate to this area and ensure retention of existing businesses
- c. Recommend that local governments, PG&E and other local economic or governmental entities support and promote any recommendations from a regional entity that create a diversified local economy and are viable, sustainable, embrace community values, build upon existing economic drivers, including tourism, agriculture, education, and technology, and offset potential economic impacts of closure and where feasible, offer incentives to bring these recommendations to fruition

### **4. Local Labor**

- a. Recommend that PG&E ensure that local labor and local businesses are used to the greatest extent possible to ease the impacts of the loss of local jobs due to the closure of DCPD and that any formal mechanism, such as a non-discriminatory Project Labor Agreement or other agreement, be fair and equitable
- b. Recommend that PG&E, in recognition of the substantial economic opportunities that will be created through decommissioning, demonstrate its continued commitment to the local workforce through a formal partnership with the local building and construction trades council and that such partnership include recognition of the importance of, and incorporate outreach to, local businesses and local workers
- c. Recommend that PG&E give full consideration to an array of community benefits in any negotiated agreement, such as but not limited to: employment of local workers, career pathway apprenticeship training, encouragement of small and local businesses, outreach to veterans, programs promoting the employment of women and minorities, programs for disadvantaged youth and any other programs targeting underserved portions of the community

*[Added February 2020]*

## I. Transportation of Non-Radioactive and Low-Level Radioactive Waste Materials Recommendations

1. Recommend that PG&E propose and use the safest method of transport for demolition waste materials in order to minimize risk and disruption to local communities, with consideration of the cost to ratepayers, including use of barges and trucking only during dates and times to avoid peak traffic
2. Recommend that PG&E include a feasibility and cost analysis of barging demolition waste materials in the 2021 NDTCP
3. Recommend that any regulatory agencies that review the decommissioning land use permit or any other necessary permits evaluate all measures to fully mitigate the impacts of transporting demolition waste materials off-site, including a full exploration of barging and allowing trucking only during dates and times of day of lowest traffic volumes
4. Recommend that PG&E reuse as much demolition waste materials on-site as is practically feasible in order to minimize the amount of materials that need to be transported off-site
5. Recommend that PG&E work with the CPUC, State Lands Commission and the California Coastal Commission to allow for retention of the breakwater to limit the amount of demolition materials created in order to minimize the numbers of truck/rail/barge trips necessary for removal from the site
6. Recommend that the CPUC direct PG&E implement the preceding recommendations

*[Added July 2020]*

## J. Water Resources Recommendations

1. **Breakwaters and Marina**
  - a. Recommend that PG&E pursue retention of the breakwaters and associated harbor with the CSLC, CPUC and the California Coastal Commission in order to provide opportunities for repurposing the harbor and other on shore marina facilities
  - b. Recommend PG&E work with the CSLC to modify the existing lease as necessary to allow for retention of the breakwaters and other on shore facilities specified in the lease
  - c. Recommend that PG&E require that future management of the breakwaters and harbor be accomplished in a manner that preserves the natural habitat, allows for long term maintenance and creates a safe harbour for boaters in distress
  - d. Recommend that PG&E use barging as the primary method of removal of materials if the breakwaters are required to be demolished
  - e. Recommend that PG&E continue to monitor and study the harbor and other coastal areas throughout the decommissioning process to ensure the sensitive marine habitat is undamaged and preserved in perpetuity

## **2. Intertidal Zone / Marine Resources**

- a. Recommend that any studies already undertaken by PG&E and its consultants regarding the Diablo Canyon Lands and its fragile intertidal zone be used to craft future management plans for the region by PG&E or a successor conservation entity or entities
- b. Recommend that the lessons learned through the establishment, placement, and operation of the Point Buchon Trail on the North Ranch and the Pecho Coast Trail on the South Ranch, be taken into consideration in the development of future land use and management plans
- c. Recommend that governmental permitting entities require transfer of the Diablo Canyon Lands to a conservation entity or entities only after a full assessment of that entity's ability to protect the land and water resources, from a practical, scientific, and financial perspective to ensure the appropriate protection of natural and cultural resources in perpetuity
- d. Recommend that PG&E and governmental permitting entities work to provide permanent endowment monies for the continued protection and management of the marine and terrestrial resources
- e. Recommend that public access to coastal trails along the Diablo Canyon Lands be specifically sited and managed to ensure no degradation of the intertidal zone and other cultural and ecological resources
- f. Recommend that PG&E temporarily cease any existing public uses on the Diablo Canyon Lands that result in degradation of the intertidal zone (and any ecological or cultural resources of the lands) to allow for the regeneration of any impacted resources and where necessary, perform active restoration

## **3. Desalination Facilities**

- a. Recommend that PG&E as part of its future regular maintenance of the desalination plant retrofit the plant with the latest in high efficiency polymer membranes in order to increase efficiency and reduce operational costs
- b. Recommend that the County take part in the permitting of offshore windfarms as appropriate in order to negotiate better rates for the energy required to operate a desalination plant
- c. Recommend that PG&E conduct a nationwide marketing effort to highlight the availability of the desalination plant to investors and operators
- d. Recommend that PG&E conduct a detailed cost-benefit study of the possibility of relocating the existing plant to the south side of the Diablo Canyon Lands (near the security gate and Port San Luis) and an alternative method to carry the brine effluent offshore
- e. Recommend that the County consider the possibility of partnering the operation of the desalination plant with other water purveyors in the greater area, including those outside of San Luis Obispo County

*[Added March 2021]*



## **K. Decommissioning Land Use Permit and the CEQA Process Recommendations**

1. Recommend that the County of San Luis Obispo review the land use permit and complete the CEQA review in a manner that ensures an efficient and collaborative process that includes comprehensive public involvement
2. Recommend that the DCDEP continue to assist the public with providing input on behalf of the local community to the County and PG&E during the DCPD decommissioning land use permit and CEQA process
3. Recommend that the County of San Luis Obispo consider appropriate mitigations in order to reduce environmental impacts to the maximum extent that may occur during decommissioning, consistent with this Strategic Vision and in furtherance of the conservation of, and sustainable access to, the Diablo Canyon Lands.

*[Added April 2022]*

## **L. New Spent Nuclear Fuel Storage System**

1. Recommend that the new dry cask storage system be installed assuring earthquake safety and protection of workers, the surrounding communities and the environment
2. Recommend that any license amendments necessary to allow for a more rapid offload of spent nuclear fuel from the spent fuel pools to dry cask storage be obtained as expeditiously as possible from the NRC
3. Recommend that PG&E develop an Aging Management Program for the ISFSI that includes both the existing and the new dry cask system as soon as practicable, possibly before such program is required to be prepared
4. Recommend that PG&E continue to keep the DCDEP informed regarding any plans concerning potential changes or expansions of the ISFSI as that information becomes available

*[Added April 2023]*

## **K. Future Topics**

This section of the document will be prepared as new topics are covered by the DCDEP and recommendations on those topics are developed.

# Glossary

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## A

A4NR - Alliance for Nuclear Responsibility *[Added May 2019]*

AB – California Assembly Bill *[Added April 2023]*

## C

CAISO – California Independent Systems Operator *[Added April 2023]*

Cal OSHA – California Division of Occupational Safety and Health *[Added April 2022]*

Cal Trans - California Department of Transportation *[Added July 2020]*

CCC – California Coastal Commission *[Added April 2022]*

CCRWQCB – Central Coast Regional Water Quality Control Board *[Added April 2022]*

CDP – Coastal Development Permit *[Added April 2022]*

CEC – California Energy Commission *[Added May 2019]*

CEQA - California Environmental Quality Act *[Added July 2020]*

CERIP – Clean Energy Reliability Investment Plan *[Added April 2023]*

CHP - California Highway Patrol *[Added July 2020]*

CNRA – California Natural Resources Agency *[Added April 2023]*

CoC – Certificates of Compliance *[Added May 2019]*

CISF - Consolidated Interim Storage Facility *[Added May 2019]*

CPUC - California Public Utilities Commission *[Added May 2019]*

CSLC – California State Lands Commission *[Added March 2021]*

CUP – Conditional Use Permit *[Added April 2022]*

CZLUO – Coastal Zone Land Use Ordinance *[Added April 2022]*

## D

DCDEP - Diablo Canyon Decommissioning Engagement Panel

DCPP - Diablo Canyon Power Plant

DCISC – Diablo Canyon Independent Safety Committee

DOE - Department of Energy *[Added May 2019]*

DEIR - Draft Environmental Impact Report *[Added April 2022]*

DREAM - Diablo Resources Advisory Measure (also known as Measure A)

DSC – Dry Shielded Canister *[Added April 2023]*

DWR – California Department of Water Resources *[Added April 2023]*

## E

EPA - Environmental Protection Agency *[Added April 2019]*

EPRI – Electric Power Research Institute, Inc. *[Added May 2019]*

EIR – Environmental Impact Report *[Added April 2022]*

## F

FEIR – Final Environmental Impact Report *[Added April 2022]*

FEMA - Federal Emergency Management Agency *[Added April 2019]*

## G

GTCC - Greater Than Class C Waste *[Added May 2019]*

GWd/MTU - Gigawatt-Days Per Metric Ton of Uranium *[Added May 2019]*

## **H**

HOSS - Hardened On-Site Storage *[Added May 2019]*  
HELMS - Hardened Extended-life Local Monitored Surface Storage *[Added May 2019]*  
HBA - High Bridge Associates *[Added May 2019]*  
HBPP - Humboldt Bay Power Plant *[Added May 2019]*

## **I**

ISFSI - Independent Spent Fuel Storage Installation *[Added April 2019]*  
IOEP - ISFSI Only Emergency Plan *[Added April 2019]*

## **L**

LCP - Local Coastal Plan *[Added April 2022]*  
LUO – Land Use Ordinance *[Added April 2022]*

## **M**

MPC - Multi-Purpose Canister *[Added May 2019]*

## **N**

NRC - Nuclear Regulatory Commission  
NDCTP - Nuclear Decommissioning Cost Triennial Proceeding (also known as the Triennial Report)  
NPDES – National Pollutant Discharge Elimination System *[Added April 2022]*  
NOP – Notice of Preparation (Environmental Impact Report) *[Added April 2022]*  
NOD – Notice of Determination (Environmental Impact Report) *[Added April 2022]*  
NWSA - Nuclear Waste Policy Act *[Added May 2019]*

## **P**

PDEF - Permanently Defueled Emergency Plan *[Added April 2019]*  
PG&E - Pacific Gas and Electric  
PSDAR - Post-Shutdown Decommissioning Activities Report *[Added April 2019]*  
PSEP - Post-Shutdown Emergency Plan *[Added April 2019]*

## **R**

RFP - Request for Proposal *[Added May 2019]*

## **S**

SAFSTOR – Safe Storage  
SAR – Safety Analysis Report *[Added May 2019]*  
SB – California Senate Bill *[Added April 2023]*  
SFP – Spent Fuel Pool *[Added May 2019]*  
SFPI – Spent Fuel Pool Island *[Added May 2019]*  
SONGS - San Onofre Nuclear Generating Station  
SONGS CEP – San Onofre Nuclear Generating Station Community Engagement Panel

## **T**

TLD – Thermoluminescent Dosimeters *[Added May 2019]*  
TS – Technical Specifications *[Added May 2019]*

## **U**

UFSAR – Updated Final Safety Analysis Report *[Added April 2023]*  
USACE – US Army Corp of Engineers *[Added April 2022]*

# Amendments

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## **Diablo Canyon Power Plant Decommissioning - Vision Document Amendments, Additions, Corrections**

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Initial Document - December 31, 2018

Amended - April 22, 2019

Amended - May 17, 2019

Amended - January 27, 2020

Amended - August 27, 2020

Amended - March 1, 2021

Amended – March 30, 2022

Amended – April 16, 2023

# Signature Page

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The undersigned members of the Diablo Canyon Decommissioning Engagement Panel respectfully submit this document to PG&E with the understanding that it will be forwarded to the California Public Utilities Commission as a supplemental filing to the 2018 and 2021 Nuclear Decommissioning Cost Triennial Proceedings (NDTCP) and any future NDCTP.

Kara Woodruff



Chris R. Lattin



Dina Bellman

Mariam Shah

Kevin Donoff



David M. Baldwin

Charlene Rosales

# Diablo Resources Advisory Measure (DREAM) – Election Results

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Election held in San Luis Obispo County, California on March 7, 2000  
Advisory vote only on Diablo Canyon Lands – *Passed 74.66%*

## ***Measure A-ADVISORY DIABLO CANYON LANDS***

Shall the County Board of Supervisors recognize the Diablo Canyon Lands as an exceptionally precious coastal resource by adopting policies that promote habitat preservation, sustainable agricultural activities, and public use and enjoyment consistent with public safety and property rights once the lands are no longer needed as an emergency buffer for the Diablo Canyon Nuclear Plant after its remaining operating life?

Precincts Reporting: 195/195 - 100.00%  
Ballots Cast/Reg. Voters: 84,425/130,828 - 64.53%  
Total Votes: 78,042  
Times Blank Voted: 6,321  
Times Over Voted: 62  
Number Of Under Votes: 0

**YES: 58,264 - 74.66%**  
NO: 19,778 - 25.34%

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# Appendices

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Appendix A, Appendix B, Appendix C and Appendix D begin on the following page.

Appendix A: California Public Utilities Commission (CPUC) Should Create an Independent Decommissioning Advisory Panel (DAP) in Lieu of the DCDEP - by Alex S. Karlin – DCDEP Panelist

Appendix B: Maintain and Strengthen the Current DCDEP: A Response to California Public Utilities Commission (CPUC) Should Create an Independent Decommissioning Advisory Panel (DAP) in Lieu of the DCDEP” by Alex Karlin - by Lauren R. Brown – DCDEP Panelist

Appendix C: Opposition to Consolidated Interim Storage - by Linda Seeley – DCDEP Panelist

Appendix D: Letters from the Diablo Canyon Engagement Panel

Appendix A  
*California Public Utilities Commission (CPUC) Should Create an Independent Decommissioning  
Advisory Panel (DAP) in Lieu of the DCDEP*

October 2018

by Alex S. Karlin – DCDEP Panelist<sup>1</sup>

Decommissioning the Diablo Canyon Nuclear Power Plant is a Long-Term and Multi-Billion Dollar Project That Requires an Independent, Resourced, and Sustainable Decommissioning Advisory Panel (DAP). CPUC Should Charter Such a DAP in Lieu of PG&E's DCDEP.

## I. INTRODUCTION

Decommissioning DCPD will be a complex, multi-billion dollar enterprise that will take 20 to 60 years and that will have huge impact on the State and on the San Luis Obispo and Santa Barbara communities. The process will be subject to the authority and approval of numerous State and local regulatory agencies, as well as the U.S. Nuclear Regulatory Commission. Meanwhile, State and local elected officials and other important stakeholders (such as Labor, Native American, and Environmental groups) will be involved in the decommissioning process. Lack of coordination between these numerous entities will arise

In this context, California should emulate States such as Vermont, Massachusetts and New York and should establish an independent Decommissioning Advisory Panel (DAP) to provide a forum for centralized and coordinated oversight of the decommissioning of the DCPD nuclear power plant. The DAP would bring all of the relevant agencies, governmental entities and private and public stakeholders together. A major advantage would be that designees of these agencies and entities could tap into the resources and technical knowledge of their respective organization and bring these strengths to bear on the process, rather than relying primarily on the technical input of PG&E. In addition, such members would be truly accountable to the major relevant constituencies, rather than individual interest and advocacy groups. The members of the DAP would bring long-term institutional knowledge, experience and stability to the DAP, would be nominated and selected in a public process, would be subject to conflict of interest requirements, and would be required to conduct open meetings in accordance with California law. The current DCDEP does not meet these criteria.

The primary function of the DAP would be to conduct regular public meetings where each member could to report on the activities and progress of their respective agencies and organizations, could discuss and resolve difficulties. More importantly, the DAP would provide the public with a single, coordinated forum for raising issues and seeking answers to legitimate concerns. While the DAP would be advisory only (a new regulatory entity is decidedly not needed), its meetings would include representatives from all relevant State and local agencies (USNRC could also be invited). This would facilitate communication and coordination among the many regulators and thereby promote a more efficient decommissioning process that is better understood by the public.

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<sup>1</sup> From 2004 to 2015 Alex Karlin served as an Administrative Judge with the U.S. Nuclear Regulatory Commission's Atomic Safety and Licensing Board. He presided over and decided litigation at nuclear facilities including Diablo Canyon, Vermont Yankee, San Onofre, and Yucca Mountain. Prior to that, he was the Associate General Counsel of at British Nuclear Fuels Ltd, Inc. a major international nuclear remediation company that performed radiological cleanup and decommissioning work at commercial nuclear power plants and at US Department of Energy nuclear sites such as Oak Ridge, Hanford, Idaho Falls, and Los Alamos. Prior to that he was Of Counsel at Morgan Lewis and Bockius, a law firm that represents over a third of the U.S. nuclear power companies. From 1978 to 1981 Mr. Karlin served as an Enforcement Attorney at US EPA in Washington D.C.



Accordingly, I urge that the California Public Utilities Commission (CPUC) NOT accede to PG&E's request simply to endorse and fund PG&E's DCDEP as is. Instead, I urge CPUC to charter a more robust, sustainable, and independent Decommissioning Advisory Panel (DAP) that will serve the public interest during the long, difficult, and crucial decommissioning process that lies ahead. The CPUC should create the new DAP as part of the 2018 Nuclear Decommissioning Cost Triennial Proceeding (NDCTP).

The attached chart COMPARISON OF CURRENT NUCLEAR DECOMMISSIONING ENTITIES reflects the current best practices for DAPs, as shown by the Indian Point (NY), Vermont Yankee (VT) and Pilgrim (Mass) DAPs. The CPUC should consider those best practices.

## **I. DCDEP IS NOT SUFFICIENT**

### **A. DCDEP LACKS ADEQUATE RESOURCES AND INDEPENDENCE.**

PG&E created the DCDEP to "provide direct input on behalf of the local community" to PG&E. More specifically, PG&E created the DCDEP as one way of responding to a part of a CPUC order, which stated that PG&E could "take no action with respect to any of the [DCNPP] lands and facilities before the completion of a future process, including a public stakeholder process, where there will be local input and further Commission review prior to the disposition of Diablo Canyon facilities and surrounding lands." CPUC Decision - D.18-01-022. The order focused on land and facility reuse, not decommissioning.

When it created the DCDEP, PG&E decided that it should be composed of eleven citizen-volunteers (plus one PG&E member). Original members were selected by a committee appointed by PG&E. PG&E barred elected officials from serving on the DCDEP. PG&E hired a facilitator to run the DCDEP and its meetings. PG&E wrote the DCDEP charter and only PG&E can amend it. Under the charter the DCDEP has no chair, no management committee, and no formal motions or voting. Only the facilitator, not the Panel, can create subcommittees. The charter specifies that PG&E decides whether the DCDEP can hold additional workshops or meetings. PG&E picks all DCDEP replacement members.

As to DCDEP's actual meetings - they are not run by the Panel but are instead, plainly, PG&E meetings. They are run by the facilitator appointed by PG&E. The meetings commence with a PG&E safety moment. PG&E representatives make the opening remarks and closing remarks. PG&E and the facilitator draft the agenda, the timetable for the meetings, and develop the power-point slides that are presented to the public at the meeting.

At the outset, PG&E stated that it created the DCDEP to help PG&E prepare for its December 2018 NDCTP submission to CPUC. PG&E's charter for the DCDEP states that "the continuation of the panel beyond that initial term [e.g. after December 2018] shall be determined by PG&E." Now, in the NDCTP, PG&E says that wants the DCDEP to continue until decommissioning is complete (approximately 2072) provided that CPUC requires ratepayers to pay for the DCDEP.

### **B. DCDEP HAS ELICITED VALUABLE INITIAL PUBLIC INPUT ON LANDS AND FACILITY REUSE ISSUES – BUT THESE ARE NOT REALLY DECOMMISSIONING ISSUES.**

During the 8 months of its existence the DCDEP has served PG&E as a useful forum for eliciting public comment on the two topics specified in D.18-01-022 – (1) what should happen to the 12,000+ acres of land at DCP, and (2) whether the structures and facilities at DCP should be re-used after the decommissioning is completed. With PG&E's authorization, the DCDEP held public workshops on these topics. Not surprisingly, the workshops confirmed that everyone wants PG&E to preserve and protect the 12,000+ acres in perpetuity, and everyone hopes that the facilities can be re-used to in a way that saves money, protects the environment,

promote jobs, and reduces traffic (not always compatible goals). No one is quite sure how to pay for it. The DCDEP Vision Statement articulates these uncontroversial findings and recommendations. I agree with my colleagues on most of these points.

**C. BUT THE DCDEP HAS NOT YET FOCUSED ON THE HARD PART - DECOMMISSIONING**

Although disposition of the 12,000 acres of DCP land has consumed much of DCDEP's energy it is crucial to recognize that land use is NOT really central to the task of decommissioning. It has nothing to do with the 10 CFR Part 50 decommissioning process and most of these lands are not even owned by PG&E. But D.18-01-022 focused on land and reuse and thus PG&E has asked DCDEP to do so. The DCDEP has not yet tackled the radiological decommissioning of the 770 acres that are the footprint of the NRC regulated nuclear power reactors. Alliance for Nuclear Responsibility has legitimately criticized the DCDEP on this count.<sup>2</sup>

**D. DCDEP CITIZEN-VOLUNTEERS HAVE SERVED DILIGENTLY AND IN GOOD FAITH – BUT DO NOT HAVE THE NEEDED KNOWLEDGE OR INSTITUTIONAL RESOURCES, ARE NOT ACCOUNTABLE TO, NOR BROADLY REPRESENTATIVE OF MAJOR CONSTITUENCIES, AND LACK THE LONG TERM INSTITUTIONAL HORSEPOWER OR PERSPECTIVE.**

The members of the DCDEP are all outstanding citizen activists – volunteers who bring a variety of perspectives to the DCDEP and who have served diligently and in good faith. They have worked hard and volunteered their time and effort. But virtually none of them have any knowledge, background, or skills related to the huge and crucial DCP decommissioning project that lies ahead and that will have major impact on San Luis Obispo and the State of California.<sup>3</sup> Nor do the DCDEP members even have access to decommissioning technical expertise or resources (other than PG&E) to help them (1) identify important issues, (2) formulate questions, and (3) evaluate the answers to such questions when PG&E and/or some advocacy group provides an answer. PG&E is the source of the DCDEP's understanding of decommissioning and how it works.

Meanwhile, the panelists are part time volunteers who probably cannot sustain attention or membership for the long haul. Some are busy with full-time jobs elsewhere. Some are activists advocates concerned about the agendas of their particular groups. The members are not formally accountable to the public and do not formally represent any governmental or regulatory agency or NGO. They are not subject to the normal conflict of interest rules applicable to public entities under California law.

**E. DCDEP CANNOT FARM-OUT DECOMMISSIONING ISSUES TO THE DCISC<sup>4</sup>**

My friend and colleague on the DCDEP - Lauren Brown, an outstanding member of the SLO community, - rejects my vision because, among other things he says, Diablo Canyon is unique and, if the DCDEP needs any help we can rely on the DCISC for decommissioning advice. I respectfully disagree. At the outset, I note that the decommissioning of Diablo Canyon is not so unique that it does not need an independent DAP. Many communities in the US are grappling with the same situation. Some get advance notice of the plant shut-down, some do not. Many of them have very active local environmental groups who have been monitoring plant safety issues for decades. As an environmental lawyer in the nuclear decommissioning field for 20+ years I

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<sup>2</sup> October 24, 2018 letter from Rochelle Becker, Executive Director of A4NR to the DCDEP.

<sup>3</sup> Linda Seeley and Alex Karlin are the only exceptions.

<sup>4</sup> Diablo Canyon Independent Safety Committee (DCISC).

have seen decommissioning happen numerous times. While no two decommissioning projects are the same, most of them follow very similar paths. And all of them need an independent, knowledgeable, and publicly accountable DAP.

Next, the DCDEP cannot and should not rely on the Diablo Canyon Independent Safety Committee (DCISC) for technical advice on decommissioning. First and foremost, the members of the DCISC were selected for their knowledge, skills and background in the safe operation of a nuclear power plant. Decommissioning is very different than operating one. It is a different skill set. The members of the DCISC are not experts in decommissioning.

Second, the CPUC charter to the DCISC prohibits it from working on decommissioning issues. The first substantive sentence of the charter of the DCISC limits its mission to providing safety advice relating to operations.

“The Committee shall review Diablo Canyon operations for the purpose of assessing the safety of operations and suggesting and recommendations for safe operations.” CPUC D.88-12-083, App. C, Att. A, Section 1.1.

The law states that “decommissioning” starts when “operations” cease. See 10 C.F.R. Section 50.82(a) (3) (“Permanent Cessation of Operations”). Thus, by its own CPUC charter, the DCISC expires in 2025. Even before that, DCISC has no authority to deal with decommissioning.

Third, the DCISC does not have the budget to serve as a decommissioning subcontractor to the DCDEP. The DCISC was created by the CPUC which provides it with an annual budget, paid for by ratepayers. The DCISC is not free to wander off and give technical support to issues outside of its expertise, authority and budget

The DCISC has neither the legal authority, expertise, nor budget to address decommissioning, even if it had the time to do so. Any such change would require a public ratemaking case and affirmative decision by the CPUC.

Fourth, as a regular observer and attendee at DCISC meetings, it is my opinion that, as a practical matter, the DCISC, despite its good will and best intentions, is not well situated to provide the DCDEP with prompt and responsive technical help. The DCISC is busy with its own agenda. Its three members come to town briefly three times a year and hold 2 days of public meetings. The DCISC cannot even legally meet with the DCDEP or anyone else without giving the public advance notice and opportunity to participate. So how and when is the DCISC going to meet in public to decide to help us with a particular decommissioning issue? And how long will it take for them to deal with the issue? Must we wait for their next public meeting? Since the DCISC farms out many of its own technical questions to its own outside consultants and subcontractors, is that what they will do? Why not have a DAP with its own decommissioning expertise and/or the authority to obtain its own outside technical help from paid consultants who will be immediately responsive to the DAP’s. In short, I believe that we are misguided if we think that the DCISC can provide us with timely and sufficient technical support on a regular basis.

## **II. KEY STAKEHOLDERS SUPPORT A STRONGER AND MORE ROBUST DECOMMISSIONING ADVISORY PANEL**

Several important voices and stakeholders have asserted that a stronger DAP is needed.

On October 24, 2018, Alliance for Nuclear Responsibility (A4NR), a knowledgeable and constructive participant in numerous CPUC proceedings concerning Diablo Canyon, sent a letter to the DCDEP asserting that it has failed to focus on decommissioning, and that the composition, organization, and independence of the DCDEP are inadequate.

Meanwhile, on October 10, 2018, David Victor, the Chair of the San Onofre Nuclear Generating Station Community Engagement Panel sent an email stating that elected officials and technically knowledgeable members (something lacking on the DCDEP) are vitally necessary:

“Elected officials are a vital resource [on the SONGS CEP] – perhaps the most important, because they are immersed into local politics, which gives them special insight into what is feasible and also judgment about where/how to focus.”<sup>5</sup>

Dr. Victor added that having technically knowledgeable experts on the SONG CEP has been invaluable:

“These experts are invaluable – not just in meetings but also outside the meetings, for two reasons. First, they can help organize and understand the range of stakeholder opinion. . . . Second, at times topics arise that have high technical content and it is really important for the CEP to be able to rely on its own members to wade through the details and help it formulate an opinion.”<sup>6</sup>

During the public comment period on the DCDEP vision, over 140 stakeholders, including the Surfriders Alliance and Edward Halpin, former Senior Vice President and Chief Nuclear Officer for PG&E, expressed support for a stronger DAP.

### **III. CPUC IMPLEMENTATION: CHARTER AN INDEPENDENT AND ROBUST DAP**

CPUC should charter and implement the new/modified decommissioning entity via a PG&E ratemaking process, preferably the Nuclear Decommissioning Cost Triennial Proceeding (NDCTP) that PG&E will initiate in December 2018. PG&E has advised us that it plans to ask CPUC to approve ratepayer funding for the current DCDEP. Before CPUC approves any such amount, members of the public and the CPUC Office of Ratepayer Advocacy need to evaluate whether the existing DCDEP is the appropriate vehicle. For reasons set forth above, I believe that rather than automatically approving PG&E’s DCDEP, the CPUC should allow the DCDEP to sunset, AND instead charter a more robust, sustainable, and independent DAP. More specifically, I recommend that the CPUC use the NDCTP ratemaking as the basis:

1. To create a robust and sustainable DAP in lieu of the DCDEP;
2. To develop a new and independent charter for the DAP;
3. To have CPUC conduct the nomination and appointment of DAP members,
4. To apply conflict of interest and public governmental procedures to the DAP;
5. To allow State and local agencies to designate members of the DAP to serve in their official capacities and to bring their perspectives and constituencies to the table;
6. To provide that Labor should have at least one designated seat on the DAP;
7. To provide the Native American community at least one designated seat on the DAP;
8. To assure that the DAP should include at least some members with knowledge and experience relevant to the decommissioning tasks,
9. To assure that the DAP include appropriate citizen and interest group representation,
10. To specify that the DAP be directly funded (not via PG&E) by ratepayer funding; and
11. To assure that the DAP access to needed administrative, scientific, legal and technical support, either by tapping resources of member governmental entities or by retaining part-time consultants who will provide independent help.

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<sup>5</sup> October 10, 2018 email from David G. Victor to Rochelle Becker attached to the October 24, 2018 A4NR letter.

<sup>6</sup> October 19, 2018 email from David G. Victor to Rochelle Becker attached to the October 24, 2018 A4NR letter.

Lauren Brown has said that creating a DAP in lieu of the DCDAP could cause harm by the loss of experience and knowledge of the DCDEP, by the loss of momentum, by the problem of getting the new DAP members up to speed, and the loss of credibility. I disagree.

I reject the proposition that the DCDEP, which has existed for a mere 8 months for a decommissioning process that could take 60 years, cannot be changed because we might lose momentum! While the DCDEP has certainly served PG&E well with regard to the land and facility reuse issues, as I have stated above, it does not bring much knowledge, skills or experience to any real decommissioning issues. And cosmetic improvements to the DCDEP charter are not going to solve the deficiencies I have enumerated above. Given that PG&E does not plan to close DCPP until 2025, CPUC has plenty of time to “get it right” at the outset by chartering a robust and independent panel as part of the NDCTP.

#### **IV. CONCLUSION**

Although I agree with most of the recommendations and ideas in the DCDEP Vision Statement, and commend my colleagues on the panel them for their hard work and good faith efforts, and I have been honored to serve with them, I must respectfully disagree them regarding one key point: The need for a stronger and more independent DAP to tackle the giant and long-term decommissioning task ahead. This task requires a better resourced, more representative, more accountable, more sustainable, and much more independent decommissioning panel.

Accordingly, I urge the California Public Utilities Commission (CPUC) NOT to fund the current DCDEP (an entity entirely of PG&E’s making). The CPUC should instead charter a more robust, sustainable, and independent Decommissioning Advisory Panel (DAP) that will serve the public\_interest during the long, difficult, and crucial decommissioning process that lies ahead. The CPUC should create the new DAP as part of the 2018 Nuclear Decommissioning Cost Triennial Proceeding (NDCTP).

***COMPARISON CHART OF CURRENT NUCLEAR DECOMMISSIONING ENTITIES  
FOLLOWS ON THE NEXT PAGE***

**COMPARISON OF PUBLIC OVERSIGHT COMMITTEES FOR  
DECOMMISSIONING OF NUCLEAR POWER PLANTS (12-11-2018)**

Name	Membership	Organization	Legal Status	Website
Diablo Canyon Decommissioning Engagement Panel  California	11 members Citizens No Govt Officials <sup>7</sup> . No Experts.  Appointed by committee appointed by PG&E.	Chair.  No voting  Facilitated by Utility appointed individual	None.  Created by PG&E  Can be closed by PG&E at any time.	<a href="https://www.pge.com/en_US/safety/how-the-system-works/diablo-canyon-power-plant/diablo-canyon-power-plant/engagement-panel.page?WT.mc_id=Vanity_engagementpanel">https://www.pge.com/en_US/safety/how-the-system-works/diablo-canyon-power-plant/diablo-canyon-power-plant/engagement-panel.page?WT.mc_id=Vanity_engagementpanel</a>
Diablo Canyon Independent Safety Committee <sup>8</sup>  California	3 members  All Experts  Appointed by Agencies	Chair  Voting  State funding. Outside consultants.	Created by State agency (CPUC).  Permanent	<a href="http://www.dcisc.org/index.php">http://www.dcisc.org/index.php</a>
Vermont Yankee Nuclear Decommissioning Citizens Advisory Panel  Vermont	19 members Govt officials Labor Rep. Citizens.  Appointed by Agency/union	Chair  Voting  Supported by State agency	Created by State law  Permanent	<a href="https://publicservice.vermont.gov/electric/ndcap">https://publicservice.vermont.gov/electric/ndcap</a>

<sup>7</sup> Although the DCDEP has one member who is employed by the County and one employed by the State, both are serving in their individual capacity and not as representatives designated by those agencies.

<sup>8</sup> The DCISC mission does NOT include decommissioning. It focuses on the operation of the plant. The DCISC does not include representatives or stakeholders from the SLO community. DCISC is only included here because it is an advisory committee related to Diablo Canyon.

Name	Membership	Organization	Legal Status	Website
Indian Point Closure Task Force  New York	20 members  Govt officials Labor Rep Citizens  Appointed by Agency/Union	Chair  Voting  Supported by State Agency	Created by State law.  Permanent	Too long for chart. See footnote <sup>9</sup>
San Onofre Nuclear Generating Station Community Engagement Panel  California	18 members  Govt officials Labor reps Citizens. Experts  Appointed by Agencies, Union & Utility	Elected Chair  Executive Committee  Voting  Supported by Utility and Agencies  Retains outside consultants	None.  Created by Utility.  Can be closed at any time.	<a href="https://www.songscommunity.com/community-engagement/community-engagement-panel">https://www.songscommunity.com/community-engagement/community-engagement-panel</a>

<sup>9</sup> <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=17-00994&submit=Search>

Name	Membership	Organization	Legal Status	Website
<p>Pilgrim Nuclear Decommissioning Citizens Advisory Panel</p> <p>Massachusetts</p>	<p>21 members</p> <p>Govt officials Labor rep Citizen</p> <p>Appointed by Agencies.</p>	<p>Elected chair</p> <p>Voting</p> <p>Supported by State Agency</p>	<p>Created by State law.</p> <p>Permanent</p>	<p><a href="https://www.mass.gov/orgs/nuclear-decommissioning-citizens-advisory-panel">https://www.mass.gov/orgs/nuclear-decommissioning-citizens-advisory-panel</a></p>
<p>Zion Community Advisory Panel</p> <p>Illinois</p>	<p>12 members</p> <p>Govt officials Expert, Citizens</p> <p>Appointed by Agencies</p>	<p>Chair</p> <p>Voting</p> <p>Supported by Utility and Agencies</p>	<p>None.</p> <p>Created by Utility.</p> <p>Can be closed at any time.</p>	<p><a href="http://www.zionsolutionscompany.com/community/zcap-charter/">http://www.zionsolutionscompany.com/community/zcap-charter/</a></p>
<p>Oyster Creek Safety Advisory Panel</p> <p>New Jersey</p> <p>Moribund?</p>	<p>3 members</p> <p>State agencies and one outside expert.</p> <p>Appointed by Governor</p>	<p>Chair</p> <p>Voting</p> <p>Supported by Agencies</p>	<p>Created by State law.</p> <p>Permanent</p>	<p><a href="https://njedl.rutgers.edu/news/oyster-creek-safety-advisory-panel-established">https://njedl.rutgers.edu/news/oyster-creek-safety-advisory-panel-established</a>  <a href="#">Vermont Yankee Nuclear Decommissioning Citizens Advisory Panel</a></p>



**Appendix B**  
***Maintain and Strengthen the Current DCDEP:  
A Response to “California Public Utilities Commission (CPUC) Should Create an Independent  
Decommissioning Advisory Panel (DAP) in Lieu of the DCDEP” by Alex Karlin***

December 2018

**by Lauren R. Brown – DCDEP Panelist<sup>1</sup>**

**Summary:** The Diablo Canyon Decommissioning Engagement Panel (DCDEP) has been in existence for nearly a year as a non-regulatory and advisory entity. During this time the DCDEP has proven to be very effective in reviewing information and providing direct input on behalf of the local community to Pacific Gas and Electric regarding decommissioning plans and activities. Given its positive accomplishments, funding for this Panel through PG&E’s decommissioning funds should continue through conclusion of the Diablo Canyon Power Plant (DCPP) decommissioning. The Panel is committed to continuous improvement and plans on an annual review of its Charter and an assessment of strengths, weaknesses and opportunities for improvement as part of its intention to play a constructive role through the decades of decommissioning at the DCPP.

**Unique conditions**

The circumstances of the decommissioning of the Diablo Canyon Power Plant are unusual in a number of ways in comparison with other nuclear power plants across the country undergoing decommissioning:

- Closure plans by PG&E were approved by the CPUC in January 2018, leaving 6 to 7 years of preparation before end of the operating licenses for Units 1 and 2, thus enabling the company plan thoroughly and to proceed directly to DECON instead of SAFSTOR.
- In December 1988 the CPUC established the Diablo Canyon Independent Safety Committee, consisting of three nuclear experts and a supporting staff in order to monitor the safety of operations at DCPP. They have been conducting quarterly assessments and issuing annual reports ever since. They have a well-known responsibility in the community to be fully aware of any potential or real safety issues at DCPP, to hold hearings on such matters and in this way serve as a voice of the community to PG&E.
- The DCISC has informally offered to be a source of safety and technical information to the DCDEP and within the body of our Vision Statement we are requesting a modification of their Charter to formalize that offer. We are also requesting that their Charter be modified to extend the existence of the DCISC past the end of power generation and through the end of decommissioning activities. San Luis Obispo has a history of activism on many issues, including groups that have closely monitored DCPP and played a part in strengthening the facility itself and safety programs at the Power Plant. Every single member of the DCDEP has a history of being active in community affairs and is highly committed to serve the public on the DCDEP.

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1. Lauren Brown is a member of the DCDEP. Following 3 years of service with the Peace Corps in India, he earned a Ph.D. in Organic Chemistry from University of California, Riverside. While still in graduate school in 1973 he co-founded JBL Scientific, a specialty biochemical company and moved to San Luis Obispo. He served as President/CEO of this company and its successor, Promega Biosciences until 2006. From 2006-2008 he served as President/CEO of Terso Corporation, another subsidiary of Promega located in Madison WI. Following retirement, he served as a part-time adjunct professor teaching Chemistry at Cerro Coso Community College in Mammoth Lakes CA for 3 years. Brown has served on boards of multiple non-profits in San Luis Obispo, including the YMCA and Chamber of Commerce. In 2013 he was honored as Citizen of the Year by the San Luis Obispo Chamber of Commerce.

- San Luis Obispo County already has a Council of Governments consisting of representatives of all the Cities plus the County and serves as a forum for the study and resolution of regional issues and thus should be equipped to deal with regional issues related to DCPD decommissioning.

As a result of these and other factors, I submit that Best Practices among Community Advisory Panels in examples of other decommissioning nuclear power plants may not translate into Best Practices for a Community Panel in the case of DCPD and San Luis Obispo. I will offer some conclusions on this issue at the end of this document.

### **DCDEP Make-up and Operation**

Major concerns expressed by Mr. Karlin in his paper include a lack of independence from PG&E, as well as lack of representation from elected officials and nuclear experts. It is, therefore, important to examine the make-up and operation of the DCDEP in order to fairly evaluate if these are serious flaws in the concept underlying the current Panel. I would offer these points of reference:

- PG&E asked a group of distinguished community leaders to recommend 11 public members from a total of 105 applicants to serve on the DCDEP, along with one PG&E representative. PG&E accepted their recommendations so PG&E did not play a direct role in who ended up on the Panel.
- The 11 public members were deliberately selected to be broadly representative of the County, both geographically as well as in terms of backgrounds and interests. Thus we have members who bring their experiences as a labor leader, a CA State Parks official, a business leader and scientist, a land-use planner, a retired administrative judge with the NRC, a County planner and CEQA expert, a Business Services expert for a public school system and member of the Northern Chumash Native American tribe, a retired city mayor and County Supervisor, a retired nurse-midwife and activist with Mothers for Peace and the Sierra Club, a lawyer and conservation activist, an Internal Medicine physician and community activist. This team of people thus are very broadly representative of the larger community, all of whom applied to serve as volunteers on the Panel and all seem to place a high priority on community service through their participation in the DCDEP.
- The DCDEP is set up for long-term viability. There are three over-lapping staggered terms with up to 1/3 of the members potentially retiring and needing to be replaced each year. As stated in our Charter, selection of replacement members should be done by PG&E, in consultation with the facilitator and the Panel. The staggered term element helps assure continuity of knowledge.
- Meetings of the DCDEP are facilitated by Chuck Anders, a well-known resource in our community who has helped many non-profits and organizations conduct their planning meetings. Chuck is retained by PG&E to assist the Panel in multiple ways. Typically, the topics for meetings are driven by members of the Panel, in consultation with PG&E. Mr. Anders then helps organize and conduct the meetings. But, strictly as a facilitator, not as a participant in the discussions. He is scrupulous in observing the limits of his role.
- The operation of DCDEP is supported extensively by PG&E, starting with Vice-President Jon Franke who fills the company position on the Panel. Another key individual is Tom Jones, Director of Strategic Initiatives. Behind them, are a couple dozen other PG&E employees who in one way or another provide support to the Panel. Now that sounds like a lot of PG&E involvement and could be perceived as overly controlling of the Panel. But, from my viewpoint, I strongly assert that PG&E's involvement is really restricted to support, not in any way to intervening and trying to influence outcomes. In my experience every PG&E employee is exemplary in understanding their role is support only. At no time have I felt manipulated or managed by PG&E. They project sincerely valuing our roles in serving as a conduit for collecting input from the public and in making recommendations to matters related to the decommissioning.

- Clearly, our Panel lacks technical experts who can help us (and the community we are in touch with) understand safety and technical issues, such as spent-fuel storage. However, thanks to the formation of the Independent Safety Committee in 1988 we have access to an extensive set of relevant information on any given technical and safety subject. The DCISC has informally offered to serve as support to our committee and we have already begun discussions with them how that offer might be implemented. We request the CPUC formalize their role in supporting the DCDEP through revising their Charter to include that component. We also request that the CPUC extend the Charter of the DCISC to cover the many decades of decommissioning.
- There was a deliberate decision by PG&E to exclude elected officials from the Panel. I agree with that decision. Having politicians as members risks over-politicizing the whole process of decommissioning, with the potential that individual politicians might care primarily for impacts in their particular electoral area and being less committed to finding solutions for the overall best outcome for the whole community.
- There is also a problem with including representatives of Regulatory Agencies because those individuals may hesitate to fully participate in the Panel decisions out of concern for conflict of interest should that particular issue come before them at the Agency they represent.

### **Scope of Work for the DCDEP**

The role of the DCDEP as outlined in our charter is straight-forward and limited:

*The Diablo Canyon Decommissioning Engagement Panel will review information and provide direct input on behalf of the local community to Pacific Gas and Electric Company on Diablo Canyon Power Plant decommissioning plans and activities.*

In terms of achieving progress in this responsibility I would point to one particularly important area. Prior to the work of the DCDEP, PG&E did not know for certain that the community would welcome both conservation of lands AND repurposing of some of the infrastructure remaining at the plant site after removal of a radiologically-contaminated materials. It could have been that the community at large would have preferred returning everything at the DCPD as nearly as possible to the original conditions. However, if the community showed support for repurposing as a means of promoting economic activities to offset the anticipated losses resulting from Diablo closure, then potentially the decommissioning costs could be reduced to the extent that infrastructure was retained and not demolished. Our panel undertook to gauge the public interest on this score by conducting two days of public workshops on land conservation and two days of public workshops on repurposing of infrastructure, plus a public Panel meeting following each of the two sets of workshops to review the information thus received. In fact, the DCDEP established strong support for both activities to run in parallel. We are conveying this important information to PG&E through the main Vision Document being submitted December 2018. The recommendations almost certainly will help PG&E with their specific plans for decommissioning and repurposing and thus reduce overall decommissioning costs. It is our expectation that the CPUC will also pay close attention to these findings and support PG&E's specific plans.

Mr. Karlin also recommends that a re-constituted Community Advisory Panel should have nuclear experts included in its membership. I disagree with that assessment. As Mr. Karlin himself emphasizes, the NRC controls all decisions regarding matters of removal of radiological contamination during decommissioning. They have set protocols and will not be paying any attention to any community advisory panel, no matter how constituted.

So, does the DCDEP have a role to play in this matter? Yes, indeed. Potentially a very important role as a forum for the public to express concerns over the decommissioning process and as a vehicle to ensure that those concerns are properly addressed in a dialogue with PG&E. A likely concern, for example, might be public anxiety about the removal of radiologically-contaminated materials from the plant site and their transport through adjacent communities. How could we assist in this matter if we lack technical experts? One way is to conduct community workshops specifically addressing relevant issues with invited experts to make presentations on the issues. In this regard, an alliance with the Independent Safety Committee could be exceedingly helpful if they make presentations at the workshops, educate the Panel AND the public as to levels of risk and ways to minimize such risk. We can also tap into experts at PG&E to participate in those discussions. The experts do NOT have to be serving as members of the Panel for this process to be effective. But by attending, the experts can hear the concerns expressed by the public (and Panel members) and respond directly. It could be a very healthy, productive process if done properly.

Mr. Karlin also advocates that members of the various regulatory agencies (in addition to the NRC) should be members of a reconstituted Panel. Again, I disagree. It should not be the role of the DCDEP to facilitate the various regulatory agencies working together. That is their responsibility to find ways to proceed when there might be overlapping or even contradictory stances on particular decision. Each of these agencies have established procedures that include public hearings, such as required by San Luis Obispo County when reviewing an Environmental Impact Report (prepared pursuant to CEQA).

So, does the DCDEP have a role to play in the way the various regulatory agencies are handling their responsibilities in the decommissioning process? Again, yes. And our role could be realized in the same way through public workshops with presentations being given by the various agencies to help educate the Panel and the public on particular issues of concern. For example, we could enhance the awareness of the community on the need to participate in a standard public hearing on an EIR report. There are a variety of ways in which our Panel could play a constructive role, all without having membership representation on the Panel from regulatory agencies.

One area of activity that seems to be embraced by the San Onofre Community Advisory Panel and its chairman, Dr. David Victor and that is advocacy for a national repository for nuclear spent fuel. While that is a worthy objective, I see that advocacy as essentially political in nature and we, as a Panel, should avoid undertaking such a role.

### **Potential Harm from Implementing Mr. Karlin's Community Advisory Panel Proposal**

There are several ways in which this proposal could have serious adverse consequences.

- Potential loss of momentum and commitment if members of the panel anticipated the DCDEP was going to be phased out.
- Potential loss of experience and knowledge resulting should current DCDEP members decline to transition to a new panel.
- Delay of one to two years because of time required for the CPUC to consider, recruit and implement its own community panel.
- More costly delays as a new panel attempts to come up to speed and has to recover ground already addressed by the current Panel.
- Loss of creditability with the community if they see splintering among the current Panel members and may tend to discount a second effort by a new Panel.
- Potential reduction in local representation if a new panel is organized under CPUC auspices. This happened with the DCISC which has no local representative among the three appointed experts.

### **One Significant Benefits from Mr. Karlin Advancing His Proposal**

I am very appreciative of Mr. Karlin advancing his proposal for this reason: He has raised the consciousness of each of our panel members as to whether or not the DCDEP could and should be improved. Of course, the answer is that any organization which desires to remain relevant and effective needs constantly to look for ways to improve. Our Panel was not focused on that concern as we were consumed with compiling a Vision Document that constituted our best wisdom to PG&E on the topics we have covered thus far. But we are only just beginning what will be a decades-long process and will involve the efforts of many classes of future Panel members. It would be extremely helpful if we were to embrace a culture of continuous improvement. Toward that end, our Panel has resolved to step back after one year of operation and assess how we are doing, consider our strengths, weaknesses and opportunities for improvements. The scope of our assessment should be broad, including the organizing Charter, our make-up and operations and procedures. We will emerge with a stronger foundation for the work of decades ahead. For that focus on improvement, I am sincerely appreciative of Mr. Karlin.

### **Conclusions**

Based on the considerations outlined above, I assess that the Diablo Canyon Decommissioning Panel has proved itself effective thus far. I further conclude that because of the special circumstances that exist here that the DCDEP represents Best Practices for our circumstances in San Luis Obispo. And Best Practices, of course, includes a strong element of continuous improvement. The DCDEP is so committed. It is a robust entity, set up for the long haul as PG&E undertakes the decommissioning of DCPD and the DCDEP is prepared to play an effective role in interaction between PG&E and the community of San Luis Obispo County. I urge the CPUC to continue supporting the functioning of the DCDEP.

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Appendix C  
*Opposition to Consolidated Interim Storage*

May 2019

by Linda Seeley – DCDEP Panelist

**“The existence of large quantities of high level radioactive wastes, such as would be produced in a major atomic power industry, would create a very special problem in that the amounts of long-lived materials at any one time would be sufficient to seriously contaminate very large regions of the earth for centuries to come.**

**This statement is made simply to emphasize the fact that if we were to go on for 50 years in the atomic power industry, and find that we had reached an impasse, that we had been doing the wrong thing with the wastes and we would like to reconsider the disposal methods, it would be entirely too late, because the problem would exist and nothing could be done to change that fact, for the next, say 600 or a thousand years.”**

L. P. Hatch, Brookhaven National Laboratory, testimony before the  
U.S. Joint Congressional Committee on Atomic Energy, January 30, 1959

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The nation’s nuclear power plants are in a difficult situation. Many years ago, when the nuclear industry was in its infancy, the U.S. Department of Energy (DOE) reassured operators of nuclear plants that their radioactive waste would be taken to a permanent geological repository for safe storage for millennia into the future. This promise was made without the DOE’s having identified or developed a location for the repository. Now, nearly a half century later, there is still no permanent repository for nuclear waste, and the waste is piling up at power plants across the nation. With all of the spent fuel pools full, the industry developed dry cask storage, in which radioactive fuel that has cooled in spent fuel pools for a specified number of years can be more safely stored in casks at the plant sites.

In 1998, nuclear plant owners sued the DOE for renegeing on its promise to take responsibility for fuel removal, and the DOE was found liable. Since that ruling, nuclear operators have been paid by the DOE to store radioactive fuel onsite in dry casks.

Now, great effort is being made to develop Consolidated Interim Storage (CIS), interim storage that will allow nuclear plants to ship their dry casks to storage sites in both Southwestern Texas and Southeastern New Mexico, where private companies are proposing to store the waste until a permanent repository is identified, permitted, and built.

Both sites proposed for interim storage are in sparsely populated, economically stressed locations with very poor, mostly non-White populations. In both Texas and New Mexico, local citizens have organized to prevent the facilities from being built. Local politicians generally support the idea because of the income that will be generated for the areas during the construction phase of the storage sites.

On May 8, 2019, the Atomic Safety and Licensing Board (ASLB), the judicial branch of the Nuclear Regulatory Commission (NRC), dismissed all contentions made by environmental and social justice groups objecting to the Holtec International CIS proposal in New Mexico, leaving the groups with no recourse except to appeal the ASLB decision.

## ETHICAL REASONS FOR OPPOSING CIS

With the splitting of the atom, scientists created radioactive elements that do not appear in the atomic table, and those elements can cause DNA mutations resulting in numerous health problems, including but not limited to cancer, immune system problems, heart defects, developmental disabilities, and glandular problems. Scientists created, and the United States used, nuclear bombs that, in the opinion of many, ended World War II while sacrificing the lives of hundreds of thousands of innocent people. Post-war, the government instituted the “Atoms for Peace” initiative to develop atomic energy from nuclear power plants that would be “too cheap to meter.” The Department of Defense also had a need for plutonium for nuclear weapons, and nuclear power plants generated that plutonium for the defense industry.

Now, a half-century later, nuclear plants are closing around the nation. Nuclear power is not cost competitive with renewable energy and conservation practices, and it produces tons of nuclear waste each year.

This nuclear waste will be with us long after institutions have collapsed, after humans have witnessed the ravages of climate chaos, and after our modern languages have disappeared.

Sending the nation’s nuclear waste to economically depressed and sparsely populated areas of the United States is inherently unfair. The proposal not only violates the sovereignty of the local populations who oppose interim storage, but goes against the U.S. Government’s own recommendations for a consent-based interim storage siting process. Responsibility for the waste produced at Diablo Canyon lies with the people of California, who benefitted from the power it generated, not the people of New Mexico. It was the corporation in California that made the guaranteed profit from producing the power, not a corporation in New Mexico. And California is politically strong, as opposed to New Mexico. California has 53 Congressional representatives; New Mexico has 3. New Mexico simply doesn’t wield power in Congress, and therefore it is all too easy to sacrifice its lands and people.

Transportation of highly irradiated nuclear waste is dangerous, and the proposed shipping routes transect almost every major population center in the U.S. This puts many millions of Americans at risk. Why would we choose to potentially expose so many to the risk of radiation exposure?

I ask members of the Panel to consider this: What if the tables were turned? What would you think if San Luis Obispo County – the Carrizo Plain – were chosen to host the nuclear waste from the whole nation’s nuclear power plants? Would you think it to be a fair choice of location? And if not, why not?

Moneyed interests of the few sway the decisions made in this country. But for once, we have an opportunity to do the right thing. We know that it is possible to improve the safety of the storage system on site at Diablo Canyon. Strong dry casks are available for use right here, and PG&E can make the choice to use those strong casks. Keeping the waste on site at the point of production creates far better incentives for the ultimate selection, permitting and construction of a permanent geological repository. If the waste is allowed to be moved “away,” it will be forgotten. That’s human nature.

As a Decommissioning Engagement Panel, we have an opportunity to think outside of our own personal interests and test our moral integrity with respect to the future generations. I urge you to join me in opposing Consolidated Interim Storage of highly radioactive nuclear waste. The decommissioning planning process at Diablo Canyon is being watched all across the nation. Our panel can set a precedent for other nuclear sites, embodying a sense of fair play and environmental justice.

Keep it here. Keep it safe.

Other reasons for opposing CIS are as follows:

- A. The process of siting, licensing and constructing a permanent nuclear waste repository in the United States has been underway for decades. That process is fundamentally broken and prospects for resolving it are bleak. As a result, these “interim” sites are likely to become *de facto* permanent sites.
- B. The interim storage proposal violates The Nuclear Waste Policy Act of 1982, as amended (the “NWPA”). The NWPA states that no interim storage of nuclear waste may be permitted unless and until a permanent repository has been identified and approved by Congress. No permanent repository has yet been identified and approved. Thus, the proposal for CIS violates the NWPA and would require Congressional legislation authorizing such a facility to be lawful.
- C. The Holtec site in New Mexico is an unsuitable location for nuclear waste storage of any duration. Storing 174,000 metric tons of highly radioactive nuclear fuel above ground in an area that has become plagued by earthquakes since the fracking boom has moved into the area is highly inadvisable. Earthquakes dramatically increase the risk of accidental releases of radiation and create an unacceptable threat to the health and wellbeing of local populations and the environment.
- D. The energy industry in general, and nuclear industry in particular, has all too often prioritized corporate profits over broader safety, security, health, and environmental concerns. Because the profit motive trumps all in business practices, these two dump sites in the desert have the potential to be neglected, poorly maintained, and forgotten until there is an accidental or intentional release of radiation into the atmosphere, groundwater, or soil.
- E. As detailed in the environmental coalition filings against CIS, the dozens of contentions filed on September 14, 2018 include the following categories (some of the contentions were raised by multiple intervenors; the total number of contentions filed adds up to 40+)<sup>10</sup>

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<sup>10</sup> (1) impacts on Native American and other historic and pre-historic properties on the site;  
(2) insufficient assurances of financing for construction, operation, and decommissioning;  
(3) underestimation of so-called “low-level” radioactive waste volumes that would be generated;  
(4) improper reliance on NRC Generic Environmental Impact Statement presumptions;  
(5) natural gas fracking and potash mining beneath the site;  
(6) the public health threat from the “Start Clean/Stay Clean” philosophy’s risks of shipping, and inadequate analyses of the substantial risks of these shipments through most states, over decades;  
(7) inconsistent predicted lengths for “interim storage” period, from 40 to 100, 120, or even 300 years, timeframes that could dangerously exceed the design and surface life of the containers;  
(8) unmet safety and security risk analyses for the scale of transport and storage proposed;  
(9) troubling geological formations and conditions beneath the site;  
(10) no compelling purpose and need for the CISF;  
(11) impacts on endangered and threatened species;  
(12) thermal concerns associated with corrosion of the containers;  
(13) groundwater and brine concerns at the site, including threats of radioactive contamination reaching area drinking and irrigation water aquifers downstream;  
(14) risks of high burnup irradiated nuclear fuel degradation and failure.



**Appendix D**  
**Letters from the Diablo Canyon Decommissioning Engagement Panel**

Letter to the California Public Utilities Commission - Request to Lift Partial Order of Decision 18-01-022 (Jan. 11, 2018) Regarding Diablo Canyon Lands/Wild Cherry Canyon

Letter to the California Public Utilities Commission – Request for Public Workshop in San Luis Obispo On the Tribal Land Transfer Policy Guidelines



November 3, 2018

President Michael Picker  
Commissioners Petersman, Aceves, Randolph, and Rechtschaffen  
California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, CA 94102

Subject: Retirement of Diablo Canyon Nuclear Power Plant  
Request to Lift Partial Order of Decision 18-01-022 (Jan. 11, 2018)  
Regarding Diablo Canyon Lands/Wild Cherry Canyon

Dear President Picker and Commissioners:

As the Diablo Canyon Decommissioning Engagement Panel, we write this letter to request the California Public Utilities Commission to lift a portion of the Order contained in Section 13 of the Decision Approving Retirement of the Diablo Canyon Nuclear Power Plant (DCPP) (Decision 18-01-022 January 11, 2018) (“Decision Approving Retirement”) with respect to the 2400-acre Wild Cherry Canyon property contained within the approximately 12,000 acres that comprise the Diablo Canyon Lands (see attached map).

Specifically, we ask the Commission to allow Pacific Gas & Electric to engage in discussions with the leaseholder HomeFed, conservation organizations (including State Parks, the Wildlands Conservancy, Friends of Wild Cherry Canyon, the Land Conservancy of San Luis Obispo County and/or other groups dedicated to conservation rather than development), and members of the Engagement Panel, to the extent that those discussions are limited to furthering an outcome for the property that precludes home and commercial development and ensures in-perpetuity conservation of Wild Cherry Canyon, along with public access consistent with protection of the resources.

By way of background, the Friends of Wild Cherry Canyon filed a protest to PG&E application to retire DCPP, requesting that the 12,000 Diablo Canyon Lands (including Wild Cherry Canyon) be conserved. In the Decision Approving Retirement, the Commission stated, however, that “it is premature to address land use, facilities and decommissioning issues” but noted that

“PG&E has committed to take no action with any of the lands and facilities, whether owned by the utility or a subsidiary, before completion of a future process including a public stakeholder process.” The Commission further stated that “PG&E is directed to abide by the commitment.” (Decision Approving Retirement, Section 3.7).

Further, in the Decision Approving Retirement, the Commission included in Section 13 of its Order the following:

“13. Pacific Gas and Electric Company will take no action with respect to any of the lands and facilities, whether owned by the utility or a subsidiary, before completion of a future process including a public stakeholder process; there will be local input and further commission review prior to the disposition of Diablo Canyon facilities and surrounding lands.”

For a variety of reasons, we request that the “no action” order be revised. First, although the order may have been put in place to prevent an outcome of the lands that was potentially contrary to conservation, today the facts are different. The leaseholder of Wild Cherry Canyon (HomeFed) is now willing to explore a conservation sale (as opposed to a master planned development) and is already in informal discussions about that with The Wildlands Conservancy and others. Those discussions will be stalled, however, if PG&E cannot participate in them, as the conservation of the property necessarily includes the transfer of both the leasehold and the ownership interest held by PG&E’s subsidiary to a conservation entity.

Second, the “public stakeholder process” required in the Order is well under way. The Diablo Canyon Decommissioning Engagement Panel was formed in May, and the Panel along with PG&E has hosted monthly public meetings since. Certain meetings were specifically focused on land use (August 29) and utility facilities (September 26). The panel and PG&E also hosted four, day-long public workshops on lands (August 17 and 18) and facilities (September 14 and 15). During this public stakeholder process, the voice of the community was loud and clear, and overwhelmingly in support of conservation for public access and resource protection. This opinion was expressed via workshop presentations, hearing comments, online comments, and in other forms including endorsements adopted by several local organizations. To date, for example, the panel has received 465 comments; 336 (72%) addressed the Diablo Canyon Lands specifically, with almost unanimous support of conservation and managed public access.

Third, Friends of Wild Cherry Canyon (which filed the original Protest) is in agreement with the limited lifting of the order, per the attached letter of support.

For the foregoing reasons, the Diablo Canyon Decommissioning Engagement Panel respectfully requests that the Commission lift, in part, Order Section 13 of the Decision Approving Retirement. Specifically, we ask the Commission to allow PG&E to engage in conservation discussions regarding its Wild Cherry Canyon property with leaseholder HomeFed and conservation organizations including State Parks, the Wildlands Conservancy, Friends of Wild

Cherry Canyon, the Land Conservancy of San Luis Obispo County, and/or other groups dedicated to conservation rather than development. We additionally request that the Commission proceed immediately in lifting the Order as specified, given the current availability of conservation bond funds due to the passage of the Park Bond (Proposition 68) in June of 2018. Those funds are competitive, and we hope to be able to access that funding before it is depleted.

By lifting the Order as requested, the Commission will enable Wild Cherry Canyon conservation discussions to proceed, possibly enabling the sale of both the utility/subsidiary ownership interest, as well as any leasehold interest by HomeFed, to a conservation entity. This would ensure long term protection of this beautiful and ecologically rich area, for the benefit of people and wildlife. We ask for your assistance in reaching this important goal for this community and beyond.

Sincerely,

The Diablo Canyon Decommissioning Engagement Panel

Attachments: Map of Diablo Canyon Lands  
Letter of Support by the Friends of Wild Cherry Canyon

cc: Thomas P. Jones, Pacific Gas and Electric  
Paul Borden, HomeFed Corporation  
Dan York, The Wildlands Conservancy



DIABLO CANYON  
**Decommissioning Engagement Panel**

March 13, 2020

President Batjer  
Commissioners Guzman Aceves, Shiroma,  
Rechtschaffen, and Randolph  
California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, CA 94102  
(Via Email and U.S. Mail)

Subject: **Request for Public Workshop in San Luis Obispo  
On the Tribal Land Transfer Policy Guidelines**

Dear President Batjer and Commissioners:

We are the members of the **Diablo Canyon Decommissioning Engagement Panel**. Formed in 2018, the Panel was created to foster open and transparent dialogue between members of the local community and PG&E on topics regarding the decommissioning of the Diablo Canyon Power Plant. Over the last two years, we have held multiple public meetings and workshops, to address such issues as the management of spent fuel, the economic impacts of decommissioning, and the disposition of the 12,000 acres that surround the power plant known as the “Diablo Canyon Lands.” (You can learn more about the Panel by visiting our website at [www.diablocanyonpanel.org](http://www.diablocanyonpanel.org))

It has come to our attention that the California Public Utilities Commission passed the Tribal Land Transfer Policy (Policy) at the end of 2019. The Panel was unaware that the Policy had been adopted until after it became final. This is unfortunate because the Policy could have a significant impact on the decommissioning process and specifically the disposition of the Diablo Canyon Lands – an issue of high importance to the local community. **We would have liked to provide input to CPUC about the Policy but were not given the opportunity to do so.**

We understand now that the CPUC is sponsoring a public workshop on the implementation guidelines for the new Policy (Guidelines). Yet, the workshop will be held in Brooks, California, which is over 300 miles away from San Luis Obispo. Given this distance, it is not practicable for members of the Panel nor community to attend this meeting. And yet, like the Policy, the Guidelines may have a direct impact on the future of the Diablo Canyon Lands and their potential for conservation and public access.

It is imperative that our local community -- which will be directly impacted by the Policy and Guidelines -- have an opportunity to provide input on the Guidelines. We therefore respectfully request that the **CPUC hold a public workshop in San Luis Obispo before the Policy guidelines are adopted**. In this way, the Panel and the community can hear first-hand from the CPUC itself about the direction of the Policy as well as provide input on how the Policy may be implemented in a manner that could provide a win-win solution for tribes, the community, and PG&E.

Please advise as soon as possible whether a CPUC public workshop can be scheduled in San Luis Obispo *before* the Policy Guidelines are adopted. As explained before by Panel member Kara Woodruff, the County of San Luis Obispo has agreed to accommodate such a workshop for the CPUC at the Board of Supervisors Chambers in the County Government Center; moreover, the Panel stands ready to assist in making arrangements for the CPUC’s visit.

We understand that measures to prevent the spread of the coronavirus may create an obstacle for a public hearing at this time, but we can offer two approaches to overcome this issue. First, a CPUC meeting – like the Engagement Panel meeting earlier this week – could be conducted “electronically.” That is, the CPUC Commissioners and the Panel members could meet in person at the Board Chambers (mentioned above), while being live-streamed to a larger, community audience. Public comments made online can be read onto the record and to the Commissioners and Panel members during the public comment period.

Alternatively, we can postpone the public workshop in San Luis Obispo until such a time when the uncertainties of the coronavirus have passed. We are fine with this approach, so long as the CPUC can assure us **that no final decisions will be made on the Policy Guidelines until the local workshop is held.**

We look forward to working with you on the successful implementation of the Tribal Land Transfer Policy and hope that you will appreciate our desire and request to allow for public input on the issues of high importance to our community. Please let us know at your earliest convenience whether you will accommodate our request.

Sincerely,

Diablo Canyon Decommissioning Engagement Panel:

David Baldwin  
Dena Bellman  
Lauren Brown  
Sherri Danoff  
Alex Karlin  
Scott Lathrop  
Frank Mecham  
Nancy O’Malley  
Linda Seeley  
Kara Woodruff

cc: Jonathan Koltz, Legal Advisor to Commissioner Guzman Aceves  
Leuwam Tesfai, Chief of Staff, Commissioner Shiroma  
Stephanie Green, Tribal Liaison  
Allison Brown, Public Advisor  
Tom Jones, PG&E  
Maureen Zawalick, PG&E  
Jim Welsch, PG&E  
Erik Jacobson, PG&E  
Charles Anders, Engagement Panel Facilitator  
San Luis Obispo County Board of Supervisors

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DIABLO CANYON  
Decommissioning Engagement Panel

April 22, 2019 / May 17, 2019

To: Interested Parties

From: Diablo Canyon Decommissioning Engagement Panel

Subject: Revisions/Updates/Additions to the Strategic Vision Document

The following is a summary of the revisions to the Strategic Vision Document (as of May 2019):

- The Vision Document was amended by the DCDEP at their Administrative Meetings of April 22, 2019 and May 17, 2019. The revisions were based on comments received from the public.
- Two Sections were added in Sections III and IV entitled “Emergency Planning” and “Spent Fuel Management”. These sections include Visions, Goals and Recommendations, in addition to introductory/educational language about these subjects.
- A new subsection was added in Section I under Decommissioning entitled “Ownership of Nuclear Power Plants During Decommissioning”. This subsection provides information about how other nuclear power plants in the U.S. are completing decommissioning activities.
- The DCDEP panel membership was updated to reflect Jim Welsch replacing Jon Franke as the PG&E representative.
- The Public Outreach section was updated to reflect up to date numbers of comments and links to meetings workshops held since the Vision Report’s release in January 2019 through May 2019 and to delete Subsection “C” – Numbers of Comments by Topic Table.
- The Public Outreach section was updated to reflect up to date numbers of comments and links to meetings workshops held since the Vision Report’s release in January 2019 through February 2020 and to delete Subsection “D” - Public Comments Received on Draft Vision, Goals and Recommendations.
- The Glossary was updated to reflect the new terminology used in the Emergency Planning and Spent Fuel Management Sections.
- An Appendix C was added to reflect a dissenting opinion from a DCDEP member regarding transport of Spent Nuclear Fuel to an Interim Storage Facility.

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DIABLO CANYON  
**Decommissioning Engagement Panel**

January 27, 2020

To: Interested Parties

From: Diablo Canyon Decommissioning Engagement Panel

Subject: Revisions/Updates/Additions to the Strategic Vision Document

The following is a summary of the revisions to the Strategic Vision Document (as of February 2020):

- The Vision Document was amended by the DCDEP at their Administrative Meeting of January 27, 2020. The revisions were based on comments received from the public.
- A new section was added in Sections III and IV entitled “Potential Economic Impacts/Possible Economic Development Opportunities”. This section includes Visions, Goals and Recommendations, in addition to introductory/educational language about this subject.
- The DCDEP panel membership was updated to reflect Trevor Keith as an ex-officio member.
- The Public Outreach section was updated to reflect up to date numbers of comments and links to meetings workshops held since the Vision Report’s release in January 2019, delete Subsection “C” – Numbers of Comments by Topic Table, revise Subsection “B” to reflect public outreach completed in 2019 and add new Subsection “C” to reflect outreach planned for 2020.

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August 27, 2020

To: Interested Parties

From: Diablo Canyon Decommissioning Engagement Panel

Subject: Revisions/Updates/Additions to the Strategic Vision Document

The following is a summary of the revisions to the Strategic Vision Document (as of July 2020):

- The Vision Document was amended by the DCDEP at their Administrative Meeting of August 27, 2020.
- A new section was added in Sections III and IV entitled “Transportation of Non-Radioactive and Low-Level Radioactive Waste Materials”. This section includes Visions, Goals and Recommendations, in addition to introductory/educational language about this subject.
- The DCDEP panel membership was updated to reflect the resignation of Frank Mecham.
- The DCDEP formation section was condensed and a new section added to reflect the process of reappointments and filling vacancies.
- The Public Outreach section was updated to reflect up to date numbers of comments and links to meetings workshops held since the Vision Report’s release in January 2020.
- Other miscellaneous modifications needed to keep the document up to date.

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DIABLO CANYON  
Decommissioning Engagement Panel

March 1, 2021

To: Interested Parties

From: Diablo Canyon Decommissioning Engagement Panel

Subject: Revisions/Updates/Additions to the Strategic Vision Document

The following is a summary of the revisions to the Strategic Vision Document (as of March 2021):

- The Vision Document was amended by the DCDEP on March 1, 2021.
- A new section was added in Sections III and IV entitled “Water Resources”. This section includes Visions, Goals and Recommendations, in addition to introductory/educational language about this subject.
- The DCDEP panel membership was updated to reflect the resignation of Nancy O’Malley and the appointments of Timothy Auran, Patrick Lemieux and Charlene Rosales.
- The Public Outreach section was updated to reflect up to date numbers of comments and links to meetings workshops held since the last update to the Strategic Vision in August 2020.
- Other miscellaneous modifications needed to keep the document up to date.

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DIABLO CANYON  
Decommissioning Engagement Panel

April 1, 2022

To: Interested Parties

From: Diablo Canyon Decommissioning Engagement Panel

Subject: Revisions/Updates/Additions to the Strategic Vision Document

The following is a summary of the revisions to the Strategic Vision Document (as of April 2022):

- The Vision Document was amended by the DCDEP at their Administrative Meeting on February 23, 2022 and by response to a follow up email on April 1, 2022.
- A new section was added in Sections III and IV entitled “Decommissioning Land Use Permit and the CEQA Process”. This section includes Visions, Goals and Recommendations, in addition to introductory/educational language about this subject.
- The DCDEP panel membership was updated to reflect the resignations of Lauren Brown and Alex Karlin and the appointments of Bill Almas and Mariam Shah.
- The Public Outreach section was updated to reflect up to date numbers of comments and links to meetings workshops held since the last update to the Strategic Vision in March 2021.
- Other miscellaneous modifications needed to keep the document up to date.

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DIABLO CANYON  
**Decommissioning Engagement Panel**

April 16, 2023

To: Interested Parties

From: Diablo Canyon Decommissioning Engagement Panel

Subject: Revisions/Updates/Additions to the Strategic Vision Document

The following is a summary of the revisions to the Strategic Vision Document (as of December 2022):

- The Vision Document was amended by the DCDEP by email on April 16, 2023.
- A new section was added in Sections III and IV entitled “New Spent Nuclear Fuel Storage System”. This section includes Visions, Goals and Recommendations, in addition to introductory/educational language about this subject.
- A new subsection was added to describe the potential for continuing operations at DCP, including links for the public to stay involved in that process.
- The DCDEP panel membership was updated to reflect the resignations of Patrick Lemieux and Sherri Danoff and the appointments of Michael Lucas, Bob Pavlik and Bruce Severance.
- The Public Outreach section was updated to reflect up to date numbers of comments and links to meetings workshops held since the last update to the Strategic Vision in April 2022.
- Other miscellaneous modifications needed to keep the document up to date.

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