

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA



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Application 16-08-006
(Filed August 11, 2016)

Application of Pacific Gas and Electric Company for
Approval of the Retirement of Diablo Canyon Power
Plant, Implementation of the Joint Proposal, And
Recovery of Associated Costs Through Proposed
Ratemaking Mechanisms (U39E).

**OPENING COMMENTS OF THE
CENTER FOR ENERGY EFFICIENCY AND RENEWABLE TECHNOLOGIES
ON THE PROPOSED DECISION OF ALJ ALLEN**

November 29, 2017

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ON THE PROPOSED DECISION OF ALJ ALLEN**

The Center for Energy Efficiency and Renewable Technologies respectfully submits these Opening Comments on the Proposed Decision of Administrative Law Judge (ALJ) Allen Approving Retirement of Diablo Canyon Nuclear Power Plant (“Proposed Decision”) mailed on November 8, 2017. These Opening Comments are timely filed and served pursuant to Rule 14.3 of the Commission’s Rules of Practice and Procedure, the instructions accompanying the Proposed Decision, and the ALJ’s Email Ruling issued on November 14, 2017, extending the due date for these Opening Comments to November 29, 2017.

**I.
CONTRARY TO APPLICABLE LAW AND THE RECORD
IN THIS APPLICATION, THE PROPOSED DECISION WHOLLY ERRS
BY FAILING TO ADOPT OR COMMIT TO PROPOSED
GHG-FREE ENERGY REPLACEMENT FOR DIABLO CANYON’S OUTPUT.**

A. The Proposed Decision’s *Rejection* of a Minimal Amount of GHG-Free Energy Replacement for Diablo Canyon’s Output Is *Not* Based on the Application, Does *Not* Account For the Applicable Record or Law, and Results in a Disappointing, If Not Shocking, Departure from the Governor’s and California’s Climate Change Goals and Mandates.

Despite the fact that this Application required *seven (7) days* of hearing¹ and resulted in more than 1,000 transcript pages, the admission of more than 100 exhibits, and the submission of multiple, lengthy briefs, some filed jointly by several parties, the Proposed Decision reduces this record to a simplistic 13 Findings of Fact and 11 Conclusions of Law to solely support authorization for Pacific Gas and Electric Company (PG&E) to retire the retirement of Diablo

¹ The Proposed Decision mistakenly states that the hearings ended on April 27, 2017, when in fact they ended on April 28, 2017. (Proposed Decision, at p. 5.)

Canyon Nuclear Power Plant (Diablo Canyon) with some limited ratemaking relief.² In doing so, the Proposed Decision fundamentally errs from the outset in treating the requests made in the Application and the Joint Proposal as severable and limited to retirement of the Diablo Canyon Nuclear Power Plant (Diablo Canyon). However, the request to retire Diablo Canyon was only one part of the *comprehensive* “Joint Proposal,” either in its original form or as later amended, that was founded on important trade-offs between the parties, including PG&E, designed to ensure the replacement of a greenhouse gas (GHG) emissions free resource (Diablo Canyon) with GHG-free energy consistent with California law and policy.

Thus, PG&E’s Application was not merely “supported” by the parties that had signed the “Joint Proposal,” as erroneously stated by the Proposed Decision,³ but was *founded on implementation* of the Joint Proposal itself,⁴ as the very caption to this Application indicates. Yet, there is *no* Finding of Fact, *no* Conclusion of Law, and *no* Ordering Paragraph in the Proposed Decision that makes any reference to the Joint Proposal, despite it being integral to the Application and the subject of extensive testimony, multiple days of hearing, and briefs. A suggestion at the Oral Argument held on November 28, 2017, that somehow treating the Joint Proposal in such a dismissive fashion was appropriate because it was not a Settlement Agreement is absurd. Nothing about a “Settlement Agreement” makes it any more valid as a position statement of parties – especially where, as here, the Joint Proposal was also supported by record evidence as to each of its proposals. In fact, the Commission’s own history of rejecting and modifying Settlement Agreements – no matter how many parties join – represents how fickle the Commission’s treatment has been of those commitments.⁵

Here where the Joint Proposal’s requests were directly supported by evidence, there is no justification for the Proposed Decision to engage in its “piecemeal” decision-making on that record, which it claims to be trying to avoid,⁶ that results in the rejection of a unique opportunity for the Commission to *ensure* a transition from the retirement of a nuclear facility to new, replacement electric generation resources that will meet be California’s zero carbon goals.⁷

² Proposed Decision, Ordering Paragraph 1, at p. 51.

³ Proposed Decision, at p. 3.

⁴ Application, at p. 12.

⁵ See, e.g., Decision (D.) 14-12-024.

⁶ Proposed Decision, at p. 22.

⁷ Id.

That opportunity is clearly stated in the Application: “[I]ncrease[d] investment in energy efficiency, renewable resources, and other GHG-free resources while phasing out nuclear power in California in 2024 and 2025,” with its specific requests reflecting a “shared vision concerning the best and most responsible path forward for Diablo Canyon,” with a “transition period “that “will help to ensure that power remains affordable and there is *no increase in the use of fossil fuels.*”⁸

What this Joint Proposal, and the supporting record, fundamentally understands, but is lost on the Proposed Decision, is that the greenhouse gas emissions impacts of a closure of Diablo Canyon does not arise simply from its “retirement,” since Diablo Canyon is a GHG-free resource, but from the resources required to be procured to *replace* that power. This nexus between “retirement” and “replacement” is wholly missed by the Proposed Decision that simply approves Diablo Canyon’s retirement, but rejects any commitment to or approval of GHG-free energy replacement for that lost output based on a “finding of fact” that “the impact of the retirement of Diablo Canyon on greenhouse gas emissions is not clear.”⁹

Not only is this statement *not* a “finding of fact,” since no facts are stated or offered by the Proposed Decision in support, but it is also apparently based on another unsupported conclusion in the Proposed Decision. Namely, the Proposed Decision states that “it is not clear based on the *limited* record in this proceeding *what level of* GHG-free procurement (if any) may be needed to offset the retirement of Diablo Canyon.”¹⁰

This statement is way off base. To begin with, the record in this Application on this issue was *not* “limited.” As detailed below, the record in fact supports and demonstrates that energy *will be needed* to replace Diablo Canyon at its planned retirement (2024-2025) to meet even the most conservative forecast of PG&E’s bundled customer need; will certainly be needed in the event of early retirement or shutdown of this costly, aging nuclear facility; and must, under current law, be met with GH -free energy.

It was to that end that the Joint Proposal originally committed to “three tranches of GHG-free resources” as “a first step towards replacing Diablo Canyon with a portfolio of GHG-free

⁸ Application, at p. 2; emphasis added.

⁹ Proposed Decision, Finding of Fact 3, at p. 49.

¹⁰ Proposed Decision, at p. 21; emphasis added.

resources.”¹¹ While the Joint Proposal was amended over the course of the evidentiary hearings to eliminate two of the originally proposed three “tranche” GHG-free energy replacement procurements, that amendment included the agreement among those parties that the Commission’s decision on the Application must still include a “directive” that “the output of Diablo Canyon be replaced with GHG-free resources.”¹²

Why would that be necessary? The answer is simple. Without such a commitment to GHG-free energy, there is *no* guarantee what generation will replace Diablo Canyon, and it well could be GHG-*producing*, gas-fired generation, as the Commission has already done in meeting the local capacity needs resulting from the unexpected outage and shutdown of the State’s other major nuclear facility, San Onofre Nuclear Generating Station (SONGS).¹³ Left unchanged, the Proposed Decision, therefore, offers no protection to ratepayers or the environment of any different result upon Diablo Canyon’s retirement.

CEERT already was concerned about this outcome when it urged adoption of the originally proposed Tranche 2 GHG-free energy procurement to give “teeth” to the GHG-free energy directive sought by the amended Joint Proposal.¹⁴ The Proposed Decision fails to make any such commitment and ignores, and misstates, CEERT’s *limited* procurement proposal, especially as a contingency plan for likely early retirement or shutdown of Diablo Canyon. Thus, the Proposed Decision simply states, in response to the “larger question” about “what, if anything, should be done here to ensure that the retirement of Diablo Canyon will not result in an increase in GHG emissions,” that the best answer is to do absolutely nothing in this Application.¹⁵

This result is a complete abrogation of the Commission’s statutory duties, which *includes* “a statutory mandate to implement procurement-related policies to protect the environment.”¹⁶ Thus, as the Commission has long confirmed, with citation to multiple statutory provisions and requirements:

“While a primary responsibility of the Commission is to ensure safety and reliability in the electrical system, that responsibility must be balanced with other

¹¹ A.16-08-006, at p. 9.

¹² Ex. PG&E-5, at p. 2-Atch2-8-2 (PG&E (Strauss)).

¹³ See, D.15-11-041.

¹⁴ CEERT Opening Brief, at p. 9.

¹⁵ Proposed Decision, at p. 21.

¹⁶ D.14-03-004, at p. 13.

statutory and policy considerations. Specifically, *the Commission has a statutory duty to ensure that customers receive reasonable services at just and reasonable rates, and to protect the environment from deleterious impacts from utility facilities under our jurisdiction.*¹⁷

The Proposed Decision also ignores and never addresses other relevant Commission statutory obligations. Thus, incredibly, the Proposed Decision *never* references or relies on California’s seminal Clean Energy and Pollution Reduction Act of 2015 (Senate Bill (SB) 350 (Stats.2015; ch. 547) (“Act”)) that is *not limited* simply to the Commission adopting a process for Integrated Resource Plans (IRPs). Instead, in replacing Diablo Canyon output, this law requires the Commission to ensure that such replacement generation produces “net” GHG emission reductions, reaches and provides expected “economic and environmental benefits,” and “[m]inimize[s] localized air pollutants and other greenhouse gas emissions, with early priority” to and in “disadvantaged communities.”¹⁸

In addition, the Proposed Decision never considers other provisions of that Act and the Public Utilities (PU) Code that apply to this Application *outside or regardless of the “IRP process.”* Specifically, the Proposed Decision does not demonstrate or address how the Proposed Decision’s *rejection* of either a commitment to or procurement of GHG-free energy to replace Diablo Canyon (1) will achieve the Governor’s “objectives” for clean energy, clean air, and pollution reduction,¹⁹ (2) takes “into account the opportunities to decrease costs and increase benefits, including pollution reduction and grid integration, using renewable and nonrenewable technologies with zero or lowest feasible emissions of greenhouse gases, criteria pollutants, and toxic air contaminants onsite,”²⁰ (3) improves “the environment and ... encourage[s] the diversity of energy sources through improvements in energy efficiency, development of renewable energy resources, such as wind, solar, biomass, and geothermal energy,”²¹ or (4) puts PG&E on course to “rely upon zero-carbon emitting resources to the maximum extent reasonable” upon Diablo Canyon’s retirement.²²

¹⁷ D.14-03-004, at pp. 12-13; emphasis added; footnotes omitted.

¹⁸ PU Code §399.13 (a)(7); PU Code §400(a) and (d); §454.52 (a)(1)(H); D.16-05-050, at pp. 18-19; Exhibit (Ex.) GPI-1, at pp. 6, 9 (Green Power Institute (GPI) (Morris)); Ex. TURN-04, at pp. 21-23 (The Utility Reform Network (TURN) (Woodruff)).

¹⁹ SB 350, Section 2(a).

²⁰ PU Code §400(b).

²¹ PU Code §701.1(a)(1).

²² PU Code §454.51(a).

Further, *nothing* in the PU Code Sections addressing the IRP “process” prevents the Commission here from ensuring at least a modest GHG-free energy procurement to replace the output of an identified asset, at issue in this resource-specific Application, and *nothing* in those code sections relieves the Commission from its duty to prudently respond to the very real contingency that Diablo Canyon will retire or go off-line sooner than 2024. The Proposed Decision clearly fails to guarantee any of those outcomes specific to the retirement of Diablo Canyon, and there is nothing in the current Integrated Resource Planning (IRP) Rulemaking (R.16-02-007) that does either, as discussed further below.

In addition to ignoring the law, the Proposed Decision ignores the record in this case to which that law should be applied. In this regard, the “record” in this Application again was *not* “limited,” but robust on the GHG emissions that *will result* absent any planned procurement of GHG-free energy to replace Diablo Canyon’s output. The Proposed Decision never references a study relied upon and attested to in the testimony of several parties entitled: “A Cost Effective and Reliable Zero Carbon Replacement Strategy for Diablo Canyon Power Plant” (Diablo Canyon Zero Carbon Replacement Strategy Study).²³ Yet, that Study demonstrates the increased costs to ratepayers of continuing to operate Diablo Canyon beyond 2024-2025, *as opposed to* its retirement and replacement with GHG free energy resources.²⁴ As Friends of the Earth (FOE) witness Freeman testified: “The facts ... reveal that continuing to operate Diablo Canyon, even using relatively optimistic cost scenarios, will be considerably more expensive for ratepayers than the option of retiring the facility and replacing it with new GHG-free resources obtained through a competitive procurement process.”²⁵

Thus, what is in the ratepayer’s interest is not simply retiring Diablo Canyon with no planned replacement procurement – but rather its retirement *with* replacement by GHG-free energy, especially, as discussed further below, the facility being retired is aging and at risk of closure in advance of its planned retirement date. Further, Tranches #1 and #2 represent a combined 4,000 GWh,²⁶ which represents only a *limited* portion of the *18,000 GWh produced*

²³ Ex. CEERT-01, Appendix A (CEERT (Caldwell)); Ex. TURN-02, at p. 1 and n.1 (TURN (Marcus)); Ex. FOE-1, at pp. 5-7 (Friends of the Earth (FOE) (Freeman)).

²⁴ *Id.*

²⁵ Ex. FOE-1, at p. 6 (FOE (Freeman)).

²⁶ Proposed Decision, at p. 15.

annually by Diablo Canyon today. Clearly, such modest replacement procurement cannot be claimed to be “significant” as the Proposed Decision states.²⁷

PG&E’s testimony further confirmed that this amount of replacement energy was also well within its bundled customers’ need in 2024/2025 based on its most conservative forecasted Low Load Scenario of annual “net sales” of Diablo Canyon output of 5,624 GWH.²⁸ As PG&E further testified, such procurement would also provide the very resources (energy efficiency and renewable generation) that are better “fits” than Diablo Canyon with “the needed generation profile of the changing energy landscape.”²⁹

In those circumstances, it is also important to note that those costs can be recovered through existing ratemaking mechanisms without requiring the consideration or adoption of any new or complex cost allocation mechanism. On that point, CEERT objects to any consideration of the concerns by *non-utility* electric providers about cost imposition on them that could hurt their cost-competitiveness. The Commission’s focus here must be on its obligations to the jurisdictional utility that it regulates – PG&E – and PG&E’s ratepayers and the environment, not Community Choice Aggregators or Direct Access providers over which it has limited, if any, authority regarding their procurement practices or choices.

A failure in this Application for the Commission to commit to the replacement of Diablo Canyon output by GHG-free energy is further worrisome given the Commission’s track record of approving gas-fired generation (GFG), *not* GHG-free energy, to replace retiring or shut-down nuclear facilities (SONGS). This track record simply cannot be ignored and has been fully detailed in CEERT’s Opening Brief, including the failure to ensure preferred resources being procured in all source solicitations to meet that need, and is incorporated by reference here.³⁰ In summary, the testimony of Friends of the Earth witness Freeman says it best: “[T]he output of the SONGS facility was replaced with a significant proportion of fossil-fuel-generated electricity, and GHG emissions from California’s electric sector increased substantially.”³¹ Given this track record, in fact, CEERT thought that the Proposed Decision’s reliance on a quote from the Office of Ratepayer Advocates (ORA) that PG&E is under a statutory obligation to

²⁷ Proposed Decision, at p. 15.

²⁸ Ex. PG&E-1, at p. 2-16 (PG&E (Frazier-Hampton)).

²⁹ Ex. PG&E-1, at p. 2-23; see also, pp. 2-15, 2-17 (PG&E (Frazier-Hampton)).

³⁰ CEERT Opening Brief, at pp. 30-31.

³¹ Ex. FOE-1, at p. 6 (FOE (Freeman)).

follow California’s loading order was an inside joke.³² There might be a statute to that effect, but the Commission’s wherewithal and track record to ensure sure that happens in competitive, all-source solicitations have been dismal.

This history also underscores the merit of PG&E’s and the Joint Parties’ original request for “early action” to replace at least a modest portion of Diablo Canyon’s output with competitively procured GHG-free energy with solicitations to commence as early as 2018, an outcome that is further supported by record evidence of the cost-savings benefits to ratepayers of early procurement of renewables.³³ Further, only by doing so will the Commission have the time to publicly and transparently develop RFOs that will be targeted for that purpose and avoid the risk of the output of this nuclear facility (Diablo Canyon) being replaced by gas-fired generation. Just as PG&E and the Joint Parties contended with respect to Tranche #1, it is also the case that for Tranche #2, “the IRP schedule” will not “allow time to consider authorize, and install” that 2,000 GWh of GHG-free energy “in advance of the closure” of Diablo Canyon.³⁴

These facts make authorization of Tranche #2 here even more critical given the time that likely will be needed to develop the RFOs and sign contracts necessary to ensure the *delivery* of that GHG-free energy to replace Diablo Canyon by 2024/2025 or earlier. Further, authorization of the Tranche #1 and Tranche #2 procurements will provide uniquely valuable opportunities to undertake targeted energy efficiency and GHG-free energy procurements in disadvantaged communities in PG&E’s service territory that have been underserved or not had access to such programs. Approval of both will certainly make good on the Joint Parties’ commitment to “replace this sizable amount of greenhouse gas-free electricity with new greenhouse gas-free electricity” by doing more than “some sort of a light-bulb switching exercise”³⁵ and requires the Commission to act now in this Application to approve both Tranche #1 and Tranche #2, subject to the public development of the RFOs.

³² Proposed Decision, at p. 19. (Statutory cite: 454.5(b)(9)(C)(i).)

³³ Ex. IEP-1, at pp. 6-12 (IEP (Howarth)).

³⁴ Ex. PG&E-5, at p. 2-26 (PG&E (Strauss)).

³⁵ RT at 455-456 (FOE (Freeman)).

B. The Proposed Decision’s Failure to Authorize Even a *Limited* (Not “Significant”) Amount of GHG-Free Energy Procurement Commensurate with PG&E’s Forecasted Bundled Need Is Not Reasonable and Is Not a Prudent Response to the Need for Contingency Planning for an Aging Nuclear Facility and Even Conflicts with the Proposed Decision’s Own Admission Regarding the Uncertain Future of Diablo Canyon.

The Proposed Decision acknowledges that “valid” cost concerns could raise the prospect of closure of Diablo Canyon well before the projected 2024/2025 date.³⁶ Based on reference to such cost concerns raised in testimony by Women’s Energy Matters (WEM) and the San Luis Obispo Mothers for Peace (SLOMFP), the Proposed Decision states that “shutting down Diablo Canyon in 2019/2020 might provide some short-term cost savings,” but that such an early shut-down would “provide less time for replacement procurement to be considered in the IRP proceeding and for the development and deployment of additional greenhouse gas-free resources.”³⁷ Using those “facts and policy” alone, the Proposed Decision concludes that the balance of such “tends to tip against a shutdown before 2024 and 2025.”³⁸

These statements, while admitting to the uncertainty of Diablo Canyon’s future, ignore extensive record evidence by other parties on adverse cost impacts of continued operation of Diablo Canyon as well as the risks of early closure or shut down due to mechanical failure of this aging plant. In doing so, the Proposed Decision further ignores the recommendations and support for responsible contingency planning in response, including that advocated by WEM and SLOMFP.

Thus, the previously referenced Diablo Canyon Zero Carbon Replacement Study and updated cost analysis demonstrates the increased costs to ratepayers of continuing to operate Diablo Canyon beyond 2024-2025, as opposed to its retirement and replacement with GHG free energy resources.³⁹ In terms of the risks posed for continued operation by this aging facility, the record also demonstrates that the two Diablo Canyon Units came online in 1984 and 1985,⁴⁰ which means that by their expected retirement date of 2025, these units will have been in operation for 40 years. As CEERT’s witness Caldwell testified: “41% of all of the world’s

³⁶ Proposed Decision, at p. 14.

³⁷ Id.

³⁸ Id.

³⁹ Ex. CEERT-01, Appendix A (CEERT (Caldwell)); Ex. TURN-02, at p. 1 and n.1 (TURN (Marcus)); Ex. FOE-1, at pp. 5-7 (FOE (Freeman)).

⁴⁰ A.16-08-006, at p. 4.

reactors between the ages of 36-40 have closed,” and, of the three oldest nuclear facilities in the world (47 years of age), one (Oyster Creek) has now “been declared uneconomic to operate and is scheduled for permanent retirement as of the end of December 2019.”⁴¹

Based on the testimony of CEERT and other parties in this Application, it is clear that the “advanced age of Diablo Canyon as a nuclear facility ... can reasonably be assumed” to put it “at risk for early retirement.”⁴² As further identified by WEM and SLOMFP, these risks include not only the continued costs of operation, but structural, commercial, technological, human, and natural events, from embrittlement of Unit 1 to seismic risks.⁴³ On this point, CEERT witness Caldwell testified that Unit 1 is “one of the most embrittled reactors in the country,” a fact that means that “it is at least reasonably foreseeable that one or both of the Diablo Canyon units will not make their fortieth birthday.”⁴⁴ WEM agrees, stating:

“[I]t is worth noting that none of the eight nuclear power reactors in California has yet operated for an entire 40 year license period. The average operating duration for all nuclear reactors to date is only 23 years.”⁴⁵

As a result, “PG&E’s argument that the plant will continue to safely operate for the next 8 years based on having ‘operated safely for more than 30 years’ is simplistic and evasive.”⁴⁶

From CEERT’s perspective, as a matter of responsible decision-making and planning, the Commission must acknowledge these risks and prudently address them through modest contingency planning in this Application. CEERT does not agree with SLOMFP that this contingency planning can be undertaken later, where time is of the essence.

Instead, as supported by the record in this Application, that contingency planning should be authorized in the decision in this Application by approving *both* the Tranche #1 and Tranche #2 replacement procurement proposals. That outcome will ensure that the Commission will avoid, as FOE witness Freeman warned, an early closure or “mechanical failure” of Diablo Canyon leading to its replacement by “a significant proportion of fossil-fuel-generated

⁴¹ Ex. CEERT-01, at p. 4 (CEERT (Caldwell)).

⁴² CEERT Opening Brief, at p. 13. The record evidence demonstrating these risks and the likelihood of early retirement for Diablo Canyon based on its age and operations is detailed in CEERT’s Opening Brief at pages 13-16.

⁴³ SLOMFP Opening Brief, at pp. 7, 9, 11, and 13; WEM Opening Brief, at p. 5.

⁴⁴ Ex. CEERT-01, at pp. 4-5 (CEERT (Caldwell)).

⁴⁵ WEM Opening Brief, p. 3; see also, CEERT Opening Brief, at p. 13.

⁴⁶ WEM Opening Brief, at p. 4.

electricity,” that would result in “substantially” increasing “GHG emissions from California’s electric sector.”⁴⁷

What is not reasonable or prudent is for the Commission to uphold a Proposed Decision that ignores these risks or the need for a contingency plan in favor of completing work according to an unknown timetable in another Commission “proceeding” (IRP).⁴⁸ It is quite clear, from the SONGS debacle, that the operation or failure of a nuclear facility does not depend on and cannot be deferred based on the pace of Commission proceedings. In fact, the whole premise of early action GHG-free energy procurement to replace a *modest* portion Diablo Canyon replacement procurement is premised on offering ratepayers protection – both as to costs and the environment – for ensuring that the forecasted need for Diablo Canyon’s output will be available and will be met by GHG-free energy resources. The statement made by the Proposed Decision regarding the amount of time required to complete the IRP – beyond 2019/2020 – is an admission that that proceeding, as discussed further below, has not and *cannot* provide that protection.⁴⁹

Further, faced with a sudden shutdown, as was the case with SONGS, the Commission will not have the luxury of time to “reconsider” its determination to do nothing now to plan for such a contingency.⁵⁰ Thus, as FOE witness Freeman appropriately warned, without a “Plan B” to address the potential of “mechanical failure” for an aging nuclear facility, the consequences are likely to be the same as they were for SONGS shutdown, where “GHG emissions from California’s electric sector increased substantially.”⁵¹ Such an outcome is clearly contrary to this State’s and this Commission’s environmental and climate change goals.

In terms of cost-effective GHG-free energy that can be immediately available to replace Diablo Canyon, the record in this Application demonstrates that there is a robust level of new, diverse, and reliable GHG-free energy resources available to replace the output of Diablo Canyon at lower costs to PG&E’s bundled customers. The evidentiary record in this Application, including the DCPD Zero Carbon Replacement Study, the Value of Salton Sea Geothermal Development in California’s Carbon Constrained Future Study, and renewable

⁴⁷ Ex. FOE-1, at p. 6 (FOE (Freeman)).

⁴⁸ Proposed Decision, at pp. 21-22.

⁴⁹ Proposed Decision, at pp. 14-15, 21.

⁵⁰ Proposed Decision, at p. 15.

⁵¹ Ex. FOE-1, at p. 6 (FOE (Freeman)).

energy procurement that can capture expiring tax benefits, demonstrates that a broad range of GHG-free replacement portfolios with varying resource mixes will be available and would save billions of dollars versus continued operation of Diablo Canyon over the potential license extension period.⁵² A procurement of the size proposed here for Tranche #1 and Tranche #2 is the minimum “down payment” that needs to be made toward a carbon-free future, especially where all other procurements, including the IRP, will be delayed or muddled by broader issues of cost allocation and can provide a reasonable contingency plan in the event of early retirement or shut-down of Diablo Canyon. Not having such a plan in place or adopted by the Proposed Decision is simply irresponsible.

C. The Proposed Decision Errs by Providing No Basis for Its Singular Reliance on the IRP Process to Ensure Timely GHG-Free Energy Replacement for Diablo Canyon Output.

The Proposed Decision, in rejecting the Tranche #1 and #2 replacement procurement proposals does so based on the conclusion that “practice and policy reasons indicate that it is better for potential replacement procurement issues to be addressed in the Commission’s IRP process, rather than addressing it in a more piecemeal fashion in this proceeding.”⁵³ This conclusion is offered with (1) absolutely *no* analysis of the status of the “IRP process” or proceeding, including whether it meets the Commission’s statutory duties identified above specific to this Application, (2) no explanation of why resolution of resource-specific impacts raised and addressed on the record in this Application would be “piecemeal,” and (3) no consideration of the timeline or potential outcomes in the IRP that would be specific to Diablo Canyon.

Further, the Proposed Decision’s reliance on outcomes in the IRP as being “timely” with respect to closure of Diablo Canyon is speculative since no decision has yet issued in the IRP and is wholly tied to the assumption that Diablo Canyon will not be shuttered before 2024 – 2025.⁵⁴ As addressed above, from both a cost and risk perspective for this aging facility, it is imprudent and irresponsible not to adopt a contingency plan for early retirement of Diablo Canyon that may well fall long before 2024-2025. Leaving such “planning” simply to

⁵² Ex. CEERT-01, Appendix A, Table 14, at p. 44 (CEERT (Caldwell)); Ex. FOE-1, at p. 7 (FOE (Freeman)); Ex. GEA-01, at pp. 2, 6-9 (GEA (Kitz)); Appendix B (GEA (Caldwell)); Ex. IEP-01, at pp. 2, 4-13 (IEP (Howarth)); Ex. IEP-02, at p. 4 (IEP (Howarth)).

⁵³ Proposed Decision, at p. 22.

⁵⁴ Proposed Decision, at pp. 21-22.

“reconsideration” in the event of changed facts is also irresponsible where time may not be available in such an event to provide for GHG-free energy replacement of Diablo Canyon’s output.⁵⁵ In fact, those were not the circumstances faced by the Commission with SONGS shutdown and cannot be assumed here either, especially where the plant is old. For SONGS, the Commission was left on the defensive and required to respond quickly – with gas-fired generation being the replacement resource.

In short, the future or outcomes of the IRP are currently unknown, and any reliance on that “process” to appropriately address replacement procurement for Diablo Canyon’s output is wholly speculative and impermissibly vague. It also provides no protection for ratepayers in the event of early closure of Diablo Canyon. Instead, the record in this case demonstrates that the IRP is a “complex” undertaking that has already required more time to process than originally scheduled and still has not resulted in any decision.⁵⁶

In these circumstances, and based on this record, the Commission must authorize the modest amount of GHG-free energy procurement represented by Tranches #1 and #2 as the most conservative form of contingency planning to meet its combined duties to ratepayers and the environment. This Application is also the *most appropriate* venue for addressing the resource-specific retirement or shut down of an identified utility asset. Those circumstances do not raise broader issues of system wide GHG emission impacts or reductions, but relate to the specifics of a decision – that will be unaffected by the IRP – to retire an asset that currently generates more than 18,000 GWh. Here, the Commission must focus on the specific, not the general, in deciding a facility retirement of this magnitude.

What the Proposed Decision also ignores is that Tranche #1 and Tranche #2 “early action” procurement can also provide valuable information for the IRP Process as it progresses. As CEERT witness Caldwell testified:

“The market information gained and the process lessons learned with the Joint Parties’ proposed Diablo Canyon GHG-free replacement Procurement Plan, with CEERT’s recommended revisions, will be invaluable across the board. This unique opportunity must be seized to significantly advance knowledge and experience in preferred resource procurement to serve California’s broad, shared goal of decarbonization of the electric sector.”⁵⁷

⁵⁵ Proposed Decision, at p. 15.

⁵⁶ Ex. IEP-02, at p. 3 (IEP (Howarth)).

⁵⁷ Ex. CEERT-01, at p. 12 (CEERT (Caldwell)).

Finally, only by the Commission authorizing both Tranche #1 and Tranche #2 now in its decision in this Application can the “directive” sought in the Joint Proposal Amendment “that the output of Diablo Canyon be replaced with GHG-free resources” be realized.⁵⁸ If the Commission determines that any procurement to replace Diablo Canyon must be decided in another proceeding (IRP), such a “directive,” even as a “policy,” would be considered prejudging outcomes in that case or may be too general to have any effect in that proceeding.

**II.
AN ALTERNATE PROPOSED DECISION MUST BE ISSUED TO
CORRECT THE EGGREGIOUS ERRORS OF THE PROPOSED DECISION.**

CEERT strongly urges the Commission to issue an Alternate Proposed Decision that grants the Tranche #1 and #2 GHG-free energy replacement procurements for Diablo Canyon’s output, especially as a reasonable contingency plan in the event of early shut-down and as supported by applicable law and the record in this Application. While CEERT has offered Proposed Findings of Fact, Conclusions of Law, and Ordering Paragraphs in Appendix A hereto to achieve that end, the Proposed Decision itself requires significant re-writing to effectively reflect, follow applicable law, and apply the record appropriately to achieve that end.

**III.
CONCLUSION**

Based on the law and record applicable to A.16-08-006, CEERT respectfully requests that the Commission reject the Proposed Decision and issue an Alternate Proposed Decision that, at the least, adopts the Tranche #1 and #2 GHG-free energy replacement procurement proposals for Diablo Canyon’s output. Those recommendations are further embodied in CEERT’s Proposed Findings of Fact, Conclusions of Law, and Ordering Paragraphs in Appendix A hereto.

Respectfully submitted,

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⁵⁸ Ex. PG&E-5, at p. 2-Atch2-8-2 (PG&E (Strauss)).

APPENDIX A

CENTER FOR ENERGY EFFICIENCY AND RENEWABLE TECHNOLOGIES' PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDERING PARAGRAPHS FOR THE PROPOSED DECISION OF ALJ ALLEN

The Center for Energy Efficiency and Renewable Technologies (CEERT) proposes the following modifications to the Findings of Fact, Conclusions of Law, and Ordering Paragraphs of the Proposed Decision of ALJ Allen mailed in A.16-08-006 (PG&E Diablo Canyon) on November 8, 2017 (Proposed Decision). While these proposals work from the Proposed Decision's findings, conclusions, and orders, it remains CEERT's position that an **Alternate Proposed Decision** fully reversing the Proposed Decision, in particular, on replacement procurement for Diablo Canyon's output, is required and must be issued by the Commission in this Application.

Please note the following:

- A page citation to the Proposed Decision is provided in brackets for each Finding of Fact, Conclusion of Law, or Ordering Paragraphs for which a modification is proposed.
- Added language is indicated by **bold type**; removed language is indicated by **bold strike-through**.
- A new or added Finding of Fact, Conclusion of Law, or Ordering Paragraph is labeled as "**NEW**" in **bold, underscored** capital letters.

PROPOSED FINDINGS OF FACT:

NEW FINDING OF FACT (to precede Finding of Fact 2): The Commission has a statutory duty to protect the environment from deleterious impacts form utility facilities under its jurisdiction, which duty now includes ensuring that replacement generation for any retiring facility produces net GHG emission reductions and minimizes localized air pollutants and other greenhouse gas emissions, with early priority to and in disadvantaged communities.

NEW FINDING OF FACT: The Commission has a statutory obligation to ensure that Pacific Gas and Electric Company relies upon zero-carbon emitting resources to the maximum extent reasonable to replace Diablo Canyon’s output upon its retirement or shutdown.

3. [49] The impact of the retirement of Diablo Canyon on greenhouse gas emissions is ~~not~~ clear and requires a commitment to greenhouse gas (GHG) – free energy replacement for the Diablo Canyon output.

4. [49] The IRP proceeding ~~is broader in scope than this proceeding, and is~~ may be considering issues including greenhouse gas emissions and optimized portfolios of generation resources, but is neither a timely or appropriate venue for addressing GHG-free energy replacement for Diablo Canyon’s output specifically at issue in this Application.

NEW FINDING OF FACT: Where no decision has yet issued in the R.16-02-007 (IRP), any assumption about outcomes that may be achieved in the IRP proceeding specific to Diablo Canyon or replacement procurement for its output upon its expected or early retirement or shutdown is wholly speculative at this time.

NEW FINDING OF FACT: The Joint Proposal provides a reasonable roadmap for the transition from Diablo Canyon’s operation to replacement by energy efficiency and GHG-free energy that are available and more cost-effective and provide resources that are better fits than Diablo Canyon with the needed generation profile of the changing energy landscape.

NEW FINDING OF FACT: While PG&E has proposed a planned retirement date of 2024/2025 for Diablo Canyon, consideration must also be given to the current, aging, and embrittled condition and costs of continued operation of Diablo Canyon as creating risks to Diablo Canyon’s retirement or shutdown at an earlier date.

NEW FINDING OF FACT: PG&E’s most conservative forecast of its bundled customer need in 2024/2025 is 5,624 GWh.

NEW FINDING OF FACT: The Joint Proposal’s originally proposed Tranche 1 (energy efficiency) and Tranche 2 (GHG-free energy) replacement procurements for Diablo Canyon total 4,000 GWh.

NEW FINDING OF FACT: The Joint Proposal’s originally proposed Tranche 1 (energy efficiency) and Tranche 2 (GHG-free energy) replacement procurements for Diablo Canyon are a reasonable and limited first step to ensure Diablo Canyon’s replacement with GHG-free energy to meet its bundled customer needs.

NEW FINDING OF FACT: The Joint Proposal’s originally proposed Tranche 1 (energy efficiency) and Tranche 2 (GHG-free energy) replacement procurements for Diablo Canyon offer a prudent contingency plan to replace Diablo Canyon output in the event of Diablo Canyon’s early retirement or shutdown.

NEW FINDING OF FACT: Tranche 1 and Tranche 2 procurements provide uniquely valuable opportunities to undertake targeted energy efficiency and GHG-free energy procurements in disadvantaged communities in PG&E’s service territory that have been underserved or not had access to such programs.

NEW FINDING OF FACT: While authorization of the Tranche 1 and Tranche 2 replacement procurements for Diablo Canyon are a start in replacing Diablo Canyon’s output with GHG-free energy, that authorization does not limit approval of any additional resources needed to replace Diablo Canyon’s total output at its retirement or shutdown.

NEW FINDING OF FACT: For any additional resource procurement needed to replace Diablo Canyon’s output at its retirement or shutdown, that consideration can be made in the IRP proceeding subject to the commitment that those resources must all be GHG-free energy.

NEW FINDING OF FACT: Development of successful solicitations to fulfill Tranche 1 and Tranche 2 procurements will take time, must start now, and should be undertaken in a transparent fashion with input by PG&E, Commission staff, and all stakeholders.

6. [50] PG&E’s proposed employee retention plan is **not** costly and inefficient.

PROPOSED CONCLUSION OF LAW:

1. [50] PG&E’s proposal to retire Diablo Canyon Unit 1 in 2024 and Unit 2 in 2025 is reasonable, and should be approved.

2. [50] The need for procurement to replace Diablo Canyon should **not be delayed be addressed in** to the IRP proceeding.

3. [50] The greenhouse gas impacts of retiring Diablo Canyon and any procurement to replace Diablo Canyon should be addressed **in the IRP proceeding first here by adopting the initial and prudent Tranche 1 and Tranche 2 procurement proposals contained in the Joint Proposal.**

NEW CONCLUSION OF LAW: For any additional resource procurement needed to replace Diablo Canyon’s output at its retirement or shutdown beyond Tranche 1 and Tranche 2, that consideration can be made in the IRP proceeding subject to the commitment that those resources must all be GHG-free energy.

NEW CONCLUSION OF LAW: Transparent development of solicitations to be used for the Tranche 1 and Tranche 2 replacement procurements should be undertaken through a public process with input by Commission staff and stakeholders, as well as PG&E.

5. [51] PG&E’s proposed employee retention plan is **not** reasonable, and should not be approved.

PROPOSED ORDERING PARAGRAPHS:

2. [51] Pacific Gas and Electric Company’s “Tranche 1” proposal to procure 2,000 gigawatt hours of energy efficiency is **not** approved.

NEW ORDERING PARAGRAPH: Pacific Gas and Electric Company’s “Tranche 2” replacement procurement proposal is approved.

3. [51] Pacific Gas and Electric Company’s withdrawn “~~Tranche 2~~” and “Tranche 3” replacement procurement proposals **are** is not approved.

4. [52] Replacement procurement will be addressed in the Integrated Resource Planning proceeding or a proceeding designated by the Integrated Resource Planning proceeding.

5. [52] Approval of the Tranche #1 and Tranche #2 replacement procurement proposals for Diablo Canyon shall not restrict or serve as a ceiling on authorization of any additional resources needed to replace all Diablo Canyon output needed at Diablo Canyon’s

retirement or shutdown that may result in R.16-02-007 (Integrated Resource Planning (IRP)), which resources must all be zero carbon, GHG-free sources of energy. ~~Greenhouse gas issues relating to the retirement of Diablo Canyon, including any replacement procurement, will be addressed in the Integrated Resource Planning proceeding or a proceeding designated by the Integrated Resource Planning proceeding.~~

NEW ORDERING PARAGRAPH: The development of solicitations to be used for Tranche 1 and Tranche 2 replacement procurements shall be undertaken through a public, transparent process developed by PG&E in coordination with the Commission's Energy Division and shall be noticed to all affected stakeholders.

7. [52] Pacific Gas and Electric Company's proposed employee retention program is ~~not~~ approved.