

Application: 10-01-022
(U 39 E)
Exhibit No.: _____
Date: February 18, 2011
Witnesses: Joseph F. O'Flanagan
Loren D. Sharp
Truman L. Burns

**JOINT PREPARED TESTIMONY OF
PACIFIC GAS AND ELECTRIC COMPANY AND
THE DIVISION OF RATEPAYER ADVOCATES
IN SUPPORT OF PROPOSED SETTLEMENT**



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2 **PACIFIC GAS AND ELECTRIC COMPANY AND**
3 **THE DIVISION OF RATEPAYER ADVOCATES**
4 **IN SUPPORT OF PROPOSED SETTLEMENT**

5 **A. Introduction**

6 On January 29, 2010, Pacific Gas and Electric Company (PG&E) submitted
7 an application to recover the costs associated with renewal of the Diablo Canyon
8 Power Plant (Diablo Canyon or DCPP) Operating Licenses,
9 Application 10-01-022. In that application, PG&E requested that the California
10 Public Utilities Commission (CPUC or Commission) find that it is cost effective
11 and in the best interest of PG&E’s customers to preserve the option to operate
12 Diablo Canyon for an additional 20 years beyond the expiration of the current
13 operating licenses for Units 1 and 2, which expire in 2024 and 2025 respectively.
14 Additionally, PG&E requested authority to recover in rates the costs to obtain the
15 federal and state approvals necessary to renew the operating licenses for
16 DCPP. PG&E estimated those costs at \$85.0 million, excluding environmental
17 mitigation costs.

18 On October 11, 2010, PG&E, the Division of Ratepayer Advocates (DRA)
19 and The Utility Reform Network (TURN) (collectively, the Joint Parties) reached
20 a settlement in principle of the issues in the application. A settlement
21 conference was then held on October 18, 2010. The Settlement Agreement
22 (SA) was executed on November 15, 2010, and a Joint Motion for Approval of
23 Settlement Agreement was submitted by the Joint Parties on November 16,
24 2010. On December 14, 2010, comments were filed by the Alliance for Nuclear
25 Responsibility, Sierra Club, Cal Pirc and the Environmental Research and Policy
26 Center (collectively, A4NR). The Joint Parties responded to the A4NR
27 comments on December 30, 2010. The SA, the Joint Motion for Approval of
28 Settlement Agreement and the Joint Parties’ Response are attached as
29 **Attachment 1.**

30 In a ruling dated January 28, 2011, Administrative Law Judge Barnett set
31 the SA for hearing. The ruling states that there are two issues to be resolved in
32 the proceeding that require a hearing, namely:

- 1 1. Whether the SA should be adopted?
- 2 2. Whether funding should be authorized before seismic studies are
- 3 completed?

4 This prepared testimony addresses those two issues.[1]

5 **B. The Settlement Agreement Is Reasonable and Should Be**

6 **Adopted**

7 **1. The Results of PG&E’s License Renewal Feasibility Study**

8 **Confirm That There Are No Safety, Technical or Environmental**

9 **Impediments to 20 Years of Additional Operations**

10 PG&E submitted its License Renewal Feasibility Study (LRFS) with its
11 application in this docket. The LRFS concludes that there are no safety,
12 technical or environmental impediments to operating Diablo Canyon during
13 an extended 20-year license period. These conclusions will, of course, be
14 evaluated by the Nuclear Regulatory Commission (NRC) through its federal
15 review and in part by the California Coastal Commission (CCC) as part of its
16 consistency determination. They are not, however, within the scope of this
17 proceeding. The issue in this proceeding is not whether Diablo Canyon can
18 be operated safely for an additional 20 years, but whether an adequate
19 showing has been made to determine that it is reasonable for PG&E to incur
20 license renewal costs of up to \$80.0 million to preserve the option of
21 operating Diablo Canyon for an additional 20 years beyond the expiration of
22 its current operating licenses.

23 **2. The Cost Estimate for License Renewal Prepared by PG&E, as**

24 **Adjusted by the Settlement, Is Reasonable**

25 PG&E requested in the application that the CPUC adopt an initial capital
26 cost estimate of \$85.02 million in pursuing the renewal of operating licenses
27 from the NRC and working with the CCC and other state and local agencies
28 to obtain the permits required for continued operation of Diablo Canyon for
29 an additional 20 years beyond the expiration of the current operating

[1] This joint prepared testimony is sponsored for PG&E by Joseph O’Flanagan and Loren Sharp and for DRA by Truman Burns. The Statements of Qualifications for Mr. O’Flanagan, Mr. Sharp, and Mr. Burns are attached. These witnesses, along with Mr. David A. Schlissel for TURN, will testify at hearing as a panel.

1 licenses. In the SA, the Joint Parties have agreed that a License Renewal
2 project forecast of \$80.0 million is reasonable. The reduction of
3 approximately \$5.0 million is a reasonable compromise of the approximately
4 \$8.0 million questioned by DRA in its testimony in the proceeding. (No other
5 party challenged PG&E's forecast of project costs.)

6 PG&E's initial capital cost estimate was developed based on
7 benchmarking information available to PG&E regarding the costs of
8 participation in the federal and state licensing process as well as PG&E's
9 experience in obtaining permits for projects such as the Independent Spent
10 Fuel Storage Installation and the Steam Generator Replacement Project.

11 PG&E's estimate of the costs associated with the NRC process is
12 described in Chapter 6 of PG&E's prepared testimony. As summarized in
13 Table 6-1, PG&E forecasts that the cost of the NRC process will be
14 approximately \$38.5 million. Tables 6-1, 6-2, 6-3, 6-4, 6-5, 6-6, 6-7 and 6-8
15 **(Attachment 2)** provide detailed support for the cost estimate. PG&E's
16 forecast of the costs associated with the state process is described in
17 Chapter 7 of PG&E's prepared testimony in the proceeding. As shown in
18 Table 7-1, PG&E forecasts that the cost of the state process will be
19 approximately \$8.0 million. Tables 7-1, 7-2 and 7-3 **(Attachment 3)** provide
20 detailed support for the cost estimate. The total direct costs of the NRC
21 process and state process are approximately \$46.5 million in 2009 dollars.
22 As shown in Table 8-3 **(Attachment 4)**, when escalation, capital
23 administrative and general costs, Allowance for Funds Used During
24 Construction, and contingency are added to this total, the total financial cost
25 of the project is forecast by PG&E to be approximately \$85.0 million.

26 PG&E also proposed that the Commission establish a "License Renewal
27 Environmental Mitigation Balancing Account" (LREMBA) to track the costs of
28 ongoing environmental mitigation that may be required in connection with
29 obtaining renewed operating licenses for Diablo Canyon that are not
30 included in the initial capital cost estimate, for example as a condition of the
31 coastal consistency determination or a coastal development permit. The SA
32 provides that the LREMBA should be adopted and reviewed in PG&E's next
33 General Rate Case (GRC).

1 In its prepared testimony, DRA questioned approximately \$8.0 million of
2 PG&E's \$85.0 million forecast. DRA questioned the need for three full-time
3 equivalent positions on the License Renewal Project Management Team
4 and proposed a reduction of \$1.4 million in contingency. In resolution of
5 these disputed issues, PG&E agreed to reduce its forecast to \$80.0 million.
6 The settling parties agree that, as adjusted, the forecast of project costs is
7 reasonable and should be approved by the Commission.

8 **3. The Diablo Canyon License Renewal Project Is Cost Effective**

9 In order to assess whether preserving the option to operate Diablo
10 Canyon beyond expiration of its existing operating licenses is in the best
11 interest of customers, PG&E examined the net benefits to customers of
12 extending the operations of Diablo Canyon compared to shutting down
13 DCPP at the end of its current license period and obtaining replacement
14 power from 2025 through 2044. Under a wide range of assumptions, it is
15 cost effective to renew the operating licenses for Diablo Canyon and extend
16 operations for 20 years. PG&E estimates that the net benefits of extending
17 DCPP operations range from \$3.5 billion to \$16.3 billion for the various
18 replacement energy alternatives, as summarized in Table 1 below.

**TABLE 1
PACIFIC GAS AND ELECTRIC COMPANY
NET BENEFITS BY REPLACEMENT ENERGY ALTERNATE
90% CAPACITY FACTOR
(MILLIONS OF DOLLARS)**

Line No.	Description	NPV of Extended Operation	NPV of Current Operations	NPV of Replacement Energy	Net Benefit of Extended Operation
	(a)	(b)	(c)	(d)	(e) = (c)+(d)-(b)
1	EE – Low Cost	10,010	6,343	9,568	5,901
2	EE – High Cost	10,010	6,343	13,057	9,390
3	RPS – High DG	10,010	6,343	13,618	9,952
4	RPS - Reference	10,010	6,343	14,846	11,180
5	RPS – High Wind	10,010	6,343	15,694	12,028
6	CC – Low Gas/Low Emission Price	10,010	6,343	7,170	3,503
7	CC – MPR Gas/Low Emission Price	10,010	6,343	8,563	4,897
8	CC – High Gas/Low Emission Price	10,010	6,343	15,847	12,180
9	CC – Low Gas/MPR Emission Price	10,010	6,343	8,174	4,508
10	CC – MPR Gas/MPR Emission Price	10,010	6,343	9,568	5,901
11	CC – High Gas/MPR Emission Price	10,010	6,343	16,852	13,185
12	CC – Low Gas/High Emission Price	10,010	6,343	8,722	5,055
13	CC – MPR Gas/High Emission Price	10,010	6,343	10,116	6,449
14	CC – High Gas/High Emission Price	10,010	6,343	17,399	13,732
15	IGCC – Low Fuel Price, Low Capital Cost	10,010	6,343	8,641	4,974
16	IGCC – High Fuel Price, Low Capital Cost	10,010	6,343	11,116	7,450
17	IGCC – Low Fuel Price, High Capital Cost	10,010	6,343	17,503	13,836
18	IGCC – High Fuel Price, High Capital Cost	10,010	6,343	19,978	16,311

1 PG&E’s cost effectiveness study (presented in Chapter 5 of PG&E’s
2 prepared testimony) shows that the costs to replace Diablo Canyon energy
3 and capacity with alternate generation resources significantly exceed the
4 costs of extending Diablo Canyon operations. To evaluate the cost
5 effectiveness of license renewal, PG&E examined the changes in costs to
6 customers resulting from continuing Diablo Canyon operations versus
7 shutting the units down and replacing Diablo Canyon energy and capacity.
8 PG&E examined the cost of replacing Diablo Canyon with four generation
9 alternatives: (1) new combined cycle generation; (2) energy efficiency
10 investments; (3) renewable generation; and (4) integrated gasification

1 combined cycle and carbon capture and sequestration. PG&E evaluated the
2 costs for continuing Diablo Canyon operations through a 20-year license
3 renewal, which included non-fuel Operations and Maintenance (O&M)
4 expenses, capital expenditures and nuclear fuel expenses. PG&E included
5 costs of capital projects that may be necessary to continue plant operations
6 if aging management and monitoring programs identify them as necessary.
7 In all scenarios analyzed, extending Diablo Canyon operations provided
8 PG&E's customers with a \$3.5 billion to \$16.5 billion savings over the next
9 lowest cost alternative.

10 While DRA did not oppose PG&E's economic analysis methodology,
11 DRA did express concerns with some of the input assumptions used in
12 PG&E's analysis, such as the capital expenditures forecast, the age and
13 validity of PG&E's natural gas cost forecast and the exclusion of a group of
14 potential costs, particularly a cooling tower retrofit project. DRA encouraged
15 the Commission to recognize the inherent risks of long-term natural gas
16 forecasts, pointing out that this was one of the most important inputs in the
17 cost-effectiveness study.

18 Citing what it considered to be optimistic assumptions about inputs to
19 PG&E's economic analysis, TURN stated in its prepared testimony that "it is
20 not unreasonable to posit that there are a number of circumstances in which
21 the costs to ratepayers of relicensing Diablo Canyon would exceed the
22 benefits." Among concerns cited by TURN was the lack of any nuclear plant
23 having been operated for more than 41 years, the lack of a scenario in
24 PG&E's analysis addressing Once-Through Cooling issues, the use of a
25 relatively low forecast of future seismic-related costs, and the possibility that
26 Diablo Canyon may operate more poorly in the 20-year license extension
27 period than PG&E's analysis assumed. TURN presented alternative
28 scenarios based on less optimistic assumptions regarding levels of O&M
29 Expense and Capital Expenditures, and the addition of Cooling Towers.
30 A4NR agreed with TURN's testimony on this issue.

31 The SA reasonably addresses and resolves the concerns raised by
32 parties by providing an on-going mechanism to evaluate the
33 cost-effectiveness of extended Diablo Canyon operations as critical
34 assumptions in the cost-benefit analysis may change over time. The SA

1 thus acknowledges that there is considerable uncertainty in the economic
2 analysis of extending DCCP operations 20 years past the expiration of its
3 current license dates and that PG&E should be required to provide:

- 4 1. An updated cost-effectiveness analysis for operating Diablo Canyon
5 through the remainder of its license life (including a 20-year NRC
6 renewal). The cost-effectiveness analysis shall apply the same
7 approach developed in Application 10-01-022 and compare Diablo
8 Canyon operations to the following alternative resource options—
9 combined cycle (low/medium/high gas with low/medium/high CO2
10 price).
- 11 2. Disclosure of all material inputs used in the cost-effectiveness analysis
12 including forecasted annual O&M, capital and fuel costs, and expected
13 annual capacity factors.
- 14 3. A reconciliation of the inputs identified in (2) with the inputs relied upon
15 for previous cost-effectiveness analyses. This reconciliation should
16 explain the reasons for any increases or decreases relative to previous
17 forecasts.
- 18 4. A listing of any known unquantified risks that may significantly impact
19 the economics of project operations through the forecasted period.

20 The information described in items 1 through 4 above would be provided
21 in all GRCs between now and 2024 as well as in any applications filed by
22 PG&E between now and 2024 in which PG&E seeks approval for new
23 capital projects or annual O&M expenditures at Diablo Canyon in excess of
24 \$20.0 million (excluding the Nuclear Decommissioning Cost Triennial
25 Proceeding).

26 These provisions were included in the SA to address concerns about the
27 uncertainty of the assumptions used in the forecast. If the updated analysis
28 shows that the continued operation of DCCP for an additional 20 years is no
29 longer warranted, the CPUC could take whatever action it deems necessary
30 at that time. This element of the SA ensures that the cost-effectiveness
31 determination for extended Diablo Canyon operations is not based upon a
32 single snap shot in time but rather is evaluated and reassessed over time as
33 conditions may change.

1 **4. There Are Reliability and Environmental Benefits Associated With**
2 **Twenty Additional Years of Diablo Canyon Operations**

3 Approving the SA and authorizing PG&E to recover the costs associated
4 with Diablo Canyon license renewal is cost effective for customers, but there
5 are additional environmental and reliability benefits as well. Diablo Canyon
6 Units 1 and 2 have a combined capacity of over 2,200 megawatts. The
7 units safely and reliably generate approximately 18,000 gigawatt-hours of
8 electricity per year—about 6 percent of the energy generated in California
9 annually. Diablo Canyon represents 20 percent of PG&E’s total generation
10 and over 50 percent of the generation PG&E owns that is virtually
11 greenhouse gas (GHG) emission-free. Diablo Canyon avoids the emission
12 of 6 to 7 million tons per year of GHG that would otherwise be produced by
13 conventional generation sources.

14 **C. It Is Reasonable to Approve the Settlement Agreement and**
15 **Authorize Cost Recovery for License Renewal Prior to**
16 **Completion of the 3D Seismic Studies**

17 In the order setting the SA for hearing, parties were directed to address the
18 following issue: “Whether funding should be authorized before seismic studies
19 are completed”? The Joint Parties have agreed that the answer to this question
20 is “yes.”

21 The SA, if approved by the Commission, would authorize PG&E to recover
22 the costs to obtain the state and federal permits necessary to operate Diablo
23 Canyon for an additional 20 years beyond expiration of the current operating
24 licenses, up to the \$80.0 million initial capital forecast, in rates as of the date the
25 NRC grants PG&E’s license renewal application. There is no provision in the
26 settlement that would delay or defer recovery of license renewal project costs if
27 the 3D seismic studies recommended by the CEC have not been completed
28 when the licenses for Diablo Canyon are renewed.

29 As explained above, the SA does include a requirement that in all future
30 GRCs between now and 2024 and in any applications filed by PG&E between
31 now and 2024 in which PG&E seeks approval for new capital projects or annual
32 O&M expenditures at Diablo Canyon in excess of \$20.0 million, PG&E shall be
33 required to update its cost-effectiveness analysis to evaluate if it remains cost
34 effective to operate Diablo Canyon for an additional 20 years. Including this

1 provision addresses A4NR's concern regarding completion of the three
2 dimensional seismic studies recommended by the CEC.

3 In this proceeding, the question before the Commission is whether it is
4 cost-effective and in the best interest of PG&E's customers to spend up to
5 \$80.0 million to preserve the option to operate Diablo Canyon beyond the
6 expiration of the current operating licenses. Seismic issues are relevant to this
7 proceeding only to the extent that seismic risk affects the cost effectiveness
8 analysis presented in the application. Based upon PG&E's and the NRC's
9 analysis and findings of current seismic data, there is no basis to conclude that
10 new seismic risks at Diablo Canyon will require significant seismic retrofits, the
11 cost of which might affect the cost-effectiveness conclusion in PG&E's cost
12 effectiveness study.

13 However, should new seismic information require incremental expenditures
14 not included in the current cost-effectiveness study, the SA requires PG&E to
15 update its cost-effectiveness study in the next GRC. This requirement to update
16 in future GRCs to evaluate any new circumstance that could cause increased
17 costs at Diablo Canyon addresses seismic uncertainties as well as other
18 uncertainties, such as a potential requirement to eliminate once through cooling.
19 The SA therefore reasonably addresses the seismic issue and all issues of
20 future uncertainty by ensuring that the Commission will have an opportunity to
21 reexamine the cost-effectiveness of continued operations of Diablo Canyon
22 when a future event actually occurs that would result in cost increases.

23 In addition, deferring cost recovery for license renewal would be inconsistent
24 with the guidance the Commission provided to PG&E regarding the timing for
25 pursuing license renewal. In Decision 07-03-044, the Commission concluded
26 that, for generation resource planning purposes, it would be prudent to have an
27 NRC decision on any Diablo Canyon license renewal application at least
28 10 years in advance of the dates that the current operating licenses expire. The
29 current licenses for Units 1 and 2 at Diablo Canyon expire in 2024 and 2025
30 respectively. That would mean that, applying the Commission's "10 years in
31 advance" standard, PG&E should be working to secure an NRC license renewal
32 decision by the end of 2014. That is precisely what PG&E is doing and that is
33 why PG&E has initiated the license renewal process at the NRC and why PG&E
34 filed the application in this proceeding.

1 Further, licensees file license renewal applications with the NRC according
2 to “slots” reserved with the NRC in advance. The NRC is then able to allocate
3 resources to review license renewal applications in accordance with these slots.
4 As a member of Strategic Teaming and Resource Sharing (STARS), a
5 consortium of utilities which each own and operate a single nuclear power
6 station, PG&E was allocated a November/December 2009 slot for filing a license
7 renewal application with the NRC. This timing is consistent with securing an
8 NRC decision by 2014, so PG&E took the opportunity to begin the process. Had
9 PG&E not filed when it did, the next time PG&E would have had a slot
10 designated for it through the STARS process would have been sometime in
11 2014. Obviously, delaying the filing until 2014 would not have allowed sufficient
12 time for a decision from the NRC at least 10 years in advance of plant shut
13 down, which would adversely affect PG&E's long-term resource planning.

14 Given that the CEC-recommended seismic studies are not expected to be
15 completed until sometime in 2013 at the earliest, and given the time it would
16 take thereafter to resume pursuit of an NRC license renewal decision and the
17 state and local agency permits that are also required for continued operation of
18 the plant, PG&E would not be able to meet the Commission’s standard that a
19 prudent utility should obtain a final decision on license renewal by 10 years in
20 advance of the expiration of the current licenses. The Commission should not
21 put PG&E in the position of being unable to meet the very “prudent” standard the
22 Commission itself articulated concerning resource planning by deferring funding
23 of the application until after the 3D seismic studies have been completed in
24 2013.

25 Finally, it is important to point out that seismic issues are, and always have
26 been, an ongoing operational concern at Diablo Canyon. Seismic issues affect
27 current day operations. PG&E is constantly collecting and evaluating seismic
28 data as part of its Long-Term Seismic Program.

29 If PG&E learns anything that may be significant to the safe operation of the
30 plant, PG&E promptly shares that information with the NRC. The NRC has the
31 responsibility of ensuring that no nuclear plant is permitted to continue operating
32 if that continued operation poses a threat to public safety. In the unlikely event
33 that a seismic concern is identified by the CEC-recommended 3D seismic
34 studies currently under way (but which will likely not be complete for two to three

1 years), that concern will be evaluated by the NRC. If the NRC determines it is
2 not safe to operate Diablo Canyon as designed, the NRC will shut Diablo
3 Canyon down immediately.

4 This seismic safety issue is not, and never has been, an issue that is tied to
5 license renewal. It may (or may not) arise during the current license term. The
6 NRC, in a letter to A4NR dated July 6, 2010, confirmed that the NRC will not
7 suspend the license renewal process for Diablo Canyon pending completion of
8 3D seismic studies recommended by the CEC. The NRC letter states “[i]t is
9 important to note that this license renewal review will not affect the ongoing
10 safety oversight process within which the NRC staff will continue to address
11 seismic issues. The NRC staff is involved on a daily basis in monitoring and
12 inspecting the operations at DCP. By addressing seismic issues within the
13 agency’s continuing safety oversight of the power plant, the NRC staff is able to
14 quickly respond to new information, as the agency demonstrated when it
15 monitored the response by PG&E to the discovery of the Shoreline Fault.”

16 **(Attachment 5)**

17 For these reasons, it would be unreasonable to modify the SA to defer
18 recovery of license renewal costs until after the 3D seismic studies are
19 completed. Cost recovery to retain the option to operate Diablo Canyon for an
20 additional 20 years beyond the expiration of the current operating licenses and
21 the continuing evaluation of seismic safety at the plant are unrelated and should
22 remain de-linked.

ATTACHMENT 1

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



FILED

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Application of Pacific Gas and Electric Company
for Approval to Recover the Costs Associated with
Renewal of the Diablo Canyon Power Plant
Operating Licenses.

Application No. 10-01-022

(U 39 E)

**JOINT MOTION OF PACIFIC GAS AND ELECTRIC COMPANY, THE DIVISION OF
RATEPAYER ADVOCATES AND THE UTILITY REFORM NETWORK FOR
APPROVAL OF SETTLEMENT AGREEMENT**

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November 16, 2010

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of Pacific Gas and Electric
Company to Recover the Costs Associated
with Renewal of the Diablo Canyon Power
Plant Operating Licenses.

Application No. 10-01-022

(U 39 E)

**JOINT MOTION OF PACIFIC GAS AND ELECTRIC COMPANY, THE
DIVISION OF RATEPAYER ADVOCATES AND THE UTILITY REFORM
NETWORK FOR APPROVAL OF SETTLEMENT AGREEMENT**

Pursuant to Rule 12.1 of the Rules of Practice and Procedure of the California Public Utilities Commission (“CPUC” or “Commission”), Pacific Gas and Electric Company (PG&E), the Division of Ratepayer Advocates (DRA) and The Utility Reform Network (TURN) hereby request approval of the attached Settlement Agreement. The Settlement Agreement resolves all of the issues raised by DRA and TURN in this application. Pursuant to Rule 12.1(b), on October 11, 2010, the Settling Parties e-mailed notice of a settlement conference. On October 18, 2010, the Settling Parties held a settlement conference. Southern California Edison Company (SCE) and the Alliance for Nuclear Responsibility (A4NR) sent representatives to the settlement conference.

The Settling Parties urge the Commission to approve the Settlement Agreement as reasonable in light of the whole record, consistent with the law and in the public interest.

I. BACKGROUND AND PROCEDURAL HISTORY

On January 29, 2010, PG&E submitted an Application to recover the Costs Associated with Renewal of the Diablo Canyon Power Plant Operating Licenses, A.10-01-022. In that Application, PG&E requested that the Commission find that it is cost

effective and in the best interest of PG&E’s customers to preserve the option to operate Diablo Canyon Power Plant (“Diablo Canyon” or “DCPP”) for an additional 20 years beyond the expiration of the current operating licenses for Units 1 and 2, which expire in 2024 and 2025 respectively. In turn, PG&E requested authority to recover in rates the costs to obtain the federal and state approvals related to renewal of the DCPP operating licenses. PG&E estimated those costs at \$85 million, excluding environmental mitigation costs.

In testimony supporting the Application, PG&E presented its economic analysis, which suggested a range of potential benefits to customers of operating Diablo Canyon an additional 20 years of \$3.5 billion to \$16.3 billion when compared to the various replacement energy alternatives presented. Based on this tremendous potential upside and the successful completion of the technical analysis supporting license renewal, PG&E suggested to the Commission that it would be reasonable and prudent for PG&E to spend up to \$85 million in costs to apply to the Nuclear Regulatory Commission (NRC) to renew the operating licenses for Diablo Canyon and to pursue the other necessary state and local authorizations. To reflect the fact that it is difficult to predict the cost of environmental mitigation measures that may be imposed by state and local agencies that may assert authority over license renewal, PG&E requested that the Commission establish the Diablo Canyon License Renewal Environmental Mitigation Balancing Account (LREMBBA), in which PG&E would accrue and recover the actual costs of mitigating environmental impacts.

On August 18, 2010, DRA served testimony expressing concern that the assumptions used in PG&E’s economic analysis may be overly optimistic due to

uncertainties associated with: (1) capital expenditures forecasts; (2) older natural gas forecasts adopted by the California Energy Commission and used by PG&E; and (3) possible costs of required cooling retrofits or mitigation. Additionally, DRA proposed a reduction of \$8 million to the \$85 million cost estimate. DRA also asserted that any costs recorded in the LREMBA be reviewed in the General Rate Case after they are recorded and recommended that the Commission direct PG&E to reduce depreciation expense by \$5.9 million to reflect depreciating assets over 30 years.

TURN also served testimony expressing concern with the uncertainty associated with the assumptions in PG&E's economic analysis. In addition, TURN presented several alternative cost effectiveness scenarios where, using higher capital and non-fuel O&M forecasts, as well as assuming some additional capital costs, operating DCPD for an additional 20 years would not be a cost effective option for customers. TURN then proposed a ratepayer protection mechanism which would have created a rebuttable presumption that both costs incurred above PG&E's forecast, and capacity factors achieved below PG&E's forecasts, were unreasonable.

On September 17, 2010, PG&E served rebuttal testimony supporting the \$85 million License Renewal project costs and challenging the cost assumptions used in TURN's economic analysis and scenarios. PG&E also opposed TURN's ratepayer protection proposal.

On October 11, 2010, the Parties reached a settlement in principle on the issues raised by DRA and TURN in the proceeding, compromising on the project cost and economic analysis as set forth in Section II below and in the attached Settlement Agreement. Also on October 11, 2010, pursuant to Rule 12.1(b), at the Parties' request

Administrative Law Judge (ALJ) Robert Barnett suspended hearings pending the outcome of the settlement. As noted above, the Parties served notice of and held a settlement conference on October 18, 2010.

II. THE SETTLEMENT

As a compromise of their respective litigation positions, the Parties agreed that in all future General Rate Cases and applications filed by PG&E between now and 2024 in which PG&E seeks approval for new capital projects or annual O&M expenditures at Diablo Canyon in excess of \$20 million (excluding the Nuclear Decommissioning Cost Triennial Proceeding), PG&E shall provide the following information as part of its showing:

- (1) An updated cost-effectiveness analysis for operating Diablo Canyon through the remainder of its license life (including a 20-year NRC renewal). The cost-effectiveness analysis shall apply the same approach developed in A.10-01-022 and compare Diablo Canyon operations to the following alternative resource options -- CC (low/medium/high gas with low/medium/high CO2 price).
- (2) Disclosure of all material inputs used in the cost-effectiveness analysis including forecasted annual O&M, capital and fuel costs, and expected annual capacity factors.
- (3) A reconciliation of the inputs identified in (2) with the inputs relied upon for previous cost-effectiveness analyses. This reconciliation should explain the reasons for any increases or decreases relative to previous forecasts.
- (4) A listing of any known unquantified risks that may significantly impact the economics of project operations through the forecasted period.

The Parties also agreed that a License Renewal project forecast of \$80 million is reasonable. PG&E may seek separate recovery of any additional amounts incurred for license renewal activities, subject to a reasonableness review, in its next General Rate Case. The Parties agreed that rate recovery of the revenue requirement for the License

Renewal project will be calculated using a 30-year remaining life, beginning when and if the NRC grants renewed operating licenses for Diablo Canyon operations. The remaining life will be adjusted in the event that Diablo Canyon operations are not extended for the additional 20 years. Finally, the Parties agreed that any costs recorded in the LREMBA will be reviewed in the General Rate Case after they are recorded.

III. THE COMMISSION SHOULD APPROVE THE SETTLEMENT

The Parties believe the Settlement represents a reasonable compromise of issues on the record in this proceeding. There are no laws blocking or contradicting implementation of the Settlement Agreement and the Parties believe that the Settlement Agreement is in the public interest. Therefore, the Parties urge the Commission to approve the Settlement Agreement. Commission Rule 12.1(d) sets forth the standard for approval of settlements:

The Commission will not approve settlements, whether contested or uncontested, unless the settlement is reasonable in light of the whole record, consistent with law, and in the public interest.

The Commission approves settlement agreements based on whether the settlement agreement is just and reasonable as a whole, not based on its individual terms:

In assessing settlements we consider individual settlement provisions but, in light of strong public policy favoring settlements, we do not base our conclusion on whether any single provision is the optimal result. Rather, we determine whether the settlement as a whole produces a just and reasonable outcome.¹

As noted above, the Commission strongly favors settlement:

The Commission also takes into consideration a long-standing policy favoring settlements. This policy reduces litigation expenses, conserves scarce Commission resources and allows parties to craft their own solutions reducing the risk of unacceptable outcomes if litigated.²

¹ D.10-04-033, mimeo, p. 9.

The record of this proceeding demonstrates that preserving the option to operate Diablo Canyon for an additional 20 years is, in the substantial majority of scenarios, in the best interest of PG&E's customers. Nonetheless, the record also reflects the uncertainty surrounding the assumptions used in the economic analysis. The settlement resolves this issue by requiring PG&E to present updates to the economic analysis in each General Rate Case between now and 2024, and in any separation application between now and 2024 requesting rate recovery of new capital projects or new O&M expenses associated with Diablo Canyon over \$20 million. Thus, the Commission can be assured that continued operation remains in the best interest of PG&E's customers.

Additionally, the agreement on the overall revenue requirement, representing the costs the Parties agree are reasonable in advance, and therefore not subject to after-the-fact reasonableness review, strikes an appropriate compromise of the Parties' positions in this proceeding and is in the public interest. Under the ratemaking proposal, of course, PG&E will recover only actual costs up to the \$80 million in rates. If costs exceed the \$80 million, any costs above \$80 million will be subject to reasonableness review. Likewise, establishing reasonableness review for costs accrued and recovered in the LREMBA and providing that rate recovery for the revenue requirement for the License Renewal project will be calculated using a 30-year remaining life protects and benefits PG&E's customers.

IV. CONCLUSION AND REQUESTED COMMISSION ACTION

The active parties to this proceeding have reached settlement on the issues raised by those parties and the result is reasonable in light of the record, consistent with the law

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² D.10-06-038, *mimeo*, p. 36.

SETTLEMENT AGREEMENT

In accordance with Rule 12.1 of the Commission's Rules of Practice and Procedure, Pacific Gas and Electric Company (PG&E), the Division of Ratepayer Advocates (DRA) and The Utility Reform Network (TURN), hereby enter into this Settlement Agreement in order to resolve disputed issues regarding the forecast revenue requirement to be authorized in PG&E's Application to Recover the Costs Associated with Renewal of the Diablo Canyon Power Plant Operating Licenses, A. 10-01-022 ("License Renewal Application").

RECITALS

1. On January 29, 2010, PG&E filed its License Renewal Application with the Commission. In that Application, PG&E requested that the Commission find that it is cost effective and in the best interest of PG&E's customers to preserve the option to operate Diablo Canyon Power Plant ("DCPP" or "Diablo Canyon") for an additional 20 years beyond the expiration of the current operating licenses in 2024 and 2025 for Unit 1 and Unit 2, respectively. In turn, PG&E requested authority to recover in rates the cost to obtain the federal and state approvals related to renewal of the DCPP operating licenses (referred to as the "License Renewal project"), estimated at \$85 million.

2. In addition to the \$21.6 million initial revenue requirement associated with the estimated \$85 million in License Renewal project costs, PG&E requested that the Commission approve the License Renewal Environmental Mitigation Balancing Account ("LREMBA") in which PG&E would record and through which PG&E would recover the actual costs of mitigating environmental impacts associated with obtaining approvals required to operate Diablo Canyon during the renewed license term.

3. On August 18, 2010, DRA served testimony addressing PG&E's request. DRA expressed concern about the uncertainty of some of the assumptions used in PG&E's cost effectiveness analysis and proposed an \$8 million reduction to the License Renewal

project cost estimates. DRA also proposed that any costs recorded in the LREMBA be reviewed in the next General Rate Case after they are recorded and that the depreciation life used to calculate the revenue requirement for the License Renewal project be 30 years instead of the 10-year depreciation life proposed by PG&E.

4. TURN also served testimony addressing PG&E's request on August 18, 2010. Like DRA, TURN expressed concern about the uncertainty of some of the cost assumptions in PG&E's cost effectiveness analysis and presented scenarios in which continued DCPD operations would not be the most cost effective option for PG&E's customers. TURN submitted a ratepayer protection proposal which would have created a rebuttable presumption that costs incurred above PG&E's forecast and capacity factors lower than PG&E's forecast were unreasonable.

5. On September, 17, 2010, PG&E served rebuttal testimony supporting the \$85 million in License Renewal project costs and challenging the cost assumptions used in TURN's cost effectiveness analysis and scenarios and its ratepayer protection proposal.

6. On or about September 20, 2010, PG&E, TURN and DRA communicated about the possibility of reaching a compromise of the disputed issues in PG&E's License Renewal application. On September 27, 2010, PG&E sent a proposed framework for compromise to TURN and DRA for their consideration in advance of an October 5, 2010 meeting. At the October 5 meeting, the Parties reached a preliminary compromise, subject to TURN providing some additional information regarding a cost effectiveness update. On Monday, October 11, 2010, the Parties reached an agreement in principle, compromising on the revenue requirement and cost effectiveness issues as set forth in paragraphs 8-11 below.

7. Pursuant to Rule 12.1(b), on October 11, 2010, the Parties requested that the ALJ suspend hearings and permit parties to serve a notice of settlement conference. The ALJ granted this request and the Parties served notice to all parties on the service list

for Docket A.10-01-022 that a settlement conference would occur at 10:00 am on October 18, 2010 at the Commission.

AGREEMENT

As a compromise of their respective litigation positions and subject to the Recital and Reservations set forth in this document, the Parties hereby agree to resolve fully the disputed issues raised in the testimony of TURN and DRA with regard to PG&E's License Renewal Application, A.10-01-022 as follows:

8. The Parties agree that in all future General Rate Cases and applications filed by PG&E between now and 2024 in which PG&E seeks approval for new capital projects or annual O&M expenditures at Diablo Canyon in excess of \$20 million (excluding the Nuclear Decommissioning Cost Triennial Proceeding), PG&E shall provide the following information as part of its showing:

- (1) An updated cost-effectiveness analysis for operating Diablo Canyon through the remainder of its license life (including a 20-year NRC renewal). The cost-effectiveness analysis shall apply the same approach developed in A.10-01-022 and compare Diablo Canyon operations to the following alternative resource options -- CC (low/medium/high gas with low/medium/high CO2 price).
- (2) Disclosure of all material inputs used in the cost-effectiveness analysis including forecasted annual O&M, capital and fuel costs, and expected annual capacity factors.
- (3) A reconciliation of the inputs identified in (2) with the inputs relied upon for previous cost-effectiveness analyses. This reconciliation should explain the reasons for any increases or decreases relative to previous forecasts.
- (4) A listing of any known unquantified risks that may significantly impact the economics of project operations through the forecasted period.

9. The Parties agree that a License Renewal project forecast of \$80 million is reasonable. PG&E may seek separate recovery of any additional amounts incurred for license renewal activities, subject to a reasonableness review, in its next General Rate Case.

10. The Parties agree that rate recovery of the revenue requirement for the License Renewal project will be calculated using a 30-year remaining life beginning when and if the Nuclear Regulatory Commission grants renewed operating licenses for Diablo Canyon operations. The remaining life will be adjusted in the event that Diablo Canyon operations are not extended for the additional 20 years.

11. The Parties agree that any costs recorded in the LREMBA will be reviewed in the next General Rate Case after they are recorded.

RESERVATIONS

12. The Parties agree that this Settlement Agreement represents a compromise, not agreement or endorsement of disputed facts and law presented by the Parties in the License Renewal Application.

13. The Parties shall jointly request Commission approval of this Settlement Agreement. The Parties additionally agree to actively support prompt approval of the Settlement Agreement. Active support shall include briefing, comments on the proposed decision, written and oral testimony if testimony is required, appearances, and other means as needed to obtain the approvals sought. The Parties further agree to participate jointly in briefings to Commissioners and their advisors as needed regarding the Settlement Agreement and the issues compromised and resolved by it.

14. This Settlement Agreement embodies the entire understanding and agreement of the Parties with respect to the matters described herein, and, except as described herein, supersedes and cancels any and all prior oral or written agreements, principles, negotiations, statements, representations or understandings among the Parties.

15. The Settlement Agreement may be amended or changed in this or future proceedings only by a written agreement signed by all settling Parties. Parties may not unilaterally Petition or request that the Commission modify this Settlement Agreement.

16. The Parties have bargained earnestly and in good faith to achieve this Settlement Agreement. The Parties intend the Settlement Agreement to be interpreted

and treated as a unified, interrelated agreement. The Parties therefore agree that if the Commission fails to approve the Settlement Agreement as reasonable, and adopt it unconditionally and without modification, including the findings and determinations requested herein, any Party may in its sole discretion, elect to terminate the Settlement Agreement. The Parties further agree that any material change to the Settlement Agreement shall give each Party in its sole discretion, the option to terminate the Settlement Agreement. In the event the Settlement is terminated, the Parties will request that the unresolved issues in Application 10-01-022 be heard and briefed at the earliest convenient time.

17. This Settlement Agreement represents a compromise of respective litigation positions and is not intended to establish binding precedent for any future proceeding. The Parties have assented to the terms of this Settlement Agreement only for the purpose of arriving at the compromise embodied herein.

18. Each of the Parties hereto and their respective counsel and advocates have contributed to the preparation of this Settlement Agreement. Accordingly, the Parties agree that no provision of this Settlement Agreement shall be construed against any Party because that Party or its counsel drafted the provision.

19. This document may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

20. This Settlement Agreement shall become effective among the Parties on the date the last Party executes the Settlement as indicated below.

In witness whereof, intending to be legally bound, the signatories hereto have duly executed this Settlement Agreement on behalf of the Parties they represent.

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PACIFIC GAS AND ELECTRIC COMPANY

By: William V. Manheim

Name: William V. Manheim

Date: November 15, 2010

THE DIVISION OF RATEPAYER ADVOCATES

By: _____

Name: _____

Date: _____

THE UTILITY REFORM NETWORK

By: _____

Name: _____

Date: _____

PACIFIC GAS AND ELECTRIC COMPANY

By: _____

Name: _____

Date: _____

THE DIVISION OF RATEPAYER ADVOCATES

By: Joseph P. Cono

Name: Joseph P. Cono

Date: 11/15/10

THE UTILITY REFORM NETWORK

By: _____

Name: _____

Date: _____

PACIFIC GAS AND ELECTRIC COMPANY

By: _____

Name: _____

Date: _____

THE DIVISION OF RATEPAYER ADVOCATES

By: _____

Name: _____

Date: _____

THE UTILITY REFORM NETWORK

By:  _____

Name: Matt Freedman

Date: November 16, 2010

CERTIFICATE OF SERVICE BY ELECTRONIC MAIL

I, the undersigned, state that I am a citizen of the United States and am employed in the City and County of San Francisco; that I am over the age of eighteen (18) years and not a party to the within cause; and that my business address is Pacific Gas and Electric Company, Law Department, 77 Beale Street - B30A, San Francisco, CA 94105.

I am readily familiar with the business practice of Pacific Gas and Electric Company for collection and processing of correspondence for mailing with the United States Postal Service. In the ordinary course of business, correspondence is deposited with the United States Postal Service the same day it is submitted for mailing.

On the 16th day of November, 2010, I served a true copy of:

**JOINT MOTION OF PACIFIC GAS AND ELECTRIC COMPANY, THE
DIVISION OF RATEPAYER ADVOCATES AND THE UTILITY REFORM
NETWORK FOR APPROVAL OF SETTLEMENT AGREEMENT**

[XX] By Electronic Mail – serving the enclosed via e-mail transmission to each of the parties listed on the official service list for A.10-01-022.

I certify and declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on this 16th day of November, 2010 at San Francisco, California.

/s/
DONNA LEE

THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA SERVICE LIST

Last Updated: October 14, 2010

CPUC DOCKET NO. A1001022

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FILED

12-30-10
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**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of Pacific Gas and Electric
Company for Approval to Recover the Costs
Associated with Renewal of the Diablo
Canyon Power Plant Operating Licenses.

Application No. 10-01-022

(U 39 E)

**JOINT REPLY OF PACIFIC GAS AND ELECTRIC COMPANY, THE DIVISION
OF RATEPAYER ADVOCATES AND THE UTILITY REFORM NETWORK TO
COMMENTS OF THE ALLIANCE FOR NUCLEAR RESPONSIBILITY,
SIERRA CLUB, CAL PIRG AND THE ENVIRONMENTAL RESEARCH AND
POLICY CENTER OPPOSING THE SETTLEMENT AGREEMENT**

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Attorneys for
PACIFIC GAS AND ELECTRIC COMPANY

December 30, 2010

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of Pacific Gas and Electric
Company to Recover the Costs Associated
with Renewal of the Diablo Canyon Power
Plant Operating Licenses.

Application No. 10-01-022

(U 39 E)

**JOINT REPLY OF PACIFIC GAS AND ELECTRIC COMPANY, THE
DIVISION OF RATEPAYER ADVOCATES AND THE UTILITY REFORM
NETWORK TO COMMENTS OF THE ALLIANCE FOR NUCLEAR
RESPONSIBILITY, SIERRA CLUB, CAL PIRG AND THE ENVIRONMENTAL
RESEARCH AND POLICY CENTER OPPOSING THE SETTLEMENT
AGREEMENT**

Pacific Gas and Electric Company (PG&E), the Division of Ratepayer Advocates (DRA) and The Utility Reform Network (TURN) (collectively, the “Settling Parties”) submit this response to the Comments of the Alliance for Nuclear Responsibility, Sierra Club, Cal PIRG and the Environmental Research and Policy Center (collectively, “A4NR”) opposing the settlement agreement submitted on November 16, 2010, resolving all issues raised by the Settling Parties in this proceeding.^{1/} A4NR asserts that the settlement does not meet the requirements of Rule 12.1 of the Commission’s Rules of Practice and Procedure that a settlement be reasonable in light of the whole record, consistent with the law and in the public interest. Therefore, A4NR opposes the settlement, absent the addition of four proposed “amendments.”

^{1/} Californians for Renewable Energy (“CARE”) also filed comments opposing the settlement agreement. CARE's opposition is based on the assertion that CARE’s attorney failed to receive proper notice of the settlement, as required by Commission rules. The Settling Parties have confirmed that CARE’s attorney is on the service list for the proceeding and that all Commission rules governing appropriate service were followed.

A4NR is wrong. The settlement represents a reasonable resolution of the pleadings, testimony and reports presented to the Commission in this proceeding, is consistent with the law, including Decision (D.) 07-03-044. And, it benefits the public by preserving the option to operate Diablo Canyon for an additional 20 years beyond expiration of the current operating licenses, provided PG&E demonstrates between now and the date the current operating licenses expire that continued operation remains cost effective.

A4NR's proposed "amendments" are not amendments at all. They represent a complete rejection PG&E's application to recover from PG&E's customers the cost to pursue the federal and state approvals associated with license renewal. This result is contrary to the agreement of the Settling Parties.

The Settling Parties reached an appropriate compromise on the issues raised in this proceeding. The settlement is reasonable in light of the evidence presented to the Commission, consistent with the law and in the public interest. Accordingly, the Settling Parties request that the Commission approve the Settlement Agreement without modification.

I. PG&E'S APPLICATION MEETS THE REQUIREMENTS OF DECISION 07-03-044.

A4NR incorrectly asserts that D. 07-03-044 requires that PG&E wait until receiving the outcome of seismic studies authorized by Assembly Bill (AB) 1632 prior to seeking approval from the Commission to file a license renewal application at the Nuclear Regulatory Commission ("NRC"). In D. 07-03-044, the Commission, did a number of things. It adopted a generation revenue requirement for PG&E which included funding for the license renewal feasibility study. It ordered PG&E to address the findings

and recommendations of the California Energy Commission (“CEC”) reflected in the nuclear assessment required of the CEC by AB 1632. And, it directed PG&E to file an application with the Commission, by no later than June 30, 2011, including the license renewal feasibility study (LRFS) and addressing whether license renewal is cost effective and in the best interest of PG&E’s customers. These directives are consistent with the Commission’s authority and oversight of Diablo Canyon.

The CEC undertook the assessment required by AB 1632 and, in November 2008, issued a report recommending that PG&E: (1) assess the results of ongoing seismic studies at and around Diablo Canyon and undertake additional studies using three dimensional seismic mapping techniques; (2) analyze the lessons learned from the Kashiwazaki-Kariwa plant experience in response to the 2007 earthquake in Japan to determine whether it would be appropriate to implement any seismic modifications or retrofits at Diablo Canyon in order to avoid an extended shut down in the wake of a major seismic event; (3) update the evacuation study of the Diablo Canyon access roads and surrounding roads; (4) study the local impacts resulting from shut down of Diablo Canyon and compare that impact with alternate uses of the site; (5) assess low level waste disposal costs for waste generated from a 20-year license extension; and (6) study alternative power generation options to quantify the reliability, economic and environmental impacts of replacement power options. As A4NR notes, Commission President Peevey subsequently requested that PG&E submit the results of these assessments to the Commission.

PG&E filed Application 10-01-014 to request Commission approval to recover the cost to complete the 3-D seismic studies recommended by the CEC. The Application

was unopposed, and the Commission granted PG&E's request in Decision 10-08-003. Additionally, D.10-08-003 established an Independent Peer Review Panel with representatives from the CEC, the California Coastal Commission and other state agencies interested in seismic issues, to conduct a peer review of PG&E's seismic studies and to comment on the seismic study proposals and study results.

In filing Application 10-01-022, PG&E submitted the LRFS, in its entirety, as Attachment 2.1. For items related to ongoing operations subject to regulation under NRC's regulatory oversight program, seismic safety and emergency planning, PG&E provided responsive information to the Commission by letter to Commissioner Peevey dated January 29, 2010. On April 12, 2010, PG&E submitted to the Commission, and served on the parties to this proceeding, the following reports: (1) PG&E's Responses to Kashiwazaki-Kariwa Nuclear Power Station Lessons Learned; (2) Seismic Assessment of Diablo Canyon Power Plant Non-Safety Related Structures, Systems and Components; and (3) Local Economic Impacts of Decommissioning Diablo Canyon Power Plant.

Low level radioactive waste disposal costs associated with the extended period of operations were presented in Chapter 3 of PG&E's testimony, "Ongoing Costs to Operate Diablo Canyon Power Plant" and were included in the cost effectiveness analysis presented in Chapter 5. The economic and reliability impacts of alternate generation resources were addressed in Chapter 4, "Replacement Energy Costs." Additionally, PG&E submitted, as Attachment 6.1 to the Application, the federal Environmental Report supporting its application to the NRC to renew the Diablo Canyon operating licenses which, among other things, addresses the environmental impacts of alternative generation resources.

Thus, PG&E's Application, the proceeding, and the settlement, are consistent with the law. A4NR's suggestion to the contrary is simply wrong.

II. THE PLEADINGS, TESTIMONY AND REPORTS SUBMITTED TO THE COMMISSION AND SERVED ON ALL PARTIES TO THIS PROCEEDING SUPPORT ADOPTION OF THE SETTLEMENT

A4NR's reference to the lack of a "record" in this proceeding is not correct. The pleadings, testimony and reports submitted to the CPUC and served on parties to the proceeding support adoption of the settlement. All parties to this proceeding, including A4NR, had the opportunity to review all of this information and to file testimony addressing any deficiencies or presenting any alternatives to PG&E's request to recover the costs associated with obtaining the federal and state authorizations required to operate Diablo Canyon for an additional 20 years beyond expiration of the current operating licenses.

DRA submitted testimony asserting that processing PG&E's application before completion of the CEC-recommended seismic studies was reasonable. However, DRA questioned PG&E's license renewal project cost estimate, recommended an alternate depreciation method, called for review of costs recorded in the proposed License Renewal Environmental Mitigation Balancing Account (LREMBBA), and noted the uncertainty of some of the cost assumptions used in PG&E's cost effectiveness analysis, e.g., the absence of costs for installing alternative cooling technology at Diablo Canyon.

TURN submitted testimony expressing concern with the uncertainty of some of the cost assumptions used in PG&E's cost effectiveness analysis. To illustrate its concerns, TURN presented scenarios in which continued DCP operations would not be the most cost effective option of PG&E's customers. TURN recommended a ratepayer protection plan to shield PG&E's customers from these uncertainties.

Southern California Edison Company (SCE) submitted testimony asserting that processing PG&E's application before PG&E completes the CEC-recommended seismic studies is reasonable. In support, SCE pointed out that PG&E had already completed studies of the Shoreline Fault through its Long Term Seismic Program, and had concluded that Diablo Canyon is seismically designed to withstand a larger, more severe earthquake than a potential earthquake along the Shoreline Fault. SCE also noted that the NRC had independently confirmed PG&E's studies. SCE also supported the use of contingency to develop capital cost estimates.

PG&E served rebuttal testimony responding to the issues raised by TURN and DRA. A4NR also submitted rebuttal testimony, opposing the position taken by SCE and DRA that the Commission could consider PG&E's application pending completion of the 3-D seismic studies recommended by the CEC. As it has in its comments opposing the settlement, A4NR asserted that the Commission can not consider PG&E's application until after the CEC-recommended seismic studies are completed. PG&E moved to strike this inappropriate "rebuttal" testimony on October 11, 2010, on a number of grounds. That motion is currently pending before the ALJ.

The ALJ and the Commission may rely on the submissions made to date in this proceeding to support a determination that the settlement is reasonable in light of the whole record, consistent with the law and in the public interest.

III. EVIDENTIARY HEARINGS ARE NOT NECESSARY

An evidentiary hearing is not required for the Commission to approve a negotiated resolution to a proceeding. If there are no material contested issues of fact, or if the contested issue is one of law, the Commission may decline to set hearing. (CPUC Rules of Practice and Procedure, Rule 12.3.) In its comments, A4NR does not raise any

material issue of disputed fact requiring hearings on the settlement. In fact A4NR's comments fail to address the terms of the settlement itself; instead, they oppose the settlement generically, on legal and policy grounds. As discussed in Section I, A4NR's primary argument is that the Commission should reject A. 10-01-022, and any cost recovery request associated with Diablo Canyon license renewal proceedings, until after PG&E has completed ongoing seismic studies at Diablo Canyon. The Commission can make a final determination on this legal issue without evidentiary hearings.

IV. THE SETTLEMENT AGREEMENT REASONABLY RESOLVES THE ISSUES RAISED AND ADDRESSED IN THIS PROCEEDING.

The settlement reflects compromise on all of the issues raised by the Settling Parties: the cost estimate for the license renewal project, the depreciation method, and the review of the LREMBA. The settlement also addresses concerns with uncertainty surrounding cost assumptions used in the cost effectiveness analysis supporting PG&E's application by requiring PG&E to update those assumptions, as well as the cost effectiveness analysis, in all future General Rate Cases and Applications filed by PG&E between now and 2024 in which PG&E seeks approval for new capital projects or annual O&M expenditures at Diablo Canyon in excess of \$20 million (excluding the Nuclear Decommissioning Cost Triennial Proceeding).

In addition to addressing concerns raised by DRA and TURN, this element of the settlement addresses A4NR's concerns that the results of ongoing seismic studies may require costly retrofits, that PG&E may be required to install alternative cooling technology at Diablo Canyon and that PG&E may need to build another Independent Spent Fuel Storage Installation at Diablo Canyon. The Commission will have an opportunity to determine whether costs associated with any (or all) of these possibilities

creates a situation where continued operation of Diablo Canyon is not the most cost effective option for PG&E's customers.

V. THE COMMISSION SHOULD REJECT A4NR'S PROPOSED AMENDMENTS

A4NR requests that the Commission reject the settlement absent the addition of all four of its amendments. None of the proposed amendments A4NR proposes is enforceable. Amendment 1 would require "all California agencies with primary jurisdiction for assuring the reliability and economics of energy generation" to approve the full development of all parameters of AB 1632 prior to approval of ratepayer funding for the license renewal process or operation of Diablo Canyon beyond 2025. The CPUC is the only California agency with legal authority to grant or deny rate recovery from PG&E's customers.

Amendments 2 and 3, which would preclude state approval for Diablo Canyon operations beyond 2025, address issues unrelated to the issues raised in this proceeding and resolved by the settlement: the state policy addressing once through cooling technology and a permanent, offsite repository for spent nuclear fuel. PG&E has not requested to recover the cost to operate Diablo Canyon beyond 2025; at issue in this proceeding is rate recovery of the costs to obtain the federal and state authorizations associated with a 20-year license extension for Diablo Canyon operations. This is the request addressed and resolved by the settlement.

Likewise, Amendment 4 addresses an issue unrelated to the issues raised in this proceeding and resolved by the settlement – the type of generation resources PG&E should develop at the Diablo Canyon site in the event the results of seismic studies render continued operation uneconomic. If such a situation arises, PG&E will, necessarily,

review and consider all of the generation resources available to replace Diablo Canyon's 2300 MW. Including or requiring this commitment in the settlement of A. 10-01-022 is not appropriate.

VI. CONCLUSION

For all of these reasons, the Settling Parties respectfully request that the Commission approve the Settlement Agreement without amendment.

Respectfully Submitted on behalf of all Settlement Parties under Rule 1.8 (d),

WILLIAM V. MANHEIM
MARK D. PATRIZIO
JENNIFER K. POST

By: _____/s/_____
JENNIFER K. POST

Pacific Gas and Electric Company
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Attorneys for
PACIFIC GAS AND ELECTRIC COMPANY

Dated: December 30, 2010

CERTIFICATE OF SERVICE BY ELECTRONIC MAIL

I, the undersigned, state that I am a citizen of the United States and am employed in the City and County of San Francisco; that I am over the age of eighteen (18) years and not a party to the within cause; and that my business address is Pacific Gas and Electric Company, Law Department, 77 Beale Street - B30A, San Francisco, CA 94105.

I am readily familiar with the business practice of Pacific Gas and Electric Company for collection and processing of correspondence for mailing with the United States Postal Service. In the ordinary course of business, correspondence is deposited with the United States Postal Service the same day it is submitted for mailing.

On the 30th day of December, 2010, I served a true copy of:

**JOINT REPLY OF PACIFIC GAS AND ELECTRIC COMPANY, THE DIVISION
OF RATEPAYER ADVOCATES AND THE UTILITY REFORM NETWORK TO
COMMENTS OF THE ALLIANCE FOR NUCLEAR RESPONSIBILITY,
SIERRA CLUB, CAL PIRG AND THE ENVIRONMENTAL RESEARCH AND
POLICY CENTER OPPOSING THE SETTLEMENT AGREEMENT**

[XX] By Electronic Mail – serving the enclosed via e-mail transmission to each of the parties listed on the official service list for A.10-01-022.

I certify and declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on this 30th day of December, 2010 at San Francisco, California.

/s/
DONNA LEE

THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA SERVICE LIST

Last Updated: October 14, 2010

CPUC DOCKET NO. A1001022

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ATTACHMENT 2

TABLE 6-1
PACIFIC GAS AND ELECTRIC COMPANY
SUMMARY TABLE OF DIRECT COSTS NRC PROCESS AND ASSOCIATED COSTS

Line No.		Cost (in \$ Thousands)
1	License Renewal Application Prep.	\$2,486
2	Safety/Technical Review	7,274
3	Advisory Committee on Reactor Safeguards (ACRS)	227
4	Environmental Review	782
5	Severe Accident Mitigation Alternatives (SAMA)	217
6	Adjudicatory Process	2,250
7	NRC Staff Review Fees	8,745
8	Project Management Team	16,472
9	Total NRC Process and Associated Costs	\$38,453

TABLE 6-2
PACIFIC GAS AND ELECTRIC COMPANY
LICENSE RENEWAL APPLICATION PREPARATION

Line No.	Organization	Duration (FTE Months)	Cost (in \$ Thousands)
1	<u>License Renewal Application Preparation</u>		
2	Worley Parsons	30.18	\$1,260
3	SIA	1.92	80
4	Westinghouse	11.98	500
5	ACI	3.83	160
6	<u>Aging Management Review</u>		
7	PM – Civil Structural Aging Evaluation	2.7	90
8	Consultant Eng. – Civil Structural Aging Evaluation	4.67	195
9	<u>Environmental Report</u>		
10	PG&E Technical Staff	2.00	51
11	Consulting Engineers	0.84	35
12	ERIN – SAMA Evaluation	2.75	115
13	Total		\$2,486

**TABLE 6-3
PACIFIC GAS AND ELECTRIC COMPANY
SAFETY/TECHNICAL REVIEW**

Line No.	Organization	Duration (FTE Months)	Cost (in \$ Thousands)
1	<u>Safety/Technical Review</u>		
2	<u>Sufficiency Review</u>		
3	PG&E Technical Staff	20.18	\$600
4	Worley Parsons	4.79	200
5	SIA	0.24	10
6	ACI	1.80	75
7	<u>Audits & Inspections</u>		
8	PG&E Technical Staff	37.19	999
9	Worley Parsons (Including Document Closeout)	19.16	800
10	SIA	0.48	20
11	Westinghouse	0.48	20
12	ACI	2.40	100
13	Enercon	2.04	85
14	<u>Request for Additional Information</u>		
15	PG&E Technical Staff	22.31	599
16	Worley Parsons	33.53	1,400
17	SIA	0.72	30
18	Westinghouse	0.72	30
19	ACI	4.19	175
20	Enercon	2.40	100
21	<u>Safety Evaluation Report</u>		
22	PG&E Technical Staff	8.83	237
23	Worley Parsons	4.79	200
24	ACI	1.20	50
25	<u>Technical Analysis</u>		
26	PG&E Technical Staff	10.96	294
27	Worley Parsons	2.40	100
28	SIA	2.40	100
29	Westinghouse	15.57	650
30	Enercon	9.58	400
31	Total		\$7,274

**TABLE 6-4
PACIFIC GAS AND ELECTRIC COMPANY
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS (ACRS)**

Line No.	Organization	Duration (FTE Months)	Cost (in \$ Thousands)
1	<u>Advisory Committee on Reactor Safeguards (ACRS)</u>		
2	PG&E Technical Staff	5.09	\$137
3	Worley Parsons (Including Document Closeout)	1.20	50
4	ACI	0.60	25
5	Enercon	0.36	15
6	Total		<u>\$227</u>

**TABLE 6-5
PACIFIC GAS AND ELECTRIC COMPANY
ENVIRONMENTAL REVIEW**

Line No.	Organization	Duration (FTE Months)	Cost (in \$ Thousands)
1	<u>Environmental Review</u>		
2	<u>Sufficiency Review</u>		
3	PG&E Technical Staff	0.48	\$13
4	Consulting Engineers	0.12	5
5	<u>Onsite Audits</u>		
6	PG&E Technical Staff	4.31	116
7	Consulting Engineers	1.44	60
8	<u>Requests for Additional Information</u>		
9	PG&E Technical Staff	4.31	116
10	Consulting Engineers	1.44	60
11	<u>Supplemental Environmental Impact Statement</u>		
12	PG&E Technical Staff	2.87	77
13	Consulting Engineers	0.84	35
14	<u>Historic Properties Management Plan</u>		<u>300</u>
15	Total		\$782

**TABLE 6-6
PACIFIC GAS AND ELECTRIC COMPANY
SEVERE ACCIDENT MITIGATION ALTERNATIVES (SAMA)**

Line No.	Organization	Duration (FTE Months)	Cost (in \$ Thousands)
1	<u>Severe Accident Mitigation Alternatives (SAMA)</u>		
2	PG&E Technical Staff	2.75	\$77
3	Consulting Engineers	0.96	40
4	Erin Engineering	2.40	100
5	Total		\$217

**TABLE 6-7
PACIFIC GAS AND ELECTRIC COMPANY
ADJUDICATORY PROCESS**

Line No.	Organization	Duration (FTE Months)	Cost (in \$ Thousands)
1	<u>Adjudicatory Process</u>		
2	PG&E Legal – Outside Counsel	21.26	\$1,775
3	Expert Witness	7.19	300
4	Worley Parsons	2.40	100
5	SIA	0.60	25
6	Westinghouse	1.20	50
5	Total		\$2,250

**TABLE 6-8
PACIFIC GAS AND ELECTRIC COMPANY
PROJECT MANAGEMENT COSTS**

Line No.	Organization	Duration (FTE Months)	Cost (in \$ Thousands)
1	<u>Project Team</u>		
2	Project Manager	66	\$2,200
3	Assistant Project Manager	66	2,200
4	Representative at COB	42	1,291
5	2 FTE Project Managers	132	4,400
6	Project Engineers	396	4,290
7	Project Admin. & Tech. Assistant	36	408
8	Gov. Rel.	6	203
9	Communications	5	177
10	SLO Facility Cost Incl. Office Expenses		550
11	Travel		303
12	COB STARS Facility		450
13	Total		\$16,472

ATTACHMENT 3

**TABLE 7-1
PACIFIC GAS AND ELECTRIC COMPANY
SUMMARY TABLE OF DIRECT COSTS –
STATE PROCESS AND ASSOCIATED COSTS**

Line No.		
1	Coastal Development Permit	6,487
2	Other State Process	1,434
3	Total State Process and Associated Costs	7,921

**TABLE 7-2
PACIFIC GAS AND ELECTRIC COMPANY
COASTAL DEVELOPMENT PERMIT**

Line No.	Organization	Duration (FTE Months)	Cost (in \$ Thousands)
1	County Permit Processing Fees		\$3,500
2	PGE Technical Staff	9.58	257
3	Legal Services	18.56	1,550
4	Permitting Consultant	10.1	555
5	Application Preparation Consultants	11.98	500
6	Coastal Commission Acceleration Fee		125
7	Total		\$6,487

**TABLE 7-3
PACIFIC GAS AND ELECTRIC COMPANY
OTHER STATE PROCESS**

Line No.	Organization	Duration (FTE Months)	Cost (in \$ Thousands)
1	<u>CEC Recommendations</u>		
2	PGE Technical Staff	3.11	\$84
3	Consulting Engineers	10.78	450
4	CEC Recommendations Consultants	11.98	900
5	Total		\$1,434

ATTACHMENT 4

TABLE 8-3
PACIFIC GAS AND ELECTRIC COMPANY
DIABLO CANYON LICENSE RENEWAL
TOTAL FINANCIAL CAPITAL ESTIMATE
(THOUSANDS OF DOLLARS)

Line No.	Description	2009 Direct Dollars	Escalation	Capital A&G	AFUDC	Contingency	Total Financial Cost
1	Project Team	16,472	578	1,616	6,421	3,763	28,850
2	License Renewal Application Preparation	2,486	87	21	893	1,395	4,883
3	Safety/Technical Review	7,273	255	412	2,732	4,269	14,942
4	Environmental Review	782	27	49	295	461	1,614
5	Severe Accident Mitigation Alternatives	217	8	12	81	127	445
6	Adjudicatory Process	2,250	79	0	801	1,252	4,382
7	NRC Staff Review Fees	8,745	307	0	3,114	1,825	13,991
8	Advisory Committee on Reactor Safeguards	227	8	21	88	51	395
9	Coastal Development Permit	6,487	228	39	2,323	3,631	12,708
10	Other State Processes	1,434	50	13	515	805	2,816
11	Total	46,373	1,628	2,182	17,263	17,579	85,024

ATTACHMENT 5



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 6, 2010

Ms. Rochelle Becker
Alliance for Nuclear Responsibility
P.O. Box 1328
San Luis Obispo, CA 93406

Dear Ms. Becker:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter of February 2, 2010. In the time since I received your letter, my staff has worked closely with staff in NRC's Region IV office to respond to your concerns. In order to better inform the local public about the NRC's continuing safety oversight, the staff plans to hold a public meeting in California in September to further discuss the NRC's role and actions regarding seismic issues.

In your letter, you requested that the NRC staff halt its review of the Diablo Canyon Power Plant, Units 1 and 2 (DCPP) license renewal application until State-requested seismic studies have been completed. The State, in this case, has separate requirements for seismic evaluations that stem from State laws and regulatory oversight for issues like electric grid reliability, electric ratemaking, and coastal land management. The NRC staff has coordinated with the State on issues related to its jurisdiction and will continue to do so.

At this time, it is not necessary for the NRC staff to delay the reviews it recently began of the license renewal application submitted by Pacific Gas and Electric (PG&E) for DCPP. PG&E submitted its application for the license renewal of DCPP in November 2009, within the timeframe allowed under NRC rules. The NRC staff then evaluated the application and found that it met the standards necessary to begin a formal review of the application. The NRC's safety and environmental review processes take a minimum of 22 months to complete.

It is important to note that this license renewal review will not affect the ongoing safety oversight process within which the NRC staff will continue to address seismic issues. The NRC staff is involved on a daily basis in monitoring and inspecting the operations at DCPP. By addressing seismic issues within the agency's continuing safety oversight of the power plant, the NRC staff is able to quickly respond to new information, as the agency demonstrated when it monitored the response by PG&E to the discovery of the Shoreline Fault.

Should information at any time now or in the future, regardless of whether the NRC is performing a license renewal review, show that there is a basis to question the continued safe operation of DCPP, the NRC will take the appropriate actions as part of the agency's ongoing safety oversight. The NRC staff will continue to monitor assessments of the Shoreline Fault and other seismic issues around DCPP and ensure that the power plant's safety systems remain capable of safely shutting the plant down in case of a seismic event.

Finally, your letter raised concerns about the NRC's openness and transparency in terms of the staff's outreach efforts during the DCPD license renewal review and during the ongoing update of NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," also known as the GEIS. Regarding public outreach during the DCPD license renewal review, the NRC has held a total of four public meeting sessions on two different dates to answer the public's questions and to receive public comments about environmental issues. During these public meetings, the NRC staff presented information about license renewal and supplemented this information with a variety of background materials. I understand that members of your organization were able to participate in the meetings, and I also understand that the NRC staff made special accommodations so that you could present your comments by video during one of the environmental scoping sessions. Regarding the update to NUREG-1437, the NRC staff held public meetings as part of an ongoing public rulemaking process to update existing NRC guidance. During this process, NRC staff scheduled one meeting in each of NRC's four regions, as well as a webinar meeting from NRC headquarters. The NRC staff scheduled an additional public meeting in California to respond to stakeholder interest in the NUREG-1437 revision process.

I appreciate your time and interest in contacting the NRC. The NRC staff will contact you to ensure that your organization can be represented at the upcoming public meeting on seismic issues. The NRC staff will also contact representatives from the State of California regarding the upcoming meeting, to ensure that they are able to attend. Should you have additional questions about the DCPD license renewal review process or concerns about the oversight of the plant's safe operation, I invite you to contact Mr. David Wrona, Chief of Renewal Projects Branch 2 in the Division of License Renewal, at 301-415-2292.

Sincerely,



Eric J. Leeds, Director
Office of Nuclear Reactor Regulation

cc: See next page

Diablo Canyon Nuclear Power Plant
Units 1 and 2

cc:

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Diablo Canyon Nuclear Power Plant,
Units 1 and 2

- 2 -

cc:

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Pacific Gas & Electric Company
77 Beale Street, MC B32
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1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **STATEMENT OF QUALIFICATIONS OF JOSEPH F. O'FLANAGAN**

3 Q 1 Please state your name and business address.

4 A 1 My name is Joseph F. O'Flanagan, and my business address is Pacific Gas
5 and Electric Company, 77 Beale Street, San Francisco, California.

6 Q 2 Briefly describe your responsibilities at Pacific Gas and Electric Company
7 (PG&E).

8 A 2 I am a director in the Energy Procurement organization and I am responsible
9 for various regulatory matters.

10 Q 3 Please summarize your educational and professional background.

11 A 3 I received a bachelor of science degree in marine engineering from the
12 United States Merchant Marine Academy at Kings Point, New York, in 1975.
13 I also attended the Harvard Graduate School of Business Administration,
14 where I was a candidate for a masters degree in business administration.

15 Prior to joining PG&E in 1979, I served as an engineering officer on
16 ocean going merchant vessels. Prior to assuming my present position at
17 PG&E, I held the positions of rate economist in the Rates Department,
18 senior valuation engineer in the Valuation Department, supervisor in the
19 Revenue Requirements Department, manager in the Rates, Market Planning
20 and Research, and Revenue Requirements Departments, and director of the
21 Budget, Tax, and Capital Accounting Departments.

22 Q 4 What is the purpose of your testimony?

23 A 4 I am sponsoring Chapters A, B.2 and B.3 of the Joint Prepared Testimony.

24 Q 5 Does this conclude your statement of qualifications?

25 A 5 Yes, it does.

1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **STATEMENT OF QUALIFICATIONS OF LOREN D. SHARP**

3 Q 1 Please state your name and business address.

4 A 1 My name is Loren D. Sharp, and my business address is 142 Cross Street,
5 Suite 200, San Luis Obispo, California.

6 Q 2 Briefly describe your responsibilities at Diablo Canyon Power Plant.

7 A 2 I am the senior director of Technical Services at Diablo Canyon. The license
8 renewal project staff, the license basis verification project staff, and Pacific
9 Gas and Electric Company (PG&E) corporate Geo-Sciences expertise team
10 all report to me. I report directly to the Diablo Canyon Engineering Services
11 Vice President.

12 Q 3 Please summarize your educational and professional background.

13 A 3 I received a bachelor of science degree in nuclear engineering, master of
14 science degree in nuclear engineering, professional engineer in mechanical
15 engineering, and senior reactor operator certification. I have a total of
16 35 years of experience with expertise in the following areas: engineering
17 design, plant operation, plant management, and project management.

18 I was hired by PG&E based on my plant management and project
19 management expertise to complete nuclear fuel assembly loading into
20 storage casks at Humboldt Bay Nuclear Plant. In addition, I was hired to
21 provide the leadership to transition the Humboldt site into the
22 Decommissioning phase after fuel cask loading was completed. I had been
23 part of the management team that successfully designed for
24 decommissioning for the Department of Defense Chemical weapons
25 demilitarization sites. I was a Vice President/Plant General Manager for
26 Raytheon/Washington Group International for ten years destroying nerve
27 agents or blister agents and provided the senior leadership for plants at
28 Johnston Island in the South Pacific, Umatilla in Oregon, Pueblo in
29 Colorado, Blue Grass in Kentucky, and Tirana in Albania.

30 Q 4 What is the purpose of your testimony?

31 A 4 I am sponsoring Chapters B.1, B.4 and C of the Joint Prepared Testimony.

32 Q 5 Does this conclude your statement of qualifications?

33 A 5 Yes, it does.

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Qualifications Truman L. Burns from the Division of Ratepayer Advocates

- Q.1 Please state your name and business address.
- A.1 My name is Truman L. Burns. My business address is 505 Van Ness Avenue, San Francisco, California, 94102.
- Q.2 By whom are you employed and in what capacity?
- A.2 I am employed by the California Public Utilities Commission as a Public Utilities Regulatory Analyst V in the Division of Ratepayer Advocates Energy Cost of Service and Natural Gas Branch.
- Q.3 Briefly describe your educational background and work experience.
- A.3 I received a B.A. in Political Science and English and a M.A. in Political Science, State Politics and Policy Specialization, from the University of California, Davis. I received a J.D. from the University of San Francisco, and am a member of the California Bar. I joined the CPUC’s Special Economics Projects Branch in 1986. During my employment with the CPUC, I have performed various tasks, and have spent most of my time on electric utility regulation. I have testified before the Commission related to PG&E’s Diablo Canyon nuclear power plant (steam generator replacement cost effectiveness, nuclear decommissioning trust funds, target capacity factor, long-term operating costs, utility retained generation capital and operating costs) Humboldt Bay Unit No. 3 nuclear power plant (decommissioning trust funds and decommissioning costs) and Southern California Edison’s San Onofre Units 2 & 3 (utility retained generation capital and operating costs) and Unit 1 nuclear power plant (environmental costs and rate base recovery). I have also testified before the Atomic Safety and Licensing Board of the U.S. Nuclear Regulatory Commission regarding PG&E’s financial qualifications requirements for an independent spent fuel storage installation (ISFSI), and was appointed in 2004 to the National Association of Regulatory Utility Commissioners Staff Subcommittee on Nuclear Issues-Waste Disposal.
- Q.4. What is your area of responsibility in this proceeding?
- A.4 I am responsible for identifying DRA’s rationale of entering the settlement agreement with PG&E and TURN.
- Q.5 Does that complete your Statement of Qualifications?
- A.5 Yes, it does.