

10CFR50.75

June 27, 2011

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

Subject: San Onofre Nuclear Generating Station, Units 2 and 3
Docket Nos. 50-361 and 50-362
Response to Request for Additional Information on the
10 CFR 50.75(f)(1) Decommissioning Funding Status Report

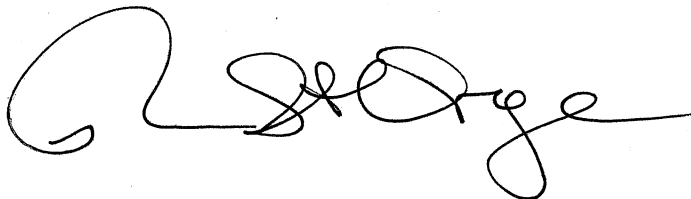
Reference: Letter from Richard J. St Onge (SCE) to NRC (Document Control Desk)
Dated March 30, 2011, Subject: Docket Nos. 50-361 and 50-362
10 CFR 50.75(f)(1) Decommissioning Funding Report
San Onofre Nuclear Generating Station Units 2 and 3

By letter dated March 30, 2011(Reference), Southern California Edison submitted the Decommissioning Funding Status Report for San Onofre Units 2 and 3. By e-mail dated May 10, 2011, the NRC requested additional information. Responses to the NRC request for additional information are provided in the Enclosure to this letter.

There are no new commitments contained in this letter.

Should you have any questions, please contact Ms. Linda T. Conklin at (949) 368-9443.

Sincerely,



Enclosure: Request for Additional Information on the 2011 Decommissioning Funding Status Report for San Onofre Nuclear Generating Station Units 2 and 3

cc: E. E. Collins, Regional Administrator, NRC Region IV
R. Hall, NRC Project Manager, San Onofre Units 2 and 3
G. G. Warnick, NRC Senior Resident Inspector, San Onofre Units 2 and 3

Enclosure

**Responses to Request for Additional Information
on
San Onofre Units 2 and 3 Decommissioning Funding Status
Report**

RESPONSES TO NRC REQUEST FOR ADDITIONAL INFORMATION ON THE SAN ONOFRE UNITS 2 AND 3 DECOMMISSIONING FUNDING STATUS REPORT

RAI No. 1: Minimum DFA calculation:

Provide the labor, energy, and burial factors used in the calculation of the minimum requirement for decommissioning financial assurance and, if necessary, a corrected submittal for that part of the DFS report.

On March 30, 2011, SCE reported an amount of decommissioning funds estimated to be required under 10 CFR 50.75(b) and (c) less than the amount calculated by the NRC staff. According to 10 CFR 50.75(f)(1), the amount provided in the DFS report should be “the amount of decommissioning funds estimated to be required under 10 CFR 50.75(b) and (c).”

The formulas for the factors used by the staff can be found using NUREG-1307, Rev. 14, “Report on Waste Burial Charges: Changes in Decommissioning Waste Disposal Costs at Low-Level Waste Burial Facilities.” For example, the calculations for the Labor and Energy Adjustment Factors can be found on pages 7 and 8 of NUREG-1307, Rev. 14.

SCE Response:

SCE’s calculations of the minimum financial assurance amounts were based on NUREG-1307, Rev. 14. SCE’s labor, energy, and burial factors, and associated calculations, are provided below:

San Onofre Nuclear Generating Station
Unit 2 Minimum Decommissioning Amount Calculations
100% Plant Share – 12/31/2010

<u>Step</u>		<u>Factor</u>	<u>Amount Millions</u>	<u>Basis</u>
A	Initial Minimum Amount (per unit)	105.0		10 CFR 50.75(c) Formula (>3400 MWT)
B	Base L _x Dec. 2005, West Region	2.06		NUREG-1307, Rev. 14, Table 3.2
C	Labor Composite Q4 2010 Value	112.500		BLS CIU2010000000240I
D	Labor Escalation Factor	2.318		Steps C * B / 100
E	Labor Weighting Factor @ 65%	1.506		Step D * 65%
F	Labor Adjustment		\$158.1	Steps A * E
G	Power Factor (1/86) Value, Reg Guide	114.200		BLS WPU0543
H	Power End of Year 2010 Value	193.300		BLS WPU0543
I	Power Escalation Factor	1.693		Steps H / G
J	Power Weighting Factor @ 58%	0.982		Step I * 58%
K	Fuel Factor (1/86) Value, Reg Guide	82.000		
L	Fuel End of Year 2010 Value	224.300		BLS WPU0573 (preliminary)
M	Fuel Escalation Factor	2.735		Steps L / K
N	Fuel Weighting Factor @ 42%	1.149		Step M * 42%
O	Energy Escalation Factor	2.131		Steps J + N
P	Energy Weighting Factor @ 13%	0.277		Step O * 13%
Q	Energy Adjustment		\$29.1	Steps A * P
R	B _x 2010 Value, NUREG-1307 Rev. 14, Generic Site	12.280		Table 2.1, NUREG-1307 Rev. 14
S	Burial Weighting Factor @ 22%	2.702		Step R * 22%
T	Burial Adjustment		<u>\$283.7</u>	Steps A * S
	Total Escalation Adjustments		\$470.9	Sum Steps F + Q + T

The calculation of the Minimum Decommissioning Amount for SONGS Unit 3 is identical.

RAI No. 2: Reporting requirements:

SCE should indicate whether there are any material changes to the trust agreements from the last submittal.

On March 30, 2011, SCE reported that none of the licensees were relying on any contracts pursuant to 10 CFR 50.75(e)(1)(v) and that there were no modifications to their method of providing financial assurance. However, SCE did not indicate if there were any material changes to the trust agreements from the last submittal. As stated under 10 CFR 50.75(f)(1):

[T]he information in [the DFS] report must include [. . .] any contracts upon which the licensee is relying under paragraph (e)(1)(v) of this section; any modifications occurring to a licensee's current method of providing financial assurance since the last submitted report; and any material changes to trust agreements. . .

SCE Response:

There were no material changes to SCE's nuclear decommissioning trust agreements since the last submittal.

RAI No. 3: Citation for real rate of returns:

Provide the citation(s) (e.g., an Order by the rate-regulatory authority) by the regulatory entity that allows for the assumptions used regarding rates of escalation in decommissioning costs, rate of earnings on decommissioning funds and rates of other factors assumed in your DFS report. On March 30, 2011, SCE reported the following for the joint owners of SONGS 2 and 3:

SCE:

6.93 percent rate of escalation in burial costs,
2.32 percent rate of escalation in "other" costs, and
4.46 percent rate of earnings on decommissioning funds.

San Diego Gas & Electric (SDG&E):

6.93 percent rate of escalation in burial costs,
2.32 percent rate of escalation in "other" costs, and
4.14 percent rate of earnings on decommissioning funds.

City of Anaheim (Anaheim):

4 percent rate of escalation in decommissioning costs,
4 percent rate of earnings on decommissioning funds.

City of Riverside (Riverside):

4 percent rate of escalation in decommissioning costs,
3.87 percent rate of earnings on decommissioning funds.

As stated in 10 CFR 50.75(f)(1),

[T]he information in [the DFS] report must include [. . .] the assumptions used regarding rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections. . .

SCE Response:

The 6.93% escalation rate for burial costs used by SCE and SDG&E was approved by the California Public Utilities Commission (CPUC) in Decision 10-07-047.

Annual contribution amounts to each San Onofre co-owner's decommissioning trusts are based on assumed rates of escalation in decommissioning costs and rates of earnings on decommissioning funds that are approved by a rate-regulatory authority. In addition, each San Onofre co-owner annually updates its decommissioning cost escalation rate and decommissioning fund rate of return assumptions independent of regulatory rate-setting proceedings for decommissioning funding. SCE reported the updated rates assumed by each San Onofre co-owner as of December 31, 2010.

RAI No. 4: Rate of escalation clarification:

Clarify which escalation costs are attributable to radiological costs associated for radiological decommissioning. Define what "other" costs imply and why Riverside and Anaheim do not have such a breakdown. Also, clarify for the NRC staff's review, why Riverside has an escalation factor higher than its rate of earnings.

On March 30, 2011, SCE provided the escalation decommissioning costs for site specific decommissioning and the rate of earnings for each joint owner of SONGS 2 and 3.

As stated in 10 CFR 50.75(f)(1):

[T]he information in [the DFS] report must include [. . .] the assumptions used regarding rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections. . .

SCE Response:

SCE and SDG&E's escalation rates for "other" costs pertain to labor and non-labor costs, but not to burial costs. They were both ordered by the CPUC to assume an escalation rate of 6.93% for burial costs, as discussed in the response to RAI No. 3, above. Anaheim and Riverside are not regulated by the CPUC, therefore, they assumed composite escalation rates that include labor, non-labor, and burial costs.

SCE calculated the composite escalation rate of 2.78% for all San Onofre co-owners that was reported in SCE's March 30, 2011 Decommissioning Funding Status Report based on the escalation rates that each co-owner provided and their respective shares of the decommissioning liability for SONGS 2 and 3. In response to this RAI, the City of Riverside

revised its escalation rate to 2.32%. Because Riverside has only a 1.79% share of the decommissioning liability for SONGS 2 and 3, and therefore, this change would have a negligible effect upon the composite escalation rate, SCE did not re-calculate the composite rate to reflect this change.

RAI No. 5: Annual collections:

Indicate whether SCE and its joint owners will have future collections into the trust funds. If so, provide a breakdown of the annual decommissioning contributions that will be accumulated for only radiological decommissioning costs.

Within the March 30, 2011, DFS report, SCE included the contributions for the year 2011, but does not indicate if there are future contributions.

As stated under 10 CFR 50.75(f)(1):

[T]he information in [the DFS] report must include [. . .] a schedule of the annual amounts remaining to be collected. . .

SCE Response:

Annual contributions for SCE and SDG&E are authorized by the CPUC in Nuclear Decommissioning Cost Triennial Proceedings. The current annual collection amounts were established in CPUC Decision 10-07-047 on July 29, 2010. These annual collection amounts will continue until the CPUC issues its decision for the next triennial proceeding, when they will likely be adjusted to reflect then-current decommissioning cost estimates, trust fund balances, and financial assumptions. Annual contributions for Anaheim and Riverside are funded through the cities' municipal utility rate-setting processes. SCE actively monitors their trust fund accumulations to ensure that their respective shares of San Onofre decommissioning costs will be adequately funded.

RAI No. 6: Citation for Site-Specific Study:

Provide the site-specific cost estimate for SONGS 2 and 3, unless it was previously submitted to NRC. If the cost estimate was previously submitted to NRC, then provide a reference to its submittal. The site-specific cost estimate should include a summary schedule of annual expenses, projected earnings, and end-of-year fund balances, expressed in 2010 dollars.

On March 30, 2011, SCE provided a site-specific cost estimate for the amount of decommissioning funds estimated to be required in 2009 dollars, but did not include the cost escalation factor(s) that would be used to escalate the site-specific cost estimate to 2010 dollars.

Per 10 CFR 50.75(e)(1)(i) and (ii), the licensee must specifically describe the safe storage period in order to take credit for projected future earnings when it uses a site-specific estimate as the basis for using the prepayment or external sinking fund methods of financial assurance.

SCE Response:

SCE's calculations of the site specific decommissioning cost estimate (license termination costs) are provided below:

From ABZ SONGS 2 & 3 Decommissioning Cost Estimate
dated February 2009

2008 \$	Unit 2	Unit 3	Total
License Termination Costs	\$1,087,572	\$1,075,602	\$2,163,174
Fuel Storage Costs	\$365,536	\$469,413	\$834,949
Site Restoration Costs	<u>\$337,800</u>	<u>\$322,883</u>	<u>\$660,683</u>
Total Decommissioning Costs	\$1,790,908	\$1,867,898	\$3,658,806
License Termination Costs	\$1,148,770	\$1,136,126	\$2,284,896
Escalated to 2010 \$			

The ABZ SONGS 2 & 3 Decommissioning Cost Estimate is not accessible on the California Public Utilities Commission (CPUC) website. The CPUC website, however, contains several documents in which the \$3,658,806 decommissioning cost estimate for SONGS 2 & 3 was discussed. These include the Joint Application of Southern California Edison Company (U 338-E) and San Diego Gas & Electric Company (U 902-E) for the 2009 Nuclear Decommissioning Cost Triennial Proceeding to Set Contribution Levels for the Companies' Nuclear Decommissioning Trust Funds and Address Other Related Decommissioning Issues, Application A.09-04-009, filed on April 3, 2009, (see item 3 on page 2 of <http://docs.cpuc.ca.gov/efile/A/99449.pdf>), and Decision on Phase 1 of the Triennial Review of Nuclear Decommissioning Trusts and Related Decommissioning Activities for Southern California Edison Company, San Diego Gas & Electric Company, and Pacific Gas and Electric Company, Decision D.10-07-047, issued on July 29, 2010, (see Conclusion of Law No. 4 on pages 54-55 of http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/121644.pdf).