Pacific Gas and Electric Company®

**Jon A. Franke**
Vice President
Safety, Health and
Chief Safety Officer

P.O. Box 56
Avila Beach, CA 93424

805.545.4888
E-Mail: Jon.Franke@pge.com

December 13, 2018

PG&E Letter DCL-18-108

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

10 CFR 50.12

Docket No. 50-275, OL-DPR-80
Docket No. 50-323, OL-DPR-82
Diablo Canyon Power Plant, Units 1 and 2
Access to Nuclear Decommissioning Trust Fund

References:

1. PG&E Letter DCL-18-096, Certification of Permanent Cessation of Power Operations, dated November 27, 2018 (ML18331A553)

Dear Sir or Madam:

On November 27, 2018, Pacific Gas and Electric Company (PG&E) informed the NRC of its intention to permanently cease operation of the Diablo Canyon Power Plant (DCPP) Units 1 and 2 on November 2, 2024, and August 26, 2025, respectively (Reference 1). Having made the decision to retire DCPP Units 1 and 2 many years in advance of expiration of the current operating licenses, PG&E has a unique opportunity to streamline the decommissioning effort, accelerate the decommissioning schedule and reduce overall decommissioning costs by proceeding with substantial decommissioning planning activities between now and permanent cessation of operations. The cost to implement these activities - $187.8 million ($2017) – is a legitimate decommissioning cost that, without question, would be funded by withdrawals from the Diablo Canyon Nuclear Decommissioning Trust (NDT) if undertaken after permanent cessation of operations. PG&E's proposed pre-shutdown planning activities and costs are presented in Enclosure 2 to this letter.

Additionally, the cost of these decommissioning planning activities will be the same whether performed pre- or post-shutdown. But, if PG&E waits until after permanent cessation of operations to implement these activities, it estimates the total cost of decommissioning would increase by $166.1 million ($2017). PG&E's economic analysis demonstrating increased cost to customers of delayed implementation of these planning activities is presented in Enclosure 3 to this letter.[1]

[1] PG&E presents the decommissioning costs in $2017 dollars to be consistent with presentation of a year-end asset balance in the NDT. If the NRC grants this exemption request, funds would be withdrawn from the trust in nominal (or current) dollars. For this reason, Enclosures 2 and 3 present the total costs and the total savings associated with implementing pre-shutdown decommissioning planning activities in both $2017 and nominal dollars.

PG&E's customers have funded the DCPP NDT as directed by the California Public Utilities Commission (CPUC) and in full compliance with NRC requirements. The CPUC has approved customer collections to cover all types of decommissioning costs, including the NRC license termination costs for which financial assurance is required pursuant to 10 CFR 50.75, the spent fuel management costs that must be funded pursuant to 10 CFR 50.54(bb), and the site restoration costs that must be funded under California law. Enclosure 4 provides information regarding the projected cost of each decommissioning phase. This information was included in the decommissioning cost estimate for Diablo Canyon submitted to the CPUC in the 2018 Nuclear Decommissioning Cost Triennial Proceeding on December 13, 2018.

The total balance of the customer-funded DCPP NDT as of December 2017 is $3.17 billion - more than adequate funding to proceed with near term decommissioning planning activities and to fully fund radiological decommissioning. The December 2017 asset balance sheet for the Diablo Canyon NDT is provided in Enclosure 5 to this letter.

On the other hand, PG&E has determined that waiting to initiate decommissioning planning activities until after permanent cessation of operations would increase the cost of decommissioning to PG&E's customers by $166.1 million ($2017). PG&E's proposed pre-shutdown planning activities reduce the costs of security, operations, fire protection, and overall decommissioning project staffing during active decommissioning and allow for a prompt transition from operating to decommissioning status. PG&E, the CPUC, and public stakeholders all strongly advocate for a path that will allow physical decommissioning to begin as soon as possible after shutdown.

Prior to permanent cessation of operations, NRC regulations (10 CFR 50.82(a)(8)(ii)) restrict the use of NDT for decommissioning planning to 3 percent of the generic minimum decommissioning amount calculated consistent with a formula set forth by regulation (10 CFR 50.75). In addition to this limitation, the initial 3 percent cannot be used for spent fuel management or site restoration planning absent (1) a clear indication that monies in the fund were collected for those purposes and are clearly and consistently accounted for separately or (2) an exemption from the NRC allowing use of co-mingled funds for those purposes (10 CFR 50.82(a)(8)(i)(A)). These regulations would limit withdrawal from the Diablo Canyon NDT to $37.2 million ($18.6 million per unit) and would allow spending only on planning activities for radiological decommissioning. This is far less than the $187.8 million ($2017) PG&E has determined should be spent on planning activities pre-shutdown across all categories of decommissioning to reduce decommissioning costs and duration overall.

Therefore, pursuant to 10 CFR 50.12, "Specific Exemptions," PG&E requests exemptions from 10 CFR 50.82(a)(8)(ii) and 10 CFR 50.82(a)(8)(i)(A) to allow PG&E to withdraw $187.8 million ($2017) from the Diablo Canyon NDT to fund decommissioning planning activities necessary to support direct transition to decommissioning upon permanent cessation of operations. Additionally, PG&E requests the NRC to allow PG&E to use these funds to support planning for radiological decommissioning, spent fuel management, and site restoration activities. Enclosure 2 provides the breakdown of the $187.8 million ($2017) into radiological decommissioning (license termination), spent fuel management, and site restoration. It is in every stakeholder's interest for the NDT to be effectively and efficiently utilized. Using NDT funds now for decommissioning planning activities PG&E otherwise would have to implement after permanent cessation of operations is prudent. It is important to stress that the planning activities must be performed, and associated costs will be incurred, in both scenarios – pre-shutdown or post-shutdown. The delay would cost PG&E's customers $166.1 million ($2017). The NRC and PG&E share an interest in reducing total decommissioning costs to reduce overall demand on the NDT and ensure funds are available for radiological decommissioning. Moreover, the public interest in prompt and efficient decommissioning weighs in favor of using NDT funds to perform the work now to expedite decommissioning later.

The bases for concluding that the exemption request meets the standards in 10 CFR 50.12 for "Specific Exemption" are included in the Enclosure 1 to this letter.

PG&E respectfully requests a timely review of the exemption request, and if possible no later than June 2019.

PG&E makes no new or revised regulatory commitment (as defined by NEI 99-04) in this letter.

Please contact Philippe Soenen, at (805) 459-3701, with any questions about this letter.

Executed on December 13, 2018

Sincerely,

Jon A. Franke
*Vice President, Safety, Health and Chief Safety Officer*

Enclosures
cc: Diablo Distribution
cc/enc: Kriss M. Kennedy, NRC Region IV Administrator
Christopher W. Newport, NRC Senior Resident Inspector
Balwant K. Singal, NRR Senior Project Manager

# Request for Exemptions from 10 CFR 50.82(a)(8)(ii) and 50.82(a)(8)(i)(A)

Request for Exemptions from 10 CFR 50.82(a)(8)(ii) and 50.82(a)(8)(i)(A)

## 1. Purpose

Pacific Gas and Electric Company (PG&E) requests exemptions from 10 CFR 50.82(a)(8)(ii) and 10 CFR 50.82(a)(8)(i)(A) to allow PG&E to withdraw $187.8 million ($2017) from the Diablo Canyon Nuclear Decommissioning Trust (NDT) for decommissioning planning between now and permanent cessation of operations of Diablo Canyon Power Plant (DCPP) Units 1 and 2 in 2024 and 2025, respectively, instead of three percent of the generic amount specified in 10 CFR 50.75. The request to withdraw $187.8 million ($2017) is based on PG&E's unique opportunity to streamline the decommissioning effort, accelerate the decommissioning schedule, and reduce overall decommissioning costs by proceeding with substantial decommissioning planning activities between now and permanent cessation of operations. The cost to implement these planning activities is a legitimate decommissioning cost that, without question, would be funded by withdrawals from the NDT for planning activities implemented after permanent cessation of operations. Waiting to initiate decommissioning planning activities until after permanent cessation of operations increases the cost of decommissioning to PG&E's customers by $166.1 million ($2017).[2]

Additionally, PG&E requests the NRC to allow PG&E to use these funds to support planning for radiological decommissioning, spent fuel management, and site restoration activities.

## 2. Background

By PG&E letter DCL-18-015, "Request to Withdraw the Diablo Canyon Power Plant License Renewal Application," dated March 7, 2018, PG&E informed the NRC that it had determined that continued baseload operation of the two DCPP units beyond the currently approved operating periods was not necessary to meet California's projected energy demand requirements. Therefore, PG&E requested to withdraw the license renewal application for DCPP Units 1 and 2. The NRC acknowledged this request by letter dated April 16, 2018. Subsequently, by PG&E letter DCL-18-096, "Certification of Permanent Cessation of Power Operations," dated November 27, 2018, PG&E informed the NRC of permanent cessation of operation on November 2, 2024, and August 26, 2025 for DCPP Units 1 and 2 respectively. The early decision to retire DCPP Units 1 and 2 upon expiration of the current operating license periods provides PG&E a unique opportunity – a lead time of 6 years to plan for decommissioning. Typically, the majority

[2] PG&E presents the decommissioning costs in $2017 dollars to be consistent with presentation of a year-end asset balance in the NDT. If the NRC grants this exemption request, funds would be withdrawn from the trust in nominal (or current) dollars. For this reason, Enclosures 2 and 3 present the total costs and the total savings associated with implementing pre-shutdown decommissioning planning activities in both $2017 and nominal dollars.

of decommissioning planning and submittal of the Post Shutdown Decommissioning Activities Report (PSDAR) is performed after permanent cessation of operations. Major decommissioning activities are not allowed to commence until 90 days after the submittal of the PSDAR, which is required to be submitted within 2 years of permanent cessation of operations. To support implementation of decommissioning planning activities pre-shutdown, PG&E plans to submit the DCPP PSDAR in 2019. PG&E will submit a site-specific decommissioning cost estimate with the PSDAR, as required by 10 CFR 50.82(a)(4)(i). Executing on planning and permitting activities between now and permanent shut down would allow physical decommissioning to begin shortly after permanent shut down. PG&E estimates this would reduce the duration of decommissioning by two years.

Decommissioning planning activities necessary to support direct transition to physical decommissioning upon permanent shut down of DCPP Units 1 and 2 include:

- obtain revisions to NRC licenses and requirements, for example: permanently defueled technical specifications and revised license conditions license amendment request, revisions required to support: the irradiated fuel management plan, store greater-than-Class-C waste, post shut down emergency planning, decommissioned quality assurance program
- obtain state and local permits required for decommissioning activities and support required stakeholder process related to future land use and disposition of facilities
- complete engineering design, work plans, technical evaluations, and procurement to support several major, critical decommissioning projects scheduled at the front end of the decommissioning effort
- develop and support decommissioning cost estimates and support nuclear decommissioning proceedings at the California Public Utilities Commission (CPUC)
- develop detailed executable work plans for decommissioning work, revise plant processes and procedures as necessary

Though the cost to perform these planning activities is the same whether the plant is operating or shut down, the total decommissioning cost would be $166.1 million ($2017) greater if decommissioning planning activities are initiated after permanent cessation of operations due to delayed implementation of power block modifications, delayed reductions to required security staffing, and delayed spent fuel transfer to the independent spent fuel storage installation.

PG&E's customers have funded the Diablo Canyon NDT as directed by the CPUC and in full compliance with NRC requirements. The CPUC has approved customer collections to cover all types of decommissioning costs, including the NRC license termination costs for which financial assurance is required pursuant to 10 CFR 50.75, the spent fuel management costs that must be funded pursuant to 10 CFR 50.54(bb), and the site restoration costs that must be funded under California law. The CPUC has also reviewed and approved previous estimated planning costs associated with implementing decommissioning activities. PG&E's current estimated pre-shutdown planning activities and costs are presented in Enclosure 2 to this letter and were submitted to the CPUC as part of the 2018 Nuclear Decommissioning Cost Triennial Proceeding application filed on December 13, 2018.

As shown in Enclosure 2, the request for $187.8 million ($2017) for pre-planning activities can be broken down into approximately $148.4 million ($2017) for license termination costs and $39.4 million ($2017) for non-license termination costs. As shown in Enclosure 4, the total projected cost for radiological decommissioning (license termination) is approximately $2.9 billion, which includes the $148.4 million being requested as part of this exemption request. The customer-funded NDT balance total was $3.17 billion as of December 2017. This is more than adequate to proceed with near term decommissioning planning activities and to fully fund radiological decommissioning. On the other hand, waiting to initiate decommissioning planning activities until after permanent cessation of operations increases the cost of decommissioning to PG&E's customers by $166.1 million ($2017).

3. Justification for Exemptions

10 CFR 50.12(a)(1) states that the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of the regulations of Part 50 which are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the defense and security. As discussed below, this exemption request satisfies the provisions of 10 CFR 50.12.

3.1 The Exemptions Are Authorized by Law

The proposed exemptions would allow PG&E to withdraw $187.8 million ($2017) from the DCPP NDT to fund decommissioning planning activities between now and permanent cessation of operations. As stated above, 10 CFR 50.12 allows the NRC to grant exemptions from the requirements of 10 CFR Part 50. Additionally, the Atomic Energy Act of 1954, as amended, does not address the subject. Further, the exemptions are necessary to allow PG&E to efficiently comply with California law. Therefore, the exemptions are authorized by law.

3.2 The Exemptions Will Not Present an Undue Risk to Public Health and Safety

The proposed exemptions would allow PG&E to withdraw $187.8 million ($2017) from the DCPP NDT to fund decommissioning planning activities between now and permanent cessation of operations, supporting a safe and efficient transition from operational to decommissioning status. Granting the requested exemptions will not alter the operation of any plant equipment or systems and, therefore, does not present an undue risk to safety. The proposed exemptions do not introduce any new industrial, radiological, chemical, or radiological hazards that would present a health and safety risk nor would granting the exemptions result in modifying or removing design or operational controls or safeguards that are intended to mitigate on-site hazards.

Furthermore, the underlying purpose of 10 CFR 50.82(a)(8)(ii) and 10 CFR 50.82(a)(8)(i)(A) is to provide reasonable assurance that adequate funds will be available for radiological decommissioning of power reactors within 60 years of permanent cessation of operations. Withdrawal of $187.8 million ($2017) from the DCPP NDT for decommissioning planning activities will not adversely impact PG&E's ability to complete radiological decommissioning. Therefore, the underlying purpose of the regulation will still be met, even if the exemptions are granted.

3.3 The Exemptions Are Consistent with the Common Defense and Security

The proposed exemptions allowing withdrawal of $187.8 ($2017) million of the DCPP NDT for decommissioning planning activities do not alter the design, function, or operation of any structures or plant equipment that is necessary to maintain the safe and secure status of the plant and will not adversely affect PG&E's ability to physically secure the site or protect special nuclear material. Therefore, the proposed exemptions are consistent with common defense and security.

4. Special Circumstances

10 CFR 50.12(a)(2) states that the Commission will not consider granting an exemption unless special circumstances are present and identifies in 10 CFR 50.12(a)(2)(i)-(vi) when special circumstances are present. Special circumstances are present as discussed below.

4.1 Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule. (10 CFR 50.12(a)(2)(ii)).

The underlying purpose of 10 CFR 50.82(a)(8)(ii) and 10 CFR 50.82(a)(8)(i)(A) is to provide reasonable assurance that adequate funds will be available for radiological decommissioning of power reactors within 60 years of permanent cessation of operations. The inability to withdraw funds in excess of $37.2 million (3 percent of the generic amount calculated using the formula in 10 CFR 50.75) from the Diablo Canyon NDT for decommissioning planning activities between now and permanent cessation of operations would interfere with the prompt and efficient decommissioning of DCPP Units 1 and 2. In contrast, the CPUC-authorized funding reflected in the total balance of the NDT is more than adequate to fund both decommissioning planning activities and radiological decommissioning activities. Therefore, application of the rule is not necessary to achieve the underlying purpose of the rule. As such, special circumstances exist to support granting the requested exemptions.

4.2 Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others who are similarly situated. (10 CFR 50.12(a)(2)(iii))

Limiting access to $37.2 million (3 percent of the generic amount calculated using the formula in 10 CFR 50.75) of the funds in the NDT for decommissioning planning activities prior to permanent shut down would create an unnecessary financial burden on PG&E and its customers without any corresponding public health or safety benefit. If PG&E delays decommissioning planning until after permanent cessation of operations, the overall cost of decommissioning would increase by $166.1 million ($2017). Therefore, compliance with the rule would result in an undue hardship by causing customers to incur costs significantly in excess of those contemplated when the regulation was adopted or that are significantly in excess of those incurred by others similarly situated.

5. Environmental Consideration

Pursuant to 10 CFR 51.22(c)(25), an exemption from NRC regulations is subject to a categorical exclusion from the preparation of an environmental assessment or an environmental impact statement if: (i) there is no significant hazards consideration; (ii) there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite; (iii) there is no significant increase in individual or cumulative public or occupational radiation exposure; (iv) there is no significant construction impact; (v) there is no significant increase in the potential for or consequences from radiological accidents; and (vi) the requirements from which an exemption is sought involve: ... (I) Other requirements of an administrative, managerial, or organizational nature.

As demonstrated below, each of these provisions in 10 CFR 51.22(c)(25) is satisfied by this exemption request. Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed exemptions.

5.1 These exemptions do not involve a significant hazards consideration.

As provided in 10 CFR 50.92, an action involves a significant hazards consideration if it would: (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) Involve a significant reduction in a margin of safety. As demonstrated below, none of these criteria apply to these exemptions.

The exemptions do not involve any physical change in the facility or in the procedures governing operation of the plant. Therefore, the exemptions do not create the possibility of a new or different kind of accident or a reduction in a margin of safety.

5.2 These exemptions do not involve a significant change in the types or significant increase in the amounts of any effluents that may be released offsite.

The exemptions do not involve any physical change in the facility or in the procedures governing operation of the plant. Therefore, the exemptions will not involve a significant change in the types or significant increase in the amounts of any effluents that may be released offsite.

5.3 These exemptions do not involve a significant increase in individual or cumulative public or occupational radiation exposure.

The exemptions do not involve any physical change in the facility or in the procedures governing operation of the plant. Therefore, the exemptions will not involve a significant increase in individual or cumulative public or occupational radiation exposure.

5.4 These exemptions do not involve a significant construction impact.

These exemptions do not involve any physical change in the facility or the manner in which the plant will be constructed. Therefore, the exemptions do not involve a significant construction impact.

5.5 These exemptions do not involve a significant increase in the potential for or consequences from radiological accidents.

These exemptions do not involve any physical change in the facility or in the procedures governing operation of the plant. Therefore, the exemptions will not involve a significant increase in the potential for or consequences from radiological accidents.

5.6 The requirements from which these exemptions are sought involve requirements of an administrative, managerial, or organizational nature.

These exemptions pertain to allowing PG&E access to $187.8 million ($2017) of the Diablo Canyon NDT prior to the permanent cessation of operation of Units 1 and 2. Therefore, the request involves the activities described in 10 CFR 51.22(c)(25)(vi)(I).

6. Conclusion

PG&E requests exemptions from 10 CFR 50.82(a)(8)(ii) and 50.82(a)(8)(i(A) to allow PG&E to withdraw $187.8 million ($2017) from the DCPP NDT for decommissioning planning activities between now and permanent cessation of operations at DCPP Units 1 and 2. These exemptions will allow PG&E to fully utilize the 6 years PG&E has to transition to decommissioning by performing planning in support of a prompt, safe transition to decommissioning status while maintaining the reasonable assurance of funds available for radiological decommissioning of the facility. In accordance with 10 CFR 50.12, this exemption request is authorized by law, will not endanger life or property, and is otherwise in the public interest. Additionally, special circumstances are present. Therefore, the NRC should approve this exemption request.

## Pacific Gas & Electric Company
## NDCTP DCPP Pre-Shutdown Planning Activities Spend ($2017, 000s)

**Pacific Gas & Electric Company**

**NDCTP DCPP Pre-Shutdown Planning Activities Spend ($2017, 000s)**

| Scope | Description | | Pre 2018 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - Program Management, Oversight, and Fees | 1.01 | Staffing | $7,368 | $21,568 | $11,054 | $12,863 | $13,579 | $14,703 | $13,821 | $18,116 | $113,071 |
| | 1.06 | NRC Fees / Reviews | | | $250 | $3,680 | $3,934 | $2,182 | $1,923 | $1,607 | $13,576 |
| | 1.10 | Permits | | | $3,696 | $1,771 | $3,192 | $2,727 | $2,894 | $5,175 | $19,454 |
| | 1.11 | Future Land Use | | | $962 | $823 | $787 | $754 | $1,626 | $2,278 | $7,229 |
| | 1.12 | Spent Fuel Management Plan | | | | | | | | $57 | $57 |
| | 1.18 | Public Outreach & Stakeholder Engagement | | | | $300 | $300 | $300 | $300 | $250 | $1,450 |
| 3 - Waste/Transportation /Material Management | 3.04 | Material Management | | | | | | | | $892 | $892 |
| 4 - Power Block Modifications | 4.01-02 | Spent Fuel Pool Island | | | | | | | $1,388 | $1,518 | $2,906 |
| | 4.03-05 | Cold and Dark | | | | | | | $6,303 | $4,768 | $11,071 |
| | 4.06 | Security Modifications | | | | | | $2,158 | $1,744 | $1,773 | $5,674 |
| 5 - Site Infrastructure | 5.03 | Facility Construction | | | | | | | $4 | $175 | $179 |
| | 5.06 | ISFSI Pad Expansion for GTCC Storage | | | $565 | $2,402 | $3,225 | $105 | | | $6,297 |
| | 5.07 | Project Oversight and Support | | | | | | | | $519 | $519 |
| 7 - Reactor/Internals Segmentation | 7.06 | Project Oversight and Support - GTCC Cask Licensing | | | | | $1,350 | | | | $1,350 |
| 14 - Balance of Site | 14.03 | Demolition | | | | | | | $2,019 | $2,104 | $4,123 |
| **TOTAL (2017 $)** | | | **$7,368** | **$21,568** | **$16,526** | **$21,840** | **$26,368** | **$22,928** | **$32,020** | **$39,231** | **$187,848** |
| | | | | | | | | | | | |
| **TOTAL (NOMINAL $)** | | | **$7,368** | **$21,686** | **$17,563** | **$23,936** | **$29,713** | **$26,807** | **$38,529** | **$48,529** | **$214,132** |

**DCPP Pre-Shutdown Planning Activities Spend ($2017, 000s) by Funding Category**

| Funding Category | |
|---|---|
| License Termination | 148,392 |
| Spent Fuel Management | 8,318 |
| Site Restoration | 31,138 |
| **Total** | **187,848** |

# Pacific Gas & Electric Company
# NDCTP – DCPP Comparison of Planning Activities Costs: Pre-Shutdown Spend vs. Post-Shutdown

Pacific Gas & Electric Company

NDCTP - DCPP Comparison of Planning Activities Costs: Pre-shutdown Spend vs. Post-shutdown Spend

**Cost of Pre-Decommissioning Activities ($2017, 000s)**

| | Total | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2032 | 2033 | 2034 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PG&E Labor | $ 85,230 | $ 3,627 | $ 6,602 | $ 10,570 | $ 8,099 | $ 11,534 | $ 13,509 | $ 13,477 | $ 17,811 | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| Contract Labor | $ 73,162 | 3,600 | 14,754 | 3,332 | 9,883 | 8,033 | 6,333 | 13,860 | 13,367 | - | - | - | - | - | - | - |
| Materials | $ 6,181 | - | - | 13 | 14 | 1,361 | 370 | 2,238 | 2,186 | - | - | - | - | - | - | - |
| Burial Costs | $ - | | | | | | | | | - | - | - | - | - | - | - |
| Other | 23,276 | 141 | 212 | 2,612 | 3,844 | 5,440 | 2,716 | 2,445 | 5,867 | - | - | - | - | - | - | - |
| **Total ($2017)** | **187,848** | **7,368** | **21,678** | **17,563** | **23,936** | **29,713** | **26,807** | **38,529** | **48,529** | - | - | - | - | - | - | - |
| **Total ($Nominal)** | **214,124** | **7,368** | **21,678** | **17,563** | **23,936** | **29,713** | **26,807** | **38,529** | **48,529** | - | - | - | - | - | - | - |

**Cost of Post-Decommissioning Activities Plus Incremental Costs Associated with Delayed Planning ($2017, 000s)**

| | Total | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2032 | 2033 | 2034 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PG&E Labor | $ 85,230 | | | | | | | | $ 42,615 | $ 42,615 | | | | | | |
| <u>**Plus Incremental Post-2024 PG&E Labor**</u> | | | | | | | | | | | | | | | | |
| Security | 89,980 | | | | | | | | | 1,548 | 3,984 | 14,145 | 10,795 | 17,784 | 29,758 | 11,972 |
| Ops / Chem & Rad Protection / Fire Brigade | 67,071 | | | | | | | | | 4,782 | 14,335 | 15,549 | 10,508 | 5,658 | 10,488 | 5,258 |
| Other Staff | 9,010 | | | | | | | | 5 | 9 | 15 | 392 | 307 | 2,354 | 4,122 | 1,770 |
| Contract Labor | 73,162 | | | | | | | | 36,581 | 36,581 | | | | | | |
| Materials | 6,181 | | | | | | | | 3,090 | 3,090 | | | | | | |
| Other | 23,276 | | | | | | | | 11,638 | 11,638 | | | | | | |
| **Total ($2017)** | **353,909** | - | - | - | - | - | - | - | **93,929** | **100,263** | **18,334** | **30,086** | **21,610** | **25,796** | **44,368** | **19,000** |
| **Total ($Nominal)** | **492,695** | - | - | - | - | - | - | - | **116,690** | **128,550** | **24,556** | **41,626** | **30,886** | **41,981** | **74,589** | **32,996** |

| | |
|---|---|
| **Cost Increase Due to Postponing Planning Activities ($2017)** | **166,061** |
| **Cost Increase Due to Postponing Planning Activities ($Nominal)** | **278,571** |

**Projected Total Cost to Decommission DCPP By Decommissioning Phase and Unit**

**PROJECTED TOTAL COST ($2017) TO DECOMMISSION DCPP BY DECOMMISSIONING PHASE AND UNIT**

| Line No. | Decommissioning Phase | Unit 1 | Unit 2 | Grand Total |
|---|---|---|---|---|
| | | | (in thousands) | |
| 1 | License Termination | 1,465,834 | 1,462,531 | 2,928,365 |
| 2 | Spent Fuel Management | 600,752 | 571,839 | 1,172,592 |
| 3 | Site Restoration | 190,308 | 511,130 | 701,438 |
| 4 | Grand Total | $2,256,894 | $2,545,501 | $4,802,395 |

# Pacific Gas & Electric Company NDT
## December 2017
## Asset Balance Sheet

**Pacific Gas & Electric Company NDT**

**December 2017**

**FINAL**

**DIABLO CANYON #1**

| | CPUC Qual | CPUC Nonqual | FERC Qual | Total | Actual % | Diablo Canyon Target % | Range % |
|---|---|---|---|---|---|---|---|
| US Equity | $ 584,867,680 | $ - | $ 6,910,793 | $ 591,778,473 | 43.06% | 42% | 40-44% |
| Non-US Equity | $ 269,485,699 | $ - | $ - | $ 269,485,699 | 19.61% | 18% | 16-20% |
| Equity total | $ 854,353,380 | $ - | $ 6,910,793 | $ 861,264,172 | 62.67% | 60% | 58-62% |
| Fixed Income | $ 511,294,708 | $ - | $ 1,455,191 | $ 512,749,898 | 37.31% | 40% | 38-42% |
| Cash | $ 290,290 | $ - | $ 3,694 | $ 293,984 | 0.02% | 0% | 0-2% |
| Total | $ 1,365,938,377 | $ - | $ 8,369,677 | **$ 1,374,308,054** | 100.00% | | |

**DIABLO CANYON #2**

| | CPUC Qual | CPUC Nonqual | FERC Qual | Total | Actual % | Diablo Canyon Target % | Range % |
|---|---|---|---|---|---|---|---|
| US Equity | $ 776,697,163 | $ - | $ 8,822,105 | $ 785,519,268 | 43.70% | 42% | 40-44% |
| Non-US Equity | $ 337,997,133 | $ - | $ - | $ 337,997,133 | 18.80% | 18% | 16-20% |
| Equity total | $ 1,114,694,296 | $ - | $ 8,822,105 | $ 1,123,516,401 | 62.50% | 60% | 58-62% |
| Fixed Income | $ 671,978,212 | $ - | $ 1,857,651 | $ 673,835,863 | 37.48% | 40% | 38-42% |
| Cash | $ 338,836 | $ - | $ 4,715 | $ 343,551 | 0.02% | 0% | 0-2% |
| Total | $ 1,787,011,344 | $ - | $ 10,684,471 | **$ 1,797,695,816** | 100.00% | | |

Total **$ 3,172,003,869.71**