



ALLIANCE FOR NUCLEAR RESPONSIBILITY

PO Box 1328
San Luis Obispo, CA 93406
(858) 337-2703
(805) 704-1810
www.a4nr.org

October 24, 2018

ATTN: Diablo Canyon Decommissioning Engagement Panel

c/o Chuck Anders, Facilitator
Diablo Canyon Decommissioning Engagement Panel

RE: Comments of the Alliance For Nuclear Responsibility

Dear Mr. Anders and Members of the Panel:

The Alliance for Nuclear Responsibility provides the following comments relating to both (1) the topics discussed and (2) the composition, organization, selection and funding of the Diablo Canyon Decommissioning Engagement Panel (DCDEP) for its work through October 2018.

We have found the Panel operates collegially and diligently with respect its assigned tasks and responsibilities. What remains less clear to us is who chooses and directs the subject matter that panel considers each month, and the order in which these issues are placed before them.

A4NR has attended all but one DCDEP meeting (and watched the other meeting via video playback). We also have closely following the San Onofre Engagement Panel (SONGS CEP) and found that the focus of the analogous SONGS CEP and its constituent make-up greatly differ from the DCDEP. For this reason we recommended that its chairman, Dr. David Victor, come and share his insight into decommissioning with the Diablo community. To address A4NR's concern, we sent Dr. Victor a list of questions to clarify the SONGS panel's focus and membership. He replied, and a copy of our questions and his answers are presented here as "Attachment A." We will be using material from that correspondence as part of these comments.

- I. DCDEP SHOULD FOCUS ON DECOMMISSIONING ISSUES
- A. DISPOSITION OF 12,500 ACRES OF PG&E/EUREKA ENERGY LANDS IS NOT A DECOMMISSIONING ISSUE AND SHOULD BE HANDLED BY A SEPARATE ENTITY OR PROCESS

We are concerned that the DCDEP has devoted a preponderance (though by no means exclusive) amount of time and energy to issues involving disposition of lands around the *entire* 12,500 plus acres of PG&E/Eureka Energy property. Further, many of these "lands" are outside the boundaries of PG&E's Part 50 NRC license (an overview and detail map from PG&E is

presented here as “Attachments B and C”), which demarks the areas that must be decommissioned and remediated under federal law. Some of those areas also include breakwaters and coastal zones that are subject to regulation under the California Coastal Commission and State Lands Commission. However, of *that* area (which is a minimal subset of the overall site), an even smaller subset of comprises the actual radiological decontamination areas that are of greatest concern at the federal level.

We are concerned that the focus on the future of outlying Diablo lands lacks timely relevance in PG&E’s upcoming decommissioning filing, while issues that *are* clearly within the Part 50 decommissioning parameters will not undergo the same scrutiny.

At the DCDEP, public questions and concerns seem predominantly oriented more towards land re-use and future stewardship or sale of adjacent lands. That the public is engaged with *these* land issues may be a reflection of the way they have been placed in the chronology of concerns by PG&E.

Over the past summer (2018), land use issues (writ large; not limited to the Part 50 areas) were not only the subject of monthly meetings, but also *additional* community workshops.

The Alliance believes adjacent land reuse issues need not be the priority for the DCDEP at this time, with the exception of those land/marine concerns within the Part 50 footprint (including breakwater, marina, auxiliary buildings). And even then, issues that could affect the decommissioning cost estimate (such as removal—or not—of the breakwater infrastructure) were considered, in Dr. Victor’s estimation, “early days for those discussions” with regard to similar infrastructure removal issues at the SONGS CEP.

In the interest of refocusing and reprioritizing the role and agenda of the DCDEP, the Alliance believes it wise to remove land use issues outside the Part 50 footprint from the priorities of the DCDEP. Those issues that involve county zoning and long-term land use planning belong in a separate proceeding—one that could commence before the closure and decommissioning of the Diablo Canyon Nuclear Plant. Disposition of extraneous properties (Wild Cherry Canyon, etc.) and external agents (e.g., Eureka Energy, Home Fed) and those who have financial, cultural or recreational interests in these lands should enter into their own negotiations in accordance with county land use and zoning regulations and proceedings. These activities are not under the jurisdiction of the NRC or CPUC that involve the work to be completed in the Part 50 zone. As part of the Joint Proposal to retire Diablo Canyon, and the subsequent CPUC Decision in that matter, PG&E did agree to not make any final decisions on disposition of land under their ownership without public input. However, *that* disposition can be either sooner or later; actual decommissioning activities as will be detailed in the NDCTP involve demolition and decontamination within the Part 50 area, and must occur on a specific, regulated timeline.

It is the Alliance’s belief that this shift will—if it is not too late—free up time for a more detailed discussion of the technical waste and decontamination issues that the real experiences of the SONGS CEP has brought to the foreground.

B. DCDEP SHOULD FOCUS ON THE KEY DECOMMISSIONING ISSUES OF EMERGENCY PLANNING AND SPENT FUEL MANAGEMENT

The Alliance believes that the DCDEP should focus its efforts on decommissioning issues with a direct nexus to the immediate areas of radiological decontamination. Two such issues are scheduled for October (Emergency Planning) and November (Spent Fuel Storage). The late scheduling of these issues is problematic because they are complex, technical issues and yet are compressed much closer to PG&E's deadline for filing their NDCTP with the CPUC by the start of 2019.

To our knowledge, no "additional workshops" are scheduled for Emergency Planning and Spent Fuel concerns, as had been convened regarding land disposition. The experience at the SONGS CEP (as evidenced by their video recordings and meeting notes) demonstrates that these issues have elicited broad public concern and comment.

A4NR has read filings by other reactor communities and closely monitored the SONGS CEP. And, as Dr. Victor's responses indicate, at SONGS—where an active decommissioning is taking place—the most frequent concerns of stakeholders are: the integrity and type of waste storage; trust (or lack thereof) in the NRC safety and state regulators; and issues about the ultimate disposal of the waste in terms of expedience and risk to the California coast—and its interrelation with activities on national level. Had spent fuel and emergency planning been placed earlier in the cue, more public input (as experienced at SONGS) might have arisen. The SONGS CEP has had more public debate—including technical presentations—on the spent fuel issue than the DCDEP will have had time to hold before PG&E files its NDCTP at the CPUC. And yet issues involving the costs, duration of storage time, durability and longevity of the waste systems will impact the costs projected in the NDCTP. Had the issue of long-term storage of spent fuel been made more prominent, the public may have become more engaged in the macro-national issues of permanent waste storage that will have greater effects and impacts on the high-level waste that remains on our seismically active, San Luis Obispo coastline.

II. COMPOSITION, ORGANIZATION, AND SELECTION OF DCDEP

A. COMPOSITION OF DCDEP

The Alliance believes that it may be necessary to modify the composition of the DCDEP so that it is better able to ventilate and review the key decommissioning issues.

1. TECHNICAL EXPERTS

The DCDEP should consider whether the addition (or replacement) of existing members with specific technical experts is needed to insure that a robust discussion. As Dr. Victor noted regarding the role of technical experts on the SONGS CEP:

These experts are invaluable—not just in meetings but also outside the meetings for two reasons. First, they can help organize and understand the range of stakeholder opinion. That has been very important on the topic of conduit removal, for example. Second, at times topics arise that have high technical content and it is really important for the CEP to be able to rely on its own members to wade through the details and help it formulate an opinion. An advantage of a larger panel (we have 18 members) is that we can represent the

wide array of local communities and also allow for cross-cutting and technical expertise.

The SONGS CEP issue of “conduit removal” could be considered analogous to the intake and breakwater issues that are involved at Diablo. Yet, the DCDEP is absent the marine science membership (or the Coastal Commission experience representative) that might inform those discussions.

2. ELECTED OFFICIALS

The Alliance suggests that the DCDEP would be stronger and more effective if it included a significant number of elected officials. The SONGS CEP is composed of numerous elected officials, and, while it has had to grapple with difficult and controversial issues, it has functioned quite well. Dr. Victor states that these elected officials are a “vital resource” to the SONGS CEP. He also felt that local elected officials that serve on the SONGS CEP provide a valuable depth of knowledge. Of the SONGS CEP, Dr. Victor wrote:

[m]ost members are elected officials. The elected officials are a vital resource—perhaps the most important because they are immersed into local politics, which gives them special insight into what is feasible and also judgement [sic] about where/how to focus.

Another benefit to having elected officials on the DCDEP in their official capacity is that they have institutional resources available that can help them perform their work on the Panel. This is what happens at SONGS CEP. As it is now, the DCDEP is composed entirely of citizen volunteers (some with full time jobs doing something else) whose time, resources, and sustainable commitment to the project varies and may be limited. This is a concern. The DCDEP has a lot of work to do and the decommissioning will take many decades, and it is uncertain how long and whether the DCDEP members can sustain this effort. Meanwhile, elected officials, have an automatic, long term, and sustainable commitment to help the community cope with the decommissioning of Diablo Canyon.

The attached copy of the roster of the SONGS CEP (attachment “D”) shows its strong representation of elected officials and some individuals with technical expertise.

B. ORGANIZATION OF DCDEP

The Alliance believes that the DCDEP would function more independently and effectively if it had some internal organizational structure such as a chairperson and executive committee. Thus far, it appears that the topics, agendas, timetables and written work products of the DCDEP are dominated by PG&E and Chuck Anders (the facilitator chosen by PG&E). For example, the public meetings focus on topics of interest to PG&E, the agendas for those meetings are drafted by PG&E and the time slots for each item on the agenda often leave inadequate time for the Panel Members to adequately discuss or investigate a matter.

In contrast, the SONGS CEP has a chair and an executive committee. Dr. Victor has stated that their Executive Committee has been a key element to the success of the SONGS CEP and that it has provided the leadership and carried much of the workload.

C. SELECTION OF DCDEP MEMBERS

The Alliance believes that the actual and perceived independence of the DCDEP would be significantly enhanced if the members of the DCDEP were selected by appropriate State and Local governmental entities, rather than by PG&E. For example, the members of the DCISC are selected by three relevant governmental agencies (Governor, Attorney General, and California Energy Commission) via a selection process conducted by the California Public Utilities Commission. This is an example of a better, more transparent approach.

A. FUNDING FOR DCDEP

The Alliance submits that the funding for the support of the DCDEP should be further investigated and refined if necessary. Currently, PG&E funds the DCDEP and can terminate funding (and thus essentially terminate the DCDEP) whenever PG&E deems the DCDEP no longer warranted or useful. The longevity, function and goals of the DCDEP and its funding should be the subject of separate and ongoing discussion.

CONCLUSION:

The Alliance appreciates this opportunity to bring these comments before you. As the agenda for the October 24th meeting includes the subject of ongoing offsite emergency planning, we are attaching both PG&E's previous written commitments (Attachment "E") from the Joint Proposal, and the commitment from Southern California Edison (Attachment "F"). We look forward to the October 24th meeting and to Dr. Victor's presentation in San Luis Obispo.

Please feel free to contact me with any questions or comments.

In Peace,

/s/

Rochelle Becker,
Executive Director

Attachments:

- a) Correspondence of David Victor to A4NR
- b) Map of Part 50 area
- c) Map of entire Diablo Canyon/PGE/Eureka property
- d) Membership roster of SONGS CEP
- e) PG&E Commitment to maintenance of offsite emergency service per Joint Proposal
- f) Southern California Edison plan to maintain support for offsite emergency service (from SCE NDCTP filing)

Dr. David Victor, Chairman
c/o SONGS Community Engagement Panel

VIA EMAIL: david.victor@ucsd.edu

Dear David:

We are very grateful that you will have the time to visit San Luis Obispo later in October, and to share your experiences involving decommissioning and community engagement with both the Diablo Canyon Independent Safety Committee and the Diablo Canyon Decommissioning Engagement Panel.

In respect for your limited time and busy schedule when in San Luis Obispo, we'd like to send a few of our concerns and questions in advance:

1. Among the stakeholders who make general public comment, what has emerged as their greatest issues of concern (by topic)?
2. What do you consider the three key accomplishments of the SONGS CEP to date?
3. Why has the CEP so strongly supported SCE's desire to remove SNF from the spent fuel pools? From a community-relations standpoint, do you think it important to transfer the SNF to dry casks as soon as that can be safely accomplished?
4. What is the "make-up" of the SONGS CEP membership, based on their occupation or community affiliation? Seeing where that panel is at today with regard to progress and process, do you feel this has been a successful compositional basis for its membership? To what achievements might you attribute the expertise of the local elected officials on the CEP?
5. Do you see an advantage to initiating a decommissioning engagement panel 2-5 years before the plant closes? If so, what are those advantages?
6. How much did the Engagement panel rely on using SCE's PSDAR filed at the NRC in September 2014 as a resource and guide?
7. How much did the Engagement panel rely on using SCE's *Joint Application of Southern California Edison Company ("SCE") and San Diego Gas and Electric Company ("SDG&E") for 2014 SONGS Units 2 and 3 Decommissioning Cost Estimate and Related Decommissioning Issues* filed at the CPUC at the end of 2014 as a resource and guide?
8. You had previously expressed satisfaction at the level technical, scientific and coastal environmental expertise on the SONGS CEP; would you recommend that PG&E include equivalent levels of expertise in its panel? What value do you ascribe to having individuals with this knowledge on the CEP?

Once again, we appreciate your time and experience with this undertaking, and look forward to your responses. Please feel free to contact us promptly if you need additional information or seek any clarification of our questions.

Thank you.

Yours truly,

/s/

Rochelle Becker,
Executive Director

----- Forwarded message -----

From: **David G. Victor** <david.victor@ucsd.edu>

Date: Wed, Oct 10, 2018 at 8:38 AM

Subject: Re: Thank you and a few questions

To: Rochelle Becker <rochellea4nr@gmail.com>, Info@DCISC.org <info@dcisc.org>

Cc: PER PETERSON <perfpeterson@me.com>, Jerry Kern <jkern@ci.oceanside.ca.us>, Dan Stetson <dan.stetson@nicholas-endowment.org>, Manuel Camargo <manuel.camargo@sce.com>, Steve Carlson <s2carlson@ucsd.edu>

Dear Rochelle

Thanks for your note with the questions you are keen to explore when I visit the Diablo Committee later this month, which I attach. I copy Bob Rathie and Per for their awareness, with the hope that Bob can share your letter and these replies with the larger group. I also copy Jerry Kern and Dan Stetson—leadership of the SONGS CEP along with me—and ask Manuel Camargo to include our letter/email thread in the next circular of correspondence with the CEP.

Some of your questions entrain politically sensitive or complex issues that can't be fully outlined in a letter, but below are some initial replies for each that can help start the conversation.

1: I have not done a statistical analysis of the questions raised during general public comment. That said, my impression is that the number one topic raised has been, in various ways, the integrity of the spent fuel canisters. Some of this is, in my view, the result of an active misinformation campaign by some folks who have been advocating impractical and unwise alternatives, but it has generated lots of comments. Second, most common are comments about low levels of trust in institutions—the operator and the NRC (and a long list of other institutions, including me and the CEP). There is a longer history prior to decommissioning involving a debacle with steam generator replacements and the aftermath of Fukushima that really soured relations for many in the local community. After that, we have had lots of comments on how to

get the spent fuel away from the site. The focus of comments varies a lot with what's in the news.

2: I think we have at least three major accomplishments. First, the CEP has become the central institution for engaging the public—even when criticized, the CEP is a regular, central fixture in the decommissioning process. Second, we have helped to shift the debate and focus attention on building political support for moving the spent fuel to interim storage. When the CEP began the outlook for moving the spent fuel was seemingly hopeless. Today it isn't—for lots of reasons, of course, but the CEP has put massive attention and energy into focusing that debate. A lot more work still needed to build the coalition required for a change in federal law. Third, I think we have played a central role in framing the “defense in depth” discussions for an ISFSI-only site. We helped reframe the debate around the choice of stainless canisters and helped get the debate focused on long-term stewardship of the ISFSI, including research and demonstration of key technologies.

3: The CEP is not a decision-making body, so we can't formally “strongly support” actions by Edison or anyone else. That said, nearly all CEP members and most CEP discussions are highly supportive of the safest, rapid offloading of the spent fuel from the pools. That's based on lots of discussions about a) what is safest; b) the benefit from shrinking the size of the site; and c) the benefit from having spent fuel ready and in line—ready to ship.

4: The CEP membership is a mix, but most members are elected officials. The elected officials are a vital resource—perhaps the most important because they are immersed into local politics, which gives them special insight into what is feasible and also judgement about where/how to focus. Also helpful to have representatives from environmental groups and at least a few people (or one) who has technical knowledge relevant to decommissioning.

5: I don't have a comment on this—since I have not observed a pre-decommissioning CEP. I can see advantages, mostly, but also the disadvantage that the CEP needs to have a clear vision for what it wants to do. Having meetings without clear action items might undermine confidence and also generate skepticism.

6: We did not rely much on the PSDAR. It was discussed periodically and we have regular update briefings from SCE management (in public) that draw on the same information that goes into the PSDAR, but the CEP has drawn on a much wider array of information and analysis.

7: We discussed the DCE a couple times, and there has been some attention in particular to the question of how “saved” money (e.g., from avoiding removal of ocean conduits) should be shared with local communities or devoted to earmarked projects (e.g., reef restoration). Still early days for those discussions.

8: See response to question 4. These experts are invaluable—not just in meetings but also outside the meetings for two reasons. First, they can help organize and understand the range of stakeholder opinion. That has been very important on the topic of conduit removal, for example. Second, at times topics arise that have high technical content and it is really important for the CEP to be able to rely on its own members to wade through the details and help it

formulate an opinion. An advantage of a larger panel (we have 18 members) is that we can represent the wide array of local communities and also allow for cross-cutting and technical expertise.

I very much look forward to our discussions and to follow-up on these replies and other questions that may arise.

All best

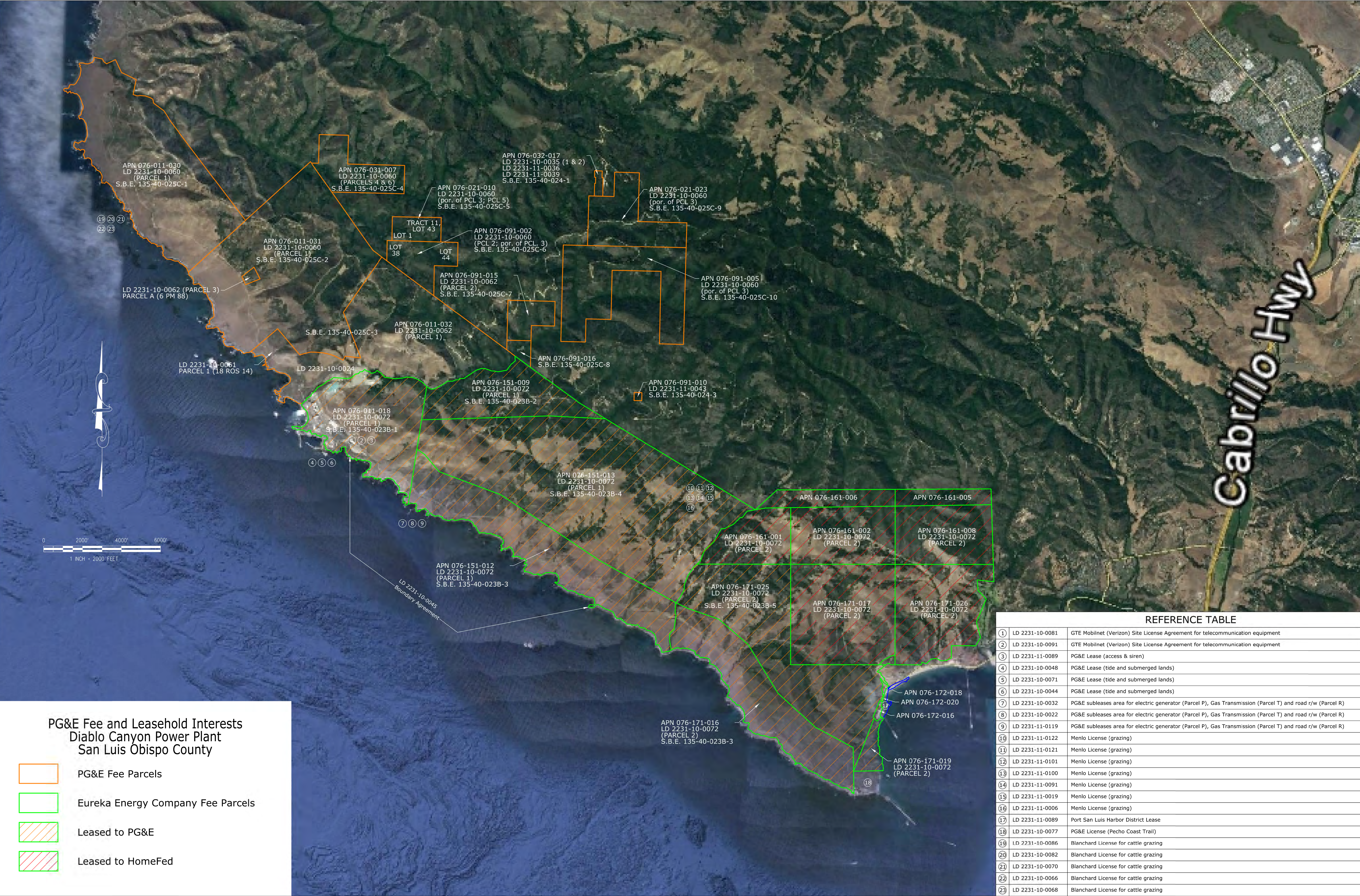
David



DCPP 10 CFR 50 Site Boundary



 Potential Radiological Areas



Community Engagement Panel

Members of the San Onofre Community Engagement Panel

The Community Engagement Panel holds public meetings at least four times per year.

Chairman

- [Dr. David G. Victor](#) (University of California, San Diego)

Vice Chairman

- The Nicholas Endowment ([Dan Stetson](#))

Secretary

- City of Oceanside ([Council Member Jerome M. "Jerry" Kern](#))

Members

- American Nuclear Society, San Diego Chapter ([Edward "Ted" Quinn](#))
- California State Parks ([Rich Haydon](#))
- Camp Pendleton ([Tom Caughlan](#))
- Capistrano Unified School District Board of Trustees ([President Martha McNicholas](#))
- City of Dana Point (Mayor Pro Tem Paul Wyatt)
- City of San Clemente (Council Member Steve Swartz)
- City of San Juan Capistrano (Mayor Sergio Farias)
- Laborers International Union of North America Local 89 (Valentine "Val" Macedo)
- Orange County Board of Supervisors ([Supervisor Lisa Bartlett](#))
- Orange County Coastkeeper ([Garry Brown](#))
- Orange County Sheriff's Department ([Donna Boston](#))
- San Diego County Board of Supervisors ([Supervisor Bill Horn](#))
- San Luis Rey Band of Mission Indians (Captain Mel Vernon)
- Sierra Club ([Marni Magda](#))
- South Orange County Economic Coalition ([Jim Leach](#))

**JOINT PROPOSAL OF
PACIFIC GAS AND ELECTRIC COMPANY, FRIENDS OF THE EARTH,
NATURAL RESOURCES DEFENSE COUNCIL, ENVIRONMENT CALIFORNIA,
INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL 1245,
COALITION OF CALIFORNIA UTILITY EMPLOYEES AND ALLIANCE FOR
NUCLEAR RESPONSIBILITY TO RETIRE DIABLO CANYON NUCLEAR POWER
PLANT AT EXPIRATION OF THE CURRENT OPERATING LICENSES AND
REPLACE IT WITH A PORTFOLIO OF GHG FREE RESOURCES**

Pacific Gas and Electric Company (“PG&E”) Friends of the Earth (“FOE”), Natural Resources Defense Council (“NRDC”), Environment California, International Brotherhood of Electrical Workers Local 1245 (“IBEW Local 1245”), Coalition of California Utility Employees (“CUE”) and Alliance for Nuclear Responsibility (“A4NR”) (collectively, the “Parties”) enter into this Joint Proposal governing the closure of Diablo Canyon Nuclear Power Plant (“Diablo Canyon”) at the expiration of its existing Nuclear Regulatory Commission (“NRC”) operating licenses and orderly replacement of Diablo Canyon with a greenhouse gas (“GHG”) free portfolio of energy efficiency, renewables and energy storage that includes a 55 percent Renewable Portfolio Standard commitment by 2031.

PREAMBLE

A. Diablo Canyon Units 1 and 2 began commercial operation in May 1985 and March 1986, respectively, and are licensed by the NRC for operation until November 2, 2024 and August 26, 2025. Each year Diablo Canyon generates about 20 percent of the annual electricity production in PG&E’s service territory and nine percent of California’s annual production. Diablo Canyon has been operated by a committed and dedicated group of employees throughout its 31 years of operations. In 2009, PG&E filed at the NRC to continue Diablo Canyon’s operations for an additional twenty years.

state and federal regulatory review in order to preserve all options, including license renewal, during a period of resource planning uncertainty that resulted in the decision reflected in the Joint Proposal. In the Joint Proposal Application, PG&E will request cost recovery of the license renewal costs. The Parties, with the exception of A4NR, support PG&E's request for full recovery of license renewal costs. A4NR reserves the right to contest recovery of the License Renewal Costs in the Joint Proposal Application.

5.3. Seismic Study Process and Costs: PG&E has been continually engaged in the evaluation of seismic conditions at Diablo Canyon since the start of operations. The decision not to proceed with license renewal does not affect this on-going commitment. Nothing in this agreement shall constrain the Parties from advocacy on issues related to seismic studies. PG&E acknowledges the substantial influence and contribution of A4NR's work in reaching the positions reflected in the Joint Proposal. Because of PG&E's decision not to proceed with license renewal, A4NR agrees to withdraw its pending objections and recommendations regarding PG&E's recovery of costs in the Diablo Canyon Seismic Studies Balancing Account in PG&E's 2013 and 2014 ERRA proceedings.

5.4. Nuclear Decommissioning: PG&E submitted a revised Diablo Canyon decommissioning study on March 1, 2016 in the CPUC Nuclear Decommissioning Triennial Proceeding ("NDCTP"). (CPUC Application 16-03-006) In the 2015 NDCTP, PG&E estimated the cost to decommission Diablo Canyon at \$3.779 billion (2014 \$). The 2015 NDCTP estimate is based on a financial model prepared by TLG Services, Inc. and does not reflect the results of an actual site-specific decommissioning study.

5.4.1. PG&E will prepare a Diablo Canyon site-specific decommissioning study and submit it to the CPUC in an application for approval no later than the date when the

2018 NDCTP will be filed. PG&E will seek authorization from the CPUC in the Joint Proposal Application to disburse funds from the Diablo Canyon decommissioning trust to fund the site specific decommissioning study. The site-specific decommissioning study will update the 2015 NDCTP forecast and incorporate the costs of (i) the Employee Program described in Section 5.3, (ii) the Community Impacts Mitigation Program in Section 4.1, (iii) a plan for expedited post-shut-down transfer of spent fuel to Dry Cask Storage as promptly as is technically feasible using the transfer schedules implemented at the San Onofre Nuclear Generating Station as a benchmark for comparison, and provided PG&E will also provide the plan to the CEC, collaborate with the CEC, and evaluate the CEC's comments and input; and (iv) a plan to continue existing emergency planning activities, including maintenance of the public warning sirens and funding of community and state wide emergency planning functions until the termination of Diablo Canyon's 10 CFR Part 50 license, subject to CPUC approval and funding in decommissioning rates. The Parties will support CPUC approval and funding of these elements of PG&E's revised Diablo Canyon decommissioning study.

5.4.2. The Parties support CPUC approval of PG&E's 2015 NDCTP decommissioning forecast and establishment of the proposed revenue requirement until such time as the CPUC reviews, approves and authorizes cost recovery for the Diablo Canyon site specific decommissioning study. A4NR reserves the right to contest PG&E's forecast and assumptions regarding spent fuel transfer to dry cask storage in the 2015 NDCTP proceeding.

6. Actions at Other Governmental Agencies

6.1. State Lands Commission ("SLC"): PG&E requested that SLC issue new

Application No.: 18-03-XXX
Exhibit No.: SCE-03
Witnesses: Jose L. Perez
Nicholas Capik



(U 338-E)

***Testimony On The 2017 Decommissioning Cost
Estimate for SONGS 2&3***

PUBLIC VERSION

Before the

Public Utilities Commission of the State of California

Rosemead, California
March 15, 2018

- Site Lease and Easement Expenses – SCE will be required to make annual easement and lease payments to the Navy for the onshore plant site and SONGS Mesa facility and to the CSLC for the SONGS 2&3 offshore conduits until the easement and lease agreements are terminated.
- Severance – Under the Decommissioning Act, SCE is required to provide severance benefits to SCE employees at SONGS whose jobs are eliminated as a result of the permanent retirement of SONGS.
- Energy – SCE must purchase electrical energy at retail rates to power the SONGS site.
- Loading Spent Fuel & GTCC Waste to DOE – Under the DOE Standard Contract, SCE is responsible for the cost to transfer spent fuel canisters from the ISFSI and loading them into DOE shipping containers on-site, and then onto the DOE's transportation device.
- Information Technology – SCE will be required to incur software and network licenses, pay network service providers, and provide internal technical support to site personnel at levels commensurate with site staffing until decommissioning is completed.
- Third Party Legal – SCE retains outside counsel as necessary to handle legal matters that require specific expertise or additional resources.
- Emergency Preparedness Fees – SCE provides funding to local jurisdictional authorities for their radiological emergency preparedness, and will continue to do so until all spent fuel has been removed from SONGS, under a memorandum of understanding.
- NRC Fees – As holder of the NRC licenses for SONGS, SCE will be required to pay 10 C.F.R. Part 171 annual license fees and 10 C.F.R. Part 170 inspection fees until the NRC licenses are terminated.

on-site, and then onto the DOE's transportation device, will be \$30.6 million⁷² (100% share, 2014 \$). The 2014 DCE did not include a line item for this cost.

- Information Technology – In the 2017 DCE, SCE estimates \$31.9 million⁷³ (100% share, 2014 \$) for IT costs, compared with \$6.6 million (100% share, 2014 \$) in the 2014 DCE. This resulted in an increase of \$25.3 million. The increased cost is due in part to some one-time payments to network service providers in 2018. After payment of these costs, SCE expects that ongoing support costs will be reduced after 2019.
- Third Party Legal – In the 2017 DCE, SCE estimates \$23.8 million⁷⁴ (100% share, 2014 \$) for third party legal expenses. This variance occurred because the 2014 DCE did not forecast these services as direct costs, but instead assumed that the costs were a part of overheads.⁷⁵ The services provided by outside legal counsel are required to perform normal business functions as well as tasks required by the NRC, and state and local agencies.
- Emergency Preparedness Fees – In the 2017 DCE, SCE estimates \$48.3 million⁷⁶ (100% share, 2014 \$) for emergency preparedness fees, compared with \$25.8million (100% share, 2014 \$) in the 2014 DCE. This resulted in an increase of \$22.5 million. In the 2017 DCE, SCE anticipates that it will continue to incur emergency preparedness fees pursuant to a Memorandum of Understanding with local jurisdictional authorities until all spent fuel is removed from the SONGS site versus the assumption in the 2014 DCE that such payments would terminate when the spent fuel was removed from the pools.

⁷² See 2017 DCE, Appendix C, Table 2, line 361.

⁷³ See 2017 DCE, Appendix C, Table 2, line 325.

⁷⁴ See 2017 DCE, Appendix C, Table 2, line 336.

⁷⁵ Corporate support is provided by SCE from organizations other than SONGS (e.g., legal, treasurer's, finance, IT, supply chain).

⁷⁶ See 2017 DCE, Appendix C, Table 2, line 303.

**San Onofre Nuclear Generating Station Units 2&3
2017 Decommissioning Cost Estimate**

**TABLE 8 UNDISTRIBUTED COST ESTIMATE
(NOMINAL/2017\$ IN THOUSANDS)**

Description	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7 ISFSI	Total (Nominal/ 2017\$)
	Initial Activities (Nominal \$)	Transition and Pool Storage (2017\$)	D&D and Pool Storage (2017\$)	D&D and Dry Storage (2017\$)	Dry Storage (2017\$)	Civil Works Project (2017\$)	Demolition & Final Site Restoration (2017\$)	
1 Start	6/7/2013	1/1/2017	1/1/2019	6/1/2019	1/1/2029	1/1/2046	1/1/2050	
2 End	12/31/2016	12/31/2018	5/31/2019	12/31/2028	12/31/2045	12/31/2049	12/31/2051	
3 Duration (Years)	3.6	2.0	0.4	9.6	17.0	4.0	2.0	
4 Undistributed Activities								
5 Labor-Staffing								
6 Site Management & Administration		\$ 19,393	\$ 3,379	\$ 71,195	\$ 16,666	\$ 13,265	\$ 1,901	
7 Plant Management		46,774	8,140	46,085	85,274	20,799	2,340	
8 Decommissioning Oversight		14,417	4,916	136,266	13,417	27,121	8,919	
9 Utility Staff Subtotal	\$ 245,555	\$ 80,583	\$ 16,436	\$ 253,546	\$ 115,356	\$ 61,185	\$ 13,159	\$ 785,820
10 Security Force	91,073	45,231	6,518	31,254	57,448	14,012	1,576	247,112
11 Labor-Staffing Subtotal	\$ 336,628	\$ 125,814	\$ 22,954	\$ 284,800	\$ 172,804	\$ 75,196	\$ 14,735	\$ 1,032,932
12								
13 Non-Labor								
14 Aging Management	\$ -	\$ -	\$ 48	\$ 4,209	\$ 10,018	\$ 1,955	\$ -	\$ 16,230
15 Association Fees and Expenses	817	1,332	251	3,910	1,958	478	215	8,961
16 Community Engagement Panel	2,304	1,640	279	5,482	2,405	566	283	12,958
17 Contracted Services	67,641	33,556	3,957	59,073	50,430	16,086	4,349	235,092
18 DAW Disposal	-	32	-	-	-	-	-	32
19 Decommissioning Advisor	2,515	1,231	278	6,392	-	-	-	10,416
20 DGC Executive Oversight Committee	-	508	144	3,306	-	-	-	3,958
21 Emergency Preparedness Fees	9,099	3,792	864	15,081	16,998	4,146	-	49,980
22 Energy	16,964	7,571	2,241	45,194	10,983	4,117	526	87,596
23 Environmental Permits and Fees	3,081	662	14	328	1,064	1,154	576	6,879
24 Ground Water Monitoring	-	-	-	-	391	92	46	529
25 Information Technology	12,886	5,248	479	7,494	2,486	3,033	1,365	32,991
26 Insurance	13,824	4,778	977	15,947	22,029	5,688	2,479	65,722
27 Third Party Legal	4,336	2,579	479	7,571	7,648	2,300	230	25,142
28 NRC Fees	4,566	2,836	248	9,169	10,369	2,455	2,646	32,291
29 Office Space	-	-	-	1,173	391	92	92	1,748
30 Security Related Expenses	1,552	1,209	422	1,017	5,461	2,192	526	12,378
31 Severance	89,594	9,135	6,001	9,782	2,367	-	6,165	123,044
32 Site Lease and Easement Expenses	8,049	5,710	1,039	21,040	47,825	11,552	5,930	101,145
33 Loading Spent Fuel & GTCC Waste To DOE	-	-	-	-	17,940	14,628	-	32,568
34 Tools and Equipment	49	-	-	-	-	-	-	49
35 Water	1,663	1,224	184	4,243	7,261	1,771	797	17,143
36 Utility Staff Health Physics Supplies	2,163	979	9	198	352	83	41	3,825
37 Non-Labor Subtotal	\$ 241,104	\$ 84,020	\$ 17,913	\$ 220,608	\$ 218,376	\$ 72,388	\$ 26,266	\$ 880,676
38								
39 Service Level Agreements	10,647	27,510	4,518	83,094	20,521	22,210	9,143	177,643
40 DGC Staffing								
41 Undistributed Activities Subtotal								
42								
43 Distributed Projects								
44								
44 Total								\$ 4,702,264

**San Onofre Nuclear Generating Station Units 2&3
2017 Decommissioning Cost Estimate**

- **D&D Complete** – Many of the contracted services costs in the Decommissioning Oversight and Site Management & Administration divisions will not be needed after SDS completes its work and the SONGS programs are reduced.

e. Decommissioning Advisor

The Decommissioning Advisor provides subject matter expertise and assistance on various matters, including regulatory issues, spent fuel storage, and project management. Decommissioning Advisor costs are estimated through Period 4 (D&D).

f. DGC Executive Oversight Committee

The SDS D&D contract requires an Executive Oversight Committee composed of five individuals charged with resolving contractual issues. The committee includes one person each from SCE and SDS, and three independent third-party members. SCE and SDS share the costs of the third-party positions.

g. Emergency Preparedness Fees

SCE provides funding to local jurisdictions for the management of radiological emergency preparedness, including planning, response, and recovery activities. Currently, SCE pays fees in accordance with a December 2015 Memorandum of Understanding (MOU) covering a period through 2020. The Emergency Preparedness fees are assumed to be paid annually until all spent fuel has been removed from SONGS.

h. Energy

SCE must purchase energy from the grid to power the site, including loads required for decommissioning work. The energy costs are based on historical retail electricity rates and on projected usage. The projected usage was prepared by SCE Engineering and reflects the major activities in each decommissioning period.

i. Environmental Permits And Fees

SONGS must comply with a variety of environmental regulations and maintain numerous permits, which involve the payment of fees. These permits and associated fees include: (1) the State Water Resource Control Board National Pollutant Discharge Elimination System (NPDES) permit fees and Stormwater Pollution Prevention Plan (SWPPP) fees; (2) State of California Board of Equalization mixed waste fees; (3) fees for the California Department of Environmental Health Permit, which includes the permit for Underground Storage Tanks; (4) Air Pollution Control District Permit (APCD) fees; (5) Diesel Generator permit fees; (6) California Coastal