BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company in its 2015 Nuclear Decommissioning Cost Triennial Proceeding

(U 39 E)

Application No. 16-03-006
(Filed March 1, 2016)

PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)
COMMENTS ON PROPOSED DECISION IN ITS 2015 NUCLEAR DECOMMISSIONING COST TRIENNIAL PROCEEDING

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Dated: May 10, 2017
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1. SUMMARY

In June 2016, PG&E announced its decision not to seek license renewal of the Diablo Canyon Power Plant (“DCPP”). As a result, decommissioning will commence in late 2024 for Unit 1 and late 2025 for Unit 2. It is therefore critical that the Diablo Canyon Nuclear Generating Station Decommissioning Trust (“Trust”) be fully funded so that decommissioning work can start in an expeditious manner. The PD would approve no increase in the cost estimate for DCPP, despite substantial record evidence in support of PG&E’s updated decommissioning cost estimate of $3.779 billion.¹/

There are only seven years remaining to complete the goal of funding the Trust. While PG&E has an opportunity in the 2018 NDCTP to submit for Commission approval a site specific, actual decommissioning cost estimate for DCPP, that would leave only 3 to 4 years to recover the revised estimate in rates prior to the facilities ceasing operation. This delay would

¹/ All dollars are in 2014$. 
result in a much greater impact on customer bills, eliminating three years of potential market returns on Trust investments that could be accruing, along with the tax benefits from the tax-qualified Trust. Further, following development of the site-specific plan, it is probable that the decommissioning cost estimate for DCPP will be higher than the current estimate. By comparison, the total decommissioning estimate approved by the Commission for San Onofre Nuclear Generating Station (“SONGS”) Units 2 & 3 is $4.4 billion. In deferring the inevitable need for substantial additional decommissioning funding, the PD unreasonably shortens the period of time available to collect the reasonably foreseeable costs of decommissioning DCPP.

The PD reduces PG&E’s decommissioning cost estimate for DCPP by $1.358 billion, consisting of reductions of (1) $344 million in Security costs; (2) $505 million for Utility and DOC Staffing and Large Component Removal (jointly “UDSLCR”) costs; (3) $312 million for disposal of decommissioned material; and (4) $197 million by reducing by three years the time spent nuclear fuel is assumed to remain in wet storage.

PG&E accepts the assumption that spent nuclear fuel will spend a shorter amount of time in wet storage. However, PG&E disagrees with the other adjustments to PG&E’s DCPP cost estimate and asks the Commission to reinstate these elements. They are all supported by ample evidence in the record; further, some of the PD’s conclusions are in conflict with assumptions found to be reasonable in separate decisions for the SONGS decommissioning estimate. The Commission should adopt a revised decommissioning cost estimate for DCPP of $3.582 billion.

If the Commission does not accept PG&E’s cost estimate as revised, there are calculation errors totaling $147.8 in the PD which must be corrected by increasing the adopted estimate.

The findings and conclusions reached by the PD with respect to Humboldt Bay Power Plant Unit 3 (“HBPP”); Department of Energy litigation/settlement proceeds; Trust rates of return and cost escalation factors; and the applicable contingency are supported by the evidentiary record and should be adopted.

Finally, the Commission should revise certain findings and conclusions. Ordering Paragraphs 3 and 4, which would require PG&E to organize meetings to address
decommissioning cost accounting and adopt cost categorization structures for DCPP impose new requirements not considered in the evidentiary record or in briefs. In addition to the complete lack of evidentiary support, they would serve no rational purpose at this time since the current DCPP estimate is a high-level estimate for ratemaking purposes, and not a site-specific decommissioning plan.

II. BY LEAVING THE DCPP TRUST SIGNIFICANTLY UNDERFUNDED, THE PD IS INCONSISTENT WITH COMMISSION POLICY AND POTENTIALLY IN VIOLATION OF THE NUCLEAR FACILITY DECOMMISSIONING ACT.

A. The PD Would Result In The DCPP Trust Being Significantly Underfunded.

The NDCTP provides a forum for the periodic update of nuclear decommissioning cost studies and customer contribution analyses to ensure that PG&E’s Trust is sufficiently funded to cover decommissioning at the expiration of the nuclear facilities’ operational life. The PD adjusts PG&E’s proposed cost estimate for DCPP from $3.779 billion to $2.421 billion. This massive reduction would result in customers making no annual contributions to the Trust. As discussed below, the adjustments to PG&E’s cost estimate are unwarranted and unsupported by the substantial evidence submitted by PG&E.

While the PD notes that PG&E will have another opportunity to adjust its cost forecast when it submits a detailed site-specific decommissioning plan for DCPP in the next NDCTP, deferring collection of funding that will eventually be required is not in the best interests of customers. The deferral makes the rate increase approved in the next case larger and forces recovery of these greater costs to be fully recovered from customers over a much shorter 3 to 4 year period of time. It also eliminates the potential for market returns on Trust fund contributions as augmented by the tax benefits of the Trust, thereby squandering a non-customer funded opportunity to grow the Trust. None of this benefits customers.

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Exhibit (“Exh.”) 1, p. 3, lines 4-22 (PG&E/Sharp).
Importantly, the failure to adequately fund the Trust also creates significant uncertainty with respect to the planning of decommissioning activities as PG&E prepares its site-specific DCPP decommissioning plan.

**B. The Nuclear Facility Decommissioning Act and Commission Policy Require that the Diablo Canyon Trust Be Adequately Funded.**

The California Nuclear Facility Decommissioning Act of 1985 ("Act")\(^3\) requires that the Trust be fully funded at the time decommissioning commences since “expenses associated with decommissioning … shall be paid from [the Trust].”\(^4\) As the Commission has concluded: “We are charged with providing assurance that required decommissioning funds are fully available when needed.”\(^5\) The Act also requires the Commission to permit PG&E to collect sufficient revenues to make the maximum contributions to the Trust allowable for tax purposes\(^6\): “Section 8325(c) requires us to ascertain the maximum level of contributions deductible for tax purposes and to authorize them in rates.”\(^7\) The PD would result in no contributions to the Trust, thereby reducing the tax benefits to customers received through use of the tax-qualified Trust, and increasing ultimate customer costs.

Finally, the PD fails to conform with Commission policy with respect to intergenerational ratepayer equity. As the Commission recognized in the 2012 NDCTP, “if significant costs are excluded from collection, future ratepayers may bear an unfair share of decommissioning costs.”\(^8\)

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4/ PUC §8328 (emphasis added).
5/ D.00-02-046, *mimeo*, at 371.
6/ PUC §8325(c)
7/ D.00-02-046, *mimeo*, at 371 (emphasis added).
8/ D.14-12-082 at 35. See D.83-04-013; D.00-02-046, *mimeo* at 362.
III. THE COMMISSION SHOULD ADOPT $3.582 BILLION AS THE ESTIMATED COST TO DECOMMISSION DCPP.

In rejecting PG&E’s cost estimates, the PD fails to meet the legal standard that the Commission’s decision be supported by “substantial evidence in light of the whole record”\(^{9/}\). The Commission should reject the PD’s changes to PG&E’s cost estimate.

A. The PD Reiterates Language From The 2012 NDCTP Decision Without Analyzing The Evidence Provided By PG&E In This NDCTP.

The PD states: “the Commission cannot exercise its reasonable review of the [decommissioning cost estimate] if we are unable to examine the cost estimates for the triennial proceedings to see what changed and why.”\(^{10/}\) This sentence, as well as most of the surrounding discussion, mirrors language in the 2012 NDCTP decision.\(^{11/}\)

To respond to the concerns raised in the 2012 NDCTP decision, in this NDCTP PG&E provided testimony identifying every changed assumption and the reasons for the change.\(^{12/}\) PG&E significantly augmented its Decommissioning Cost Estimate with testimony describing the impact of the changes in major assumptions made by both PG&E and TLG Services Inc. (“TLG”), including a detailed table identifying each change’s financial impact on the cost estimate.\(^{13/}\) All of the related revisions and calculations are included in supporting attachments.\(^{14/}\)

The PD discussion does not mention this evidence\(^{15/}\) nor does it analyze how it might be considered insufficient “to see what changed and why.” It merely directs PG&E to work with the parties to present revised data in the 2018 NDCTP which “more clearly” identifies changed assumptions.\(^{16/}\) The PD’s statement that PG&E did not adequately explain its changed

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\(^{9/}\) PUC §1757(a)(4).

\(^{10/}\) PD at 35.

\(^{11/}\) See D.14-12-082 at 97-98.

\(^{12/}\) Exh. 4, Diablo Canyon Decommissioning Cost Study Changed Assumptions (PG&E/Sharp). See PG&E Opening Brief at 4-10; PG&E Reply Brief at 5-6.

\(^{13/}\) Exh. 2, pp. 5-19 and 33-34 Table 2-1 (PG&E/Seymore).

\(^{14/}\) Exh. 3 (PG&E/Seymore).

\(^{15/}\) The PD does identify a few of PG&E's assumptions at 28-29 but does not reference the testimony supporting the assumptions in its analysis.

\(^{16/}\) PD at 35.
assumptions fails to provide any reasoned analysis and is in clear conflict with the facts in evidence.

If the assumptions are reasonable, and PG&E has demonstrated that they are, it is appropriate to make them even though they result in a significant cost increase. “We agree with PG&E that a large increase in of itself is not unreasonable.”

“In each triennial proceeding, information about new technology, practices, and lessons learned emerge, as well as different thinking from each utility which identifies different approaches or inadvertently omitted activities.”


The PD rejects PG&E’s estimate of $687 million for the cost of security during decommissioning. It would instead continue to use the $343 million estimate previously adopted (a difference of $344 million). The PD contends that “PG&E offers no specific basis for the substantial increase” and concludes that “the current estimate seems to be primarily additional workforce estimated as needed between 2025 and 2041.”

Contrary to the PD’s assertion, PG&E’s estimation of security costs is a straightforward, transparent calculation. It is determined by identifying the number of security personnel needed, labor rates and the period of time security will be needed. The previous estimate originated in the 2009 NDCTP as a generic industry unit-cost-based estimate not specific to DCPP. PG&E did not make any changes to this prior estimate, but assessed anticipated security costs by conducting a from-the-ground-up, site-specific security analysis. There is no basis

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17/ D.14-12-082 at 96.
18/ Id.
19/ PD at 36-37. While the PD claims that “[i]n direct testimony, PG&E does not provide reference to any specific NRC authority that would require such an increase,” (PD at 36), PG&E witness Sharp stated that site security pertains to the security mandated by Nuclear Regulatory Commission (“NRC”) Safeguards requirements. Exh. 4 at p. 6, lines 21-22 (PG&E/Sharp). NRC Safeguards regulations are set forth in 10 CFR Part 73.
20/ PD at 38.
21/ See PG&E Opening Brief at 6-8; PG&E Reply Brief at 6-8.
22/ Exh. 4, p. 7, lines 17-32 (PG&E/Sharp).
upon which to make a direct comparison between the earlier estimate and PG&E’s current site-specific study. Thus, the PD’s focus on “explaining” the $344 difference from the previous estimate is inapposite.

PG&E determined its security costs by reviewing NRC Safeguards requirements in connection with the specific features of the DCPP site and estimating the level of security required to meet those requirements. i.e. the number and position classification of personnel who will be needed during each year of decommissioning. Upon the commencement of decommissioning, PG&E will need to protect a large area consisting of the Independent Spent Fuel Storage Installation (“ISFSI”), spent fuel pools and operational components critical to fuel cooling, as well as the access points leading to these locations. Since there are many access points to these areas at DCPP, securing the spent fuel pools requires a large security force. Once the last of the spent fuel is moved to dry cask storage, security needs are significantly reduced.23

After finalizing its security staffing estimate, PG&E provided TLG with the number of staff required per year and an annual average salary. To calculate the total cost, TLG converted the number of staff by position to total hours per year and multiplied those hours by the annual average salary rate provided by PG&E.24

The PD does not appear to recognize how security costs were developed, and fails to explain why PG&E’s evidence is not probative.


The initial determination of the security plan for protecting DCPP was prepared by DCPP security management familiar with Safeguards requirements, and then independently reviewed by PG&E witness Sharp,25 who was available for cross-examination.

23/ Exh. 4, p. 6, line 6 to p. 7, line7 (PG&E/Sharp).
24/ Exh. 4, p. 7, line 17 to p. 8, line 11.
25/ Exh. 4, p. 7, lines 26-32 (PG&E/Sharp).
Although PG&E explained that making Diablo Canyon security plan information available to third parties would violate NRC Safeguards regulations,\textsuperscript{26} the PD states “it is concerning that there was not a reasonableness review by TLG or some outside independent entity” and suggests the need for a “proper reasonableness review in the 2018 NDCTP.”\textsuperscript{27} PG&E has identified on the record the number of security personnel, the level of staffing needed each year, and anticipated labor rates - in other words all the data used to derive the security cost estimate. The only remaining piece of information is the details of PG&E’s security plan used to identify how many security staff are necessary given the particularities of the DCPP site.

Safeguards Information specifically includes the physical security plan for the site, and site-specific material that represents the design features of the physical security system not easily discernible by members of the public.\textsuperscript{28} Any evaluation of how PG&E determined the number of individuals necessary to protect the site would necessarily involve disclosure of this protected information. Stringent requirements, including a Federal Bureau of Investigation criminal history record check are required before access can be provided to Safeguards Information.\textsuperscript{29} For example, PG&E’s TLG expert does not have such access and so is unable to review this material.

**D. With Respect To UDSLCR Estimates, The PD Rejects Real World Experience In Place Of Industry Generic Paper Studies.**

1. The PD Inappropriately Does Not Accept PG&E Making DCPP-Specific Assumptions.

Although the current cost study represents a high-level cost estimate developed prior to the actual DCPP decommissioning plan, PG&E determined that it should incorporate site-specific information to reflect known conditions at DCPP and regulatory restrictions in California.\textsuperscript{30}

\textsuperscript{26} PG&E Reply Brief at 8.
\textsuperscript{27} PD at 38.
\textsuperscript{28} 10 CFR §73.22.
\textsuperscript{29} 10 CFR §§73.22(b), 73.56.
\textsuperscript{30} Exh. 4, pp. 3, line 28 to 4, line 13 (PG&E Sharp).
Rather than evaluating these assumptions, the PD states that “despite PG&E’s recognition of TLG as a nationally known specialist in the field of developing nuclear decommissioning cost estimates, it appears that PG&E directed the substantial increase in this area not TLG.” “PG&E appears to disregard TLG’s opinion and has directed its consultant to substitute PG&E’s independent assessment as to the necessary staffing and time needed.”31/ As fully described in Exhibit 4, PG&E did indeed use its judgment to modify assumptions where warranted. The PD does not explain why that should be considered unacceptable; rather, failing to take into account known circumstances to the extent possible would result in an unrealistic cost estimate.

2. The PD Misinterprets PG&E’s Evidence Regarding Decommissioning Experiences at Zion and HBPP.

The PD misinterprets PG&E’s evidence regarding why PG&E assumed a greater number of staffing and time to remove the Reactor Pressure Vessel (“RPV”) and internals at DCPP. Since the 2012 NDCTP, PG&E conducted a detailed analysis of their removal at both Zion Nuclear Power Station (“Zion”), which has the same reactor design as DCPP,32/ and HBPP. PG&E discovered that the numbers at both facilities were significantly more than had been assumed in the 2012 NDCTP. Further, contrary to the PD’s assertion PG&E did not misuse its experience at HBPP. While HBPP differs in significant respects from DCPP and Zion, with respect to the removal of the RPV and internals: “whether using the type of technology that we did [at HBPP] or the type of technology that Zion did, the team size was roughly the same, the duration was roughly the same. So I would expect the same experience at Diablo.”33/ The PD's reliance on high level estimates prepared years in advance of decommissioning,34/ rather than considering PG&E’s assumptions based on real life

31/ PD at 41.
32/ Exh. 4, p. 12, lines 23:30 (PG&E Sharp).
33/ Tr. Vol 1, 102:27 to 103:25 (PG&E/Sharp).
34/ The PD argues that “cost estimate comparisons raised by other parties to support their arguments are more convincing as these examples are based on industry standards and practices rather than one or two unique decommissioning situations.” PD at 42, N 3. The PD fails to note that TURN itself conceded the inappropriateness of its recommendation in its Opening Brief: “TURN is not asking the Commission to adopt adjustments to the overall cost estimate based on this comparison between DCPP and Braidwood/Byron] to reduce the DCPP estimate.” TURN Opening Brief at 23.
decommissioning, provides no reason to believe that the resulting estimate would in any way reflect the actual costs of decommissioning DCPP.

E. The PD Errs In Failing To Adopt PG&E's Estimate For Disposal Costs For Decommissioned Material.

The PD proposes to reduce PG&E’s estimate by $312 million -the entire change in site restoration costs from the 2012 NDCTP- for disposal of decommissioned material.\textsuperscript{35} PG&E’s cost estimate for DCPP assumes that a significant amount of concrete and other materials will need to be disposed of out-of-state. This assumption was based in part upon an Executive Order issued by the Governor, and is consistent with the same assumption approved by the Commission for SONGS.

1. Decommissioned Material At DCPP Cannot Be Reused On Site.

While the PD does not explicitly state that one reason for denial of cost recovery for disposal of decommissioned material is that such material could be reused on site, that conclusion might be inferred by the PD's reference to the fact that PG&E was able to reuse significant amounts of decommissioned material at HBPP.\textsuperscript{36} However, the record unequivocally demonstrates that PG&E considered possibilities for on-site reuse at DCPP and determined that, unlike the situation at HBPP, there is little to no opportunity to reuse this material at DCPP.\textsuperscript{37} The PD does not reference this testimony.

\textsuperscript{35} PD at 46. Decommissioned material is distinct from low level radioactive waste; it consists mostly of concrete and other material with low residual levels of radioactivity that may be released under NRC rules. Exh. 15, p. 26, lines 18-20 (PG&E/Salmon).

\textsuperscript{36} PD at 44-45.

\textsuperscript{37} Tr. Vol.1, 83:13-21 (PG&E/Salmon): "We don't see a significant reuse opportunity at this time for decommissioned materials at Diablo Canyon. By comparison, at Humboldt Bay, we are filling in some rather large canals and we have a [caisson] excavation that we're going to be filling. So there is significant reuse opportunities at Humboldt Bay, but we don't see those opportunities at Diablo." Tr. Vol.1, 114:6-21 (PG&E/Sharp): "Diablo is a fairly high site. It has very little material below grade, and so you'd have a very little opportunity to fill a large excavation like we have at Humboldt. There's very little place to use that material." For purposes of cost estimation, PG&E assumes total off site removal. During actual decommissioning, PG&E would evaluate specific options for reuse, if they became available. \textit{Id.}
2. The PD Fails To Recognize That The Commission Has For Many Years Accepted the Assumption That Governor Executive Order D-62-02 Requires Out-Of-State Removal Of Decommissioned Material.

Governor Executive Order D-62-02 ("Executive Order") directs the Department of Health Services ("DHS") to adopt regulations governing the in-state disposal of decommissioned materials, and directs the State Water Resources Control Board and the Regional Water Quality Control Boards ("Water Boards") to impose a moratorium on its disposal into in-state Class III landfills until the DHS adopts regulations setting permissible dose standards.\(^{38}\) DHS has never commenced the process of promulgating regulations, and the moratorium remains in place.\(^{39}\)

The PD states that, in assuming out-of-state disposal, "PG&E has adopted an ‘extreme’ interpretation of the Executive Order without providing substantial evidence to support its position."\(^{40}\) The PD ignores the evidence which demonstrated that decommissioned material from SONGS 1 was disposed of out-of-state: "California Executive Order D-62-02 prohibits the disposal of below Class A decommissioning waste in in-state Class III landfills. SCE shipped all such material from SONGS 1 to the Clive, Utah facility."\(^{41}\) Similarly, the Commission recently approved the decommissioning cost estimate for SONGS 2 & 3, in which "[c]lean (non-contaminated) concrete demolition debris is assumed to be removed off site to an out-of-state… landfill consistent with the [Executive Order]."\(^{42}\)

The PD’s failure to consider the Commission’s acceptance of the assumption that decommissioned material at SONGS must be disposed of out-of-state, and its adoption of a different assumption with respect to PG&E, render its conclusion arbitrary and capricious.

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\(^{38}\) The Executive Order was entered into the record as part of Exh. 34 (TURN/Lacy). See also Exh. 15, pp. 26-27 (PG&E/Salmon).

\(^{39}\) Tr. Vol.1, 96:10-21(PG&E/Salmon).

\(^{40}\) PD at 46.

\(^{41}\) Exh. 34, p.99 (TURN/Lacy) (Southern California Edison Company Data Response to TURN).

\(^{42}\) Exh. 37 (PG&E Cross/Lasko) at pp. 4-5; D.16-04-019.

Instead of analyzing the record supporting PG&E’s determination that the cost for disposal of decommissioned material should be calculated by reference to out-of-state disposal rates, the PD flatly dismisses PG&E conclusion by stating that PG&E has provided “no example of an entity being prevented from disposal or reuse of similar debris in state.”

The only “similar” debris comes from the decommissioning of nuclear power plants in California. As stated above, decommissioned material from SONGS is disposed of out-of-state in reliance on the Executive Order and PG&E was able to utilize decommissioned material on-site at HBPP, which is permissible.

Further, the determination that the estimated cost for disposal of this material should be determined by out-of-state rates does not depend on a definitive interpretation of the Executive Order. There is no imminent possibility that the State will adopt regulations, and unless and until the State provides clear guidelines, it is unlikely that in-state landfills would accept material from DCPP. Even if so, it is uncertain whether in-state capacity would be available for the voluminous amounts of DCPP decommissioned material. By contrast, the out-of-state disposal facilities PG&E anticipates using all have projected continued operation and available capacity sufficient to complete DCPP decommissioning.

4. The Cost Estimate Must Include Costs for Removal of the DCPP Breakwater So Long As PG&E Retains the Obligation to Remove It.

The PD eliminates funding for removal of the concrete breakwater at DCPP, finding that funding is “premature” if in the future, it is determined that the breakwater could remain in place. As part of its actual decommissioning cost estimate, PG&E will be evaluating options for the cooling system intake and discharge structures including the breakwater. However,

43/ PD at 46.
44/ Exh. 15, pp. 30, line 14 to 31, line 7 (PG&E/Salmon).
45/ Exh. 15, pp. 28, line 19 to 29, line 14 (PG&E/Salmon).
46/ PD at 47.
pursuant to existing regulatory requirements and the DCPP California State Lands Commission leases, PG&E will need to remove the breakwater.\(^{47/}\)

While the PD references ORA’s testimony that the State has agreed that portions of the offshore cooling water conduits at SONGS may be left in place, the PD fails to note the evidence that, since Southern California Edison Company retains the ultimate obligation to remove the conduits, that liability is appropriately included in the SONGS DCE.\(^{48/}\) Since at present, PG&E retains the liability to remove the breakwater, disposal costs should be included.

**IV. IF THE COMMISSION DOES NOT ADOPT PG&E’S DCPP COST ESTIMATE AS REVISED, IT MUST MAKE ADJUSTMENTS WHERE THE PD DOUBLE COUNTED COSTS.**

PG&E accepts the PD’s changed assumption reducing the amount of time spent fuel is assumed to remain in wet storage from 10 years to 7 years. However, if the Commission does not reinstate PG&E’s cost estimates for Security and UDSLCR, it must adjust the total for these categories by $147.8 million to reflect amounts which are already accounted for in the reduction associated with the changed spent fuel assumption.

In reducing the UDSLCR, the PD correctly notes that Utility and DOC Staffing Costs overlap with the Large Component Removal category and therefore incremental amounts associated with these activities must be removed to identify the actual reduction to the Large Component Removal estimate.\(^{49/}\) However the PD fails to account for $88.8 million of Security included in the Large Component Removal category which is also included as part of the $344 million reduction in Security, and $13.5 million in employee severance costs, which were not disputed amounts. Combining these amounts, the total UDSLCR adjustment should be $402.7 million rather than $505 million.

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\(^{47/}\) Exh. 15, p. 18, lines 8-27 (PG&E/Sharp).

\(^{48/}\) Exh. 36, pp. 6-7 (PG&E Cross/Lasko).

\(^{49/}\) PD at 42. PG&E does not agree with the specific methodology as to how these reductions were calculated, but using that methodology results in double counting as discussed herein.
Additionally, the PD reduces PG&E’s estimate for Security by $344 million, the entire difference between the 2015 and 2012 NDCTP. If PG&E’s Security increase is not accepted, the PD must account for the overlap in the Security cost reduction and Security costs included in the spent fuel category. This security cost overlap is $31.3 million. Finally, $14.2 million of Utility and DOC Staffing are duplicated in the spent fuel reduction.

Failure to account for these overlapping reductions will result in duplicative reductions to Security. The details of these calculations, along with cites to the record, are included as Appendix Two.

V. THE COMMISSION MUST MODIFY CERTAIN FINDINGS AND ORDERS NOT SUPPORTED BY THE RECORD.

California Public Utilities Code Section 1757(a)(3) requires all Commission decisions to be supported by the findings.

_Sua sponte_, with no justification in the record, the PD requires PG&E to develop a cost tracking structure and organize a meeting to determine how PG&E’s cost accounting system for DCPP facilitates tracking decommissioning expenditures by major subprojects, allows for comparison to previously approved estimates, provides a written record of key decisions, and what alternatives were considered. 50 These are to be consistent with milestones under development in Southern California Edison Company and San Diego Gas & Electric Company A.16-03-004. The Commission may not reach a conclusion on an issue that is out of scope of this proceeding, and the Commission must eliminate this requirement.

The PD also directs PG&E to consult with the DHS, the Water Board, the CCC, the State Lands Commission and the Department of Toxic Substances Control as to how the Executive Order may impact decommissioning efforts at Diablo Canyon. These agencies have no role with respect to the Executive Order. 51 PG&E will consult with these agencies as appropriate, but no

50/ PD, Ordering Paragraphs 3 and 4.
51/ While the Department of Health Services was expected to initiate a CEQA review on the matters covered by the Executive Order, it has taken no action for 15 years.
purpose would be served by requiring PG&E to consult with these agencies about the Executive Order requirements. This Ordering Paragraph should be removed.

Finally, the PD expressly finds that existing reporting requirements for HBPP decommissioning as set forth in D 14-02-024 are appropriate and no changes are warranted.\textsuperscript{52/}

However, Finding of Fact 30, Conclusion of Law 22 and Ordering Paragraph 6 instead impose substantially different requirements than those adopted by the prior decision. These findings and conclusions should be modified to reflect the requirements of D.14-02-024.

VI. CONCLUSION

The Commission should modify the PD as discussed herein.

Respectfully Submitted,
LINDSEY HOW-DOWNING

By: \textit{/s/ Lindsey How-Downing}

Lindsey How-Downing

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Attorney for
PACIFIC GAS AND ELECTRIC COMPANY

May 10, 2017

\textsuperscript{52/} PD at 18-19.
BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company in its 2015 Nuclear Decommissioning Cost Triennial Proceeding

(U 39 E)

Application No. 16-03-006
(Filed March 1, 2016)

PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)
COMMENTS ON PROPOSED DECISION IN ITS 2015 NUCLEAR DECOMMISSIONING COST TRIENNIAL PROCEEDING

APPENDIX ONE

RECOMMENDED CHANGES TO PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDERING PARAGRAPHS
RECOMMENDED CHANGES TO PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDERING PARAGRAPHS

Findings of Fact


2. Pacific Gas and Electric Company owns the Diablo Canyon Power Plant Units 1 and 2, and Humboldt Bay Power Plant Unit 3.

3. Every nuclear power plant operator is required to enter a standard spent nuclear fuel disposal agreement with the Department of Energy (DOE); these agreements provided that DOE will start accepting spent nuclear fuel starting January 31, 1998 to transport it to a permanent repository. No permanent U.S. repository has been established.

4. Pacific Gas and Electric Company assumed, for cost estimation purposes, that the Department of Energy will begin to accept spent nuclear fuel for long-term storage in 2028; the record provides little or no support for any date other than 2028.

5. Pacific Gas and Electric Company along with other nuclear plant operators, sued the Department of Energy to recover costs incurred to store spent nuclear fuel on-site after it was due to be picked up; the recovery varied between the utilities and was limited by time period to costs previously incurred.

6. The record supports no longer than a 7-year wet cooling period for nuclear decommissioning cost triennial proceedings consistent with industry practice.

7. Pacific Gas and Electric Company estimates forecasting future decommissioning costs which were prepared by recognized experts who used utility information and generally accepted methods for developing the submitted cost analyses.

8. Pacific Gas and Electric Company(PG&E) applied a 25% contingency to the decommissioning cost estimate submitted with its Application in this proceeding; by contingency, PG&E means “performance contingency”, i.e., unknown but historically inevitable.

9. Pacific Gas and Electric Company has complied with the reporting and approval process directed in the last nuclear decommissioning cost triennial proceeding.
10. Transparent cost accounting and linkage to prior cost estimates should enhance timely review and understanding of the basis for changes in scope or cost.

11. Pacific Gas and Electric Company’s total cost estimate for decommissioning Diablo Canyon Power Plant Units 1 and 2 is $3,779,202,000 (2014$); the total estimate is approximately $1,494,000,000 (65%) more than the approved 2012 nuclear decommissioning cost triennial proceeding cost estimate.

12. Pacific Gas and Electric Company submitted evidence that it had complied with orders from prior Commission decisions.

13. Contributions by Pacific Gas and Electric Company to the nuclear decommissioning trust fund are calculated by application of the rates of return to the approved and escalated cost estimates.


16. Pacific Gas Electric Company has established two master trusts to hold decommissioning funds; the trusts differ with respect to whether contributions to them qualify for an income tax deduction under Internal Revenue Code Section 468A.

17. In this proceeding, Pacific Gas and Electric Company has calculated separate escalation rates for: 1) labor; 2) equipment and material; 3) contract labor; 4) low level radioactive waste burial costs; and 5) other.

18. Pacific Gas and Electric Company provided evidence to support its escalation rates for labor, equipment and materials, contract labor, low level radioactive waste burial costs, and other categories.
19. Conservative forecasted yields for the trust funds serve the public interest and these yields should bear some relation to actual investments within a portfolio.

20. Pacific Gas and Electric Company developed and provided evidence supporting its forecast for rates of return on the equities and fixed income portions of its trust funds for the qualified and non-qualified trusts.

21. Pacific Gas and Electric Company (PG&E) estimated rate of return on equity of 7.7% and PG&E’s estimated rate of return on fixed income of 3.6% are reasonable.

22. Nuclear decommissioning trust funds are unique in operation and purpose, which makes their management responsive to some concerns and factors uncommon to other investment funds.

23. To obtain a schedule of Rulings from the Internal Revenue Service, Pacific Gas and Electric Company relies on Year End trust fund balances to calculate contribution levels which maximize tax benefit.


25. Pacific Gas and Electric Company’s requested contribution for decommissioning costs for Diablo Canyon Power Plant reflects an increase of roughly 65% over the estimate adopted in 2012 and a 107% increase over the adopted 2009 estimate.

26. Pacific Gas and Electric Company’s remaining cost to decommission Humboldt Bay Power Plant Unit 3 of $531.3 million (2014$) (total estimated cost of $1,054.8 million) is reasonable and supported by the record.

27. Pacific Gas and Electric Company’s activities and associated costs of $371 million for completed Humboldt Bay Power Plant Unit 3 decommissioning work were reasonable and prudently incurred.

28. Pacific Gas and Electric Company’s forecast of $3.4 million for SAFSTOR O&M expense for HBPP Unit 3 for 2017; $3.3 million for 218; and $2.7 million for 2019 is reasonable and supported by the record.
29. The variances in actual versus forecast SAFSTOR expenses for the prior review period are reasonable.

30. To be useful to the Commission and the parties, the two annual advice letters (AL) must be tied to the nuclear decommissioning cost estimate (DCE) and show expenditures and related progress toward specific major milestones in the decommissioning process. The Forecast and Recorded Decommissioning Disbursements ALs must include direct references to the DCE to tie forecasted and recorded disbursements to the DCE as well as include status reports that show progress in terms of costs and timelines for each major component of the decommissioning plan. With respect to HBPP Unit 3, PG&E shall continue to comply with the reporting and advice letter requirements set forth in D. 14-02-024.

31. All disbursements from the nuclear decommissioning trust funds are provisional and subject to an obligation to refund any improper costs to the Trust Fund.

32. After-the-fact reasonableness reviews of expenditures for decommissioning of Humboldt Bay Power Plant and Diablo Canyon Power Plant should be conducted in the nuclear decommissioning cost triennial proceeding, unless otherwise scheduled.

Conclusions of Law

1. The overall applicable standard of review for the numerous requests in the Application filed by Pacific Gas and Electric Company in this proceeding is one of reasonableness, specifically whether the decommissioning cost assumptions are reasonable, decommissioning activities are reasonable and prudent, and proposed revenue requirements result in just and reasonable rates.

2. The Atomic Energy Act of 1954\textsuperscript{177} provided the federal government with exclusive jurisdiction to license the transfer, delivery, receipt, acquisition, possession, and use of nuclear materials; states retain traditional responsibility in the field of regulating electrical utilities for determining questions of need, reliability, cost, and other related concerns.

3. The California Nuclear Facility Decommissioning Act of 1985\textsuperscript{178} requires, inter alia, each electrical utility owning, in whole or part, or operating a nuclear facility, located in California or
elsewhere, to provide the Commission with periodic decommissioning cost estimates which
include descriptions of changes in regulation, technology, and economics affecting the estimate,
descriptions of additions and deletions to the facility, and all assumptions about the remaining
useful life of the facilities.

4. It is reasonable to assume for cost estimation purposes that Department of Energy will not
begin to accept spent nuclear fuel for long-term storage prior to 2028.

5. It is reasonable to assume for cost estimation purposes that some spent nuclear fuel
assemblies will require 7 years of wet cooling. In the 2018 Nuclear Decommissioning Cost
Triennial Proceeding, the Commission would benefit from Pacific Gas and Electric Company
providing information comparing annual cost impacts of strategies to reduce wet cooling periods,
including assessment of expedited dry cask loading pre and post-shutdown.

6. Assumptions suitable for high level cost elimination purposes do not compel the same
assumptions by the utilities when considering the prudency and reasonableness of future actual
decommissioning decisions and resulting costs.

7. A nuclear plant licensee, such as Pacific Gas Electric Company is required to submit its
spent fuel management plan to the Nuclear Regulatory Commission for review.

8. The record is insufficient for the Commission to conclude that future Department of
Energy damage awards are a predictable certainty which is sufficient to reduce the
decommissioning cost estimate to reflect potential future damage awards.

9. The reasonableness of a contingency factor may vary between nuclear plants and at
different stages of decommissioning.

10. Pacific Gas and Electric Company is in compliance with prior decisions applicable to
decommissioning.

11. It is reasonable for Pacific Gas and Electric Company to use the Common Summary
Format directed in the prior proceeding to provide a comprehensive comparison of cost
estimations from different facilities.
12. It is reasonable to reduce Pacific Gas and Electric Company’s 2015 decommissioning cost estimate for Diablo Canyon Power Plant Units 1 and 2 by a total of $1.358197 billion on the grounds the request lacked adequate support to demonstrate the requests were reasonable in nature and amount; the remainder of $2.421 billion is a reasonable cost estimate and should be adopted.

13. Pacific Gas and Electric Company’s assumption for the return on equity of 7.7% is reasonable.

14. Pacific Gas and Electric Company’s assumption for the return on fixed income investments, estimated rates of 3.6% are reasonable.

15. The Commission concludes that the most recent update of trust fund balances for purposes of all facilities is the trust fund balances as of December 31, 2016 which should be used when calculating their contributions.

16. It is reasonable for Pacific Gas and Electric Company to collect the full amount necessary to make annual contributions based on the escalation rates and rates of return found reasonable herein.

17. It is reasonable for Pacific Gas and Electric Company to collect through Commission-adopted jurisdictional electric rates for funding HBPP Unit 3 SAFSTOR O&M, the annual revenue requirement, as updated, effective January 1, 2017, $4.493 million for 2017; $4.475 million for 2018; and $3.885 million for 2019, the actual revenue requirement to be adjusted to reflect the December 31, 2016 Trust Fund balances.

18. It is reasonable for Pacific Gas and Electric Company to collect through Commission-adopted jurisdictional electric rates an annual revenue requirement for the Humboldt Bay Power Plant (HBPP) Unit 3 effective January 1, 2017, the actual revenue requirement to be adjusted to reflect the HBPP decommissioning cost estimate of $62.924 million, and the actual December 31, 2016 Trust Fund balances.

19. It is reasonable for Pacific Gas and Electric Company to continue revenue requirement associated with the nuclear decommissioning trust contributions and Humboldt Bay Power Plant
SAFSTOR O&M through a non-by passable charge as specified in Public Utilities Code Section 379, and to continue to utilize the Nuclear Decommissioning Adjustment Mechanism as authorized in D.99-10-057.

20. It reasonable for Pacific Gas and Electric Company to collect through Commission-adopted jurisdictional electric rates, an annual revenue requirement to be adjusted to reflect the Diablo Canyon Power Plant decommissioning cost estimate as modified herein, and actual December 31, 2016 Trust Fund balances.

21. The respective decommissioning cost estimate for Pacific Gas and Electric should be approved consistent with the reductions set forth in this decision.

22. The Forecast and Recorded Decommissioning Disbursements Tier 2 ALs should be filed annually and must contain information supporting the requested disbursement tied to the nuclear decommissioning cost estimate and show expenditures and related progress toward specific major milestones in the decommissioning process. With respect to HBPP Unit 3-, PG&E shall continue to comply with the reporting and advice letter requirements set forth in D.14-02-024.

23. All disbursements from the Nuclear Decommissioning Trust Funds are provisional and subject to an obligation to refund any improper costs to the Trust Fund.

24. Discharging our duty to review decommissioning costs as pursuant to Pub. Util. Code §§ 451 and 8327 requires that PG&E file after-the-fact reasonableness reviews of expenditures for decommissioning Humboldt Bay Power Plant and Diablo Canyon Power Plant in the Nuclear Decommissioning Cost Triennial Proceeding, unless otherwise scheduled.

25. Discharging our duty to review decommissioning costs as pursuant to Pub. Util. Code §§ 451 and 8327 requires that when Pacific Gas and Electric Company (PG&E) completes a major component of nuclear decommissioning for Humboldt Bay Power Plant and Diablo Canyon Power Plant, PG&E should submit a separate reasonableness application with a comprehensive showing the decommissioning activities and costs from the conceptual plan through the actual recorded costs tied to line items in the decommissioning cost estimate.
26. Further scheduling for reasonableness reviews of nuclear decommissioning costs for Humboldt Bay Power Plant and Diablo Canyon Power Plant will be set in the Nuclear Decommissioning Cost Triennial Proceeding.

27. As required by Pub. Util. Code § 451 all rates and charges collected by a public utility must be “just and reasonable,” and a public utility may not change any rate “except upon a showing before the commission and a finding by the commission that the new rate is justified,” as provided in § 454.

28. Pacific Gas and Electric Company remains responsible for all decommissioning activities whether conducted by Pacific Gas and Electric Company employees or a contractor.


30. The burden of proof is on Pacific Gas and Electric Company to demonstrate the reasonableness of the rate request.

31. The standard of proof is that of a preponderance of evidence, which means such evidence as, when weighed with that opposed to it, has more convincing force and the greater probability of truth.

32. This decision should be effective upon approval by the Commission to allow Pacific Gas and Electric Company to collect the amounts authorized in this decision.

ORDER

IT IS ORDERED that:

1. Within ten (10) days of the effective date of this Decision, Pacific Gas and Electric (PG&E) shall file a Tier 2 compliance advice letter (AL) with the Commission’s Energy Division, which shall include the calculated revenue requirement as described and adjusted in the Decision. Any resulting rate change shall be incorporated with the next available consolidated rate change following the effective date of this order, subject to Energy Division determining that the revised tariffs are in compliance with this order. The compliance AL shall describe how PG&E will implement the terms adopted in this Decision, including updating the revenue
requirements to incorporate the December 31, 2016 nuclear decommissioning trust fund balances for the Diablo Canyon Power Plant, and the Humboldt Bay Power Plant Nuclear Decommissioning Trust Funds. The updated information shall serve as the basis for the Internal Revenue Service Schedule of Ruling Amounts for years 2016 and 2017. An adjustment to the Nuclear Decommissioning Adjustment Mechanism balancing account shall be made to address any difference in the revenue collected in rates and the annual revenue requirements, as described and updated in the compliance AL.

2. Pacific Gas and Electric Company shall serve testimony in its next triennial review of nuclear decommissioning trusts and related decommissioning activities that demonstrates they have made all reasonable efforts to retain and utilize sufficient qualified and experienced personnel to effectively, safely, and efficiently pursue any physical decommissioning related activities for the nuclear generation facilities under their control.

3. Pacific Gas and Electric Company (PG&E) shall organize a meeting, within 60 days of the date this decision is issued, to work with Energy Division and other interested parties to determine how PG&E’s cost accounting system for Diablo Canyon Power Plant appropriately facilitates tracking decommissioning expenditures by major subprojects within a decommissioning phase, allows for comparison to previously approved estimates of activities, costs, and schedule, and requires written record of key decisions about cost, scope, or timing of a major project or activity (i.e. varies by plus or minus 10%), including the nature of the decision, who made it, factors considered, and whether and what alternatives were considered consistent with the common summary format and the milestone being developed in A.16-03-004.

4. Pacific Gas and Electric Company (PG&E) shall develop, in consultation with the Energy Division and other interested parties, a cost categorization structure for tracking expenditures as discussed herein, which includes a reasonable path to compare the decommissioning costs previously estimated to actual costs expended. PG&E shall present the cost categorization structure, including how it conforms with the requirements of Ordering Paragraph 3.
5. Pacific Gas and Electric Company will file its detailed site-specific decommissioning cost estimate for Diablo Canyon Power Plant once completed in the following triennial proceeding. The site-specific decommissioning cost shall include an assessment for expediting dry cask loading. This assessment shall include both pre-shutdown and post shut options and costs for expediting dry cask loading.

6. Pacific Gas and Electric Company must file annually Forecast and Recorded Decommissioning Disbursements Tier 2 Advice Letters (AL); each such AL must show information supporting the requested disbursement tied to the Nuclear Decommissioning Cost Estimate and show expenditures and related progress toward specific major milestones in the decommissioning process. With respect to HBPP Unit 3, PG&E shall continue to comply with the reporting and advice letter requirements set forth in D.14-02-024.

7. Pacific Gas and Electric Company shall provide testimony in the next nuclear decommissioning triennial proceeding consistent with section 8, Reporting and Format Requirements for Next NDCTP, of this Decision. This information will include a summary and results of consultation with the CCC, State Lands Commission, Department of Public Health, California State Water Resources Control Board, and the Department of Toxic Substances Control concerning the application of Executive Order D.62-02 to disposal of construction debris and whether the breakwater will be required to be removed at Diablo Canyon Power Plant.

8. All disbursements from the Nuclear Decommissioning Trust Funds are provisional and subject to an obligation to refund any improper costs to the Trust Funds.

9. Pacific Gas and Electric Company must file after-the-fact reasonableness reviews of expenditures for decommissioning Humboldt Bay Power Plant in the Nuclear Decommissioning Cost Triennial Proceedings consistent with the provisions set forth herein and D.14-02-024, unless otherwise scheduled.
10. Pacific Gas and Electric Company (PG&E) shall provide a status update regarding the Department of Energy Litigation that includes an assessment of when spent nuclear fuel will be picked up from Humboldt Bay Power Plant and Diablo Canyon Power Plant, as well as a report regarding the status of the settlement between PG&E and Department of Energy concerning reimbursement for spent nuclear fuel management costs and how PG&E is accounting/crediting funds back to ratepayers consistent with Section 8 of this Decision.

11. Further scheduling for reasonableness reviews of nuclear decommissioning costs for Diablo Canyon Power Plant and Humboldt Bay Power Plant will be set in the Nuclear Decommissioning Cost Triennial Proceedings to filed in 2018.

12. All outstanding matters requested by any party not specifically addressed herein are deemed denied for purposes of this triennial proceeding.

13. Application 16-03-006 is closed.
BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company in its 2015 Nuclear Decommissioning Cost Triennial Proceeding

Application No. 16-03-006
(Filed March 1, 2016)

(U 39 E)

PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)
COMMENTS ON PROPOSED DECISION IN ITS 2015 NUCLEAR DECOMMISSIONING COST TRIENNIAL PROCEEDING

APPENDIX TWO

SPREADSHEETS IDENTIFYING DOUBLE COUNTED AMOUNTS
# Appendix 2 A

Large Component Removal Reduction Duplication of Site Security Reduction

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¹ PG&E’s entire request for an increase to Site Security was denied in the PD. The PD also would reduce the increase associated with Large Component Removal, which contains security and severance costs. As such, the reductions to Large Component Removal would duplicate the reductions that are already proposed for PG&E’s entire Site Security increase request. Additionally, no party challenged PG&E’s severance costs, but the reduction to Large Component Removal would result in a reduction to PG&E’s severance request.

² Exhibit PGE-1, Page 45, “Period 2a Period Dependent Costs, 2a.4.14 Security Staff Cost”
³ Exhibit PGE-1, Page 52, “Period 2a Period Dependent Costs, 2a.4.14 Security Staff Cost”
⁴ Exhibit PGE-2, Page 34, Footnote (a)
⁵ Exhibit PGE-3, Page 120, “Period 2a Period-Dependent Cost, 2a.4.14 Security Staff Cost”
⁶ Exhibit PGE-3, Page 130, “Period 2a Period-Dependent Cost, 2a.4.14 Security Staff Cost”
⁷ Exhibit PGE-1, Page 45, “Period 2a Period Dependent Costs, 2a.4.12 Severance Related Costs”
⁸ Exhibit PGE-1, Page 52, “Period 2a Period Dependent Costs, 2a.4.12 Severance Related Costs”
⁹ Exhibit PGE-3, Page 120, “Period 2a Period-Dependent Cost, 2a.4.12 Severance Related Costs”
¹⁰ Exhibit PGE-3, Page 130, “Period 2a Period-Dependent Cost, 2a.4.12 Severance Related Costs”
Appendix 2-B
Spent Fuel Wet Cooling Period Cost Reduction Duplication of Site Security Staffing Reduction

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<td>Unit 2 Duplicate Reduction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$21,136,966 (Cell J8<em>3 years (365.25</em>3))</td>
</tr>
<tr>
<td>10</td>
<td>Unit 1 and Unit 2 Duplicate Reduction Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$31,289,938 (Cell K5+Cell K9)</td>
</tr>
</tbody>
</table>

1. PG&E’s entire increase associated with Site Security would be denied. Site Security costs are included in the cost associated with the three year reduction in time spent fuel will remain in wet storage as provided in PGE-Exhibit 2, Table 2-8, line 9. As such, the PD would duplicate the reductions to Site Security.

2. Exhibit PGE-3, page 82 “Period 2c Spent Fuel Delay Prior to Spent Fuel Pool Decon”

3. Exhibit PGE-3, page 122, “2c.4.12 Security Staff Cost” “Total Cost”

4. Exhibit PGE-1, page 46, “2c.4.12 Security Staff Cost” “Total Cost”

5. Exhibit PGE-3, page 46, “2c.4.12 Security Staff Cost” “Total Cost”


7. Exhibit PGE-1, page 54, “2c.4.12 Security Staff Cost” “Total Cost”

8. Escalation factor of 1.085458 which is based on a 2.85% annual escalation as provided in Exhibit PGE-2, page 34, footnote (a)
## Appendix 2-C
### Spent Fuel Wet Cooling Period Cost Reduction Duplication of Utility Staffing Reduction

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DCE</td>
<td>Unit</td>
<td>Start</td>
<td>End</td>
<td>Days</td>
<td>Sub-period $/day</td>
<td>Sub-period $/day</td>
<td>Sub-period $/day</td>
<td>Sub-period $/day</td>
<td>Duplicate Reduction</td>
</tr>
<tr>
<td>2</td>
<td>2016 DCE</td>
<td>Unit 1</td>
<td>5/2/2030</td>
<td>10/2/2034</td>
<td>1645</td>
<td>$16,468,000$^4</td>
<td>N/A</td>
<td>N/A</td>
<td>$10,011</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td>2012 DCE</td>
<td>Unit 1</td>
<td>5/3/2030</td>
<td>8/26/2027</td>
<td>2671</td>
<td>$10,169,000$^6</td>
<td>$3,807</td>
<td>$4,132</td>
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<td>N/A</td>
</tr>
<tr>
<td>4</td>
<td>Delta</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$5,879</td>
</tr>
<tr>
<td>5</td>
<td>Unit 1</td>
<td>Duplicate Reduction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$6,441,468</td>
<td>(Cell J4<em>3 years (365.25</em>3))</td>
</tr>
<tr>
<td>6</td>
<td>2016 DCE</td>
<td>Unit 2</td>
<td>2/26/2031</td>
<td>8/26/203</td>
<td>1642</td>
<td>$50,222,000$^6</td>
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<td>N/A</td>
<td>$30,586</td>
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</tr>
<tr>
<td>7</td>
<td>2012 DCE</td>
<td>Unit 2</td>
<td>2/24/2031</td>
<td>8/26/2037</td>
<td>2374</td>
<td>$51,506,000$^7</td>
<td>$21,695</td>
<td>$23,549</td>
<td>$23,549</td>
<td>N/A</td>
</tr>
<tr>
<td>8</td>
<td>Delta</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>$7,037</td>
</tr>
<tr>
<td>9</td>
<td>Unit 2</td>
<td>Duplicate Reduction</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td>$7,710,960</td>
<td>(Cell J8<em>3 years (365.25</em>3))</td>
</tr>
<tr>
<td>10</td>
<td>Unit 1 and Unit 2</td>
<td>Duplicate Reduction</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$14,152,428</td>
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</tbody>
</table>

1 PG&E’s entire increase associated with Utility Staffing was denied in its entirety. Utility Staffing costs are included in the cost associated with the three year reduction in time spent fuel will remain in wet storage as provided in PGE-Exhibit 1, Table 2-8, line 9. As such, the PD would duplicate the reductions to Utility Staffing.

2 Exhibit PGE-3, page 82 “Period 2 Spent Fuel Delay Prior to Spent Fuel Pool Decon”

3 Exhibit PGE-3, page 122, “2c.4.13 Utility Staff Cost” “Total Costs”

4 Exhibit PGE-3, page 46, “2c.4.13 Utility Staff Cost” “Total Costs”

5 Exhibit PGE-1, page 46, “2c.4.13 Utility Staff Cost” “Total Costs”

6 Exhibit PGE-3, page 132, “2c.4.13 Utility Staff Cost” “Total Costs”

7 Exhibit PGE-1, page 54, “2c.4.13 Utility Staff Cost” “Total Costs”

8 Exhibit PGE-2, page 34, footnote (a)