

DRAFT REQUEST FOR ADDITIONAL INFORMATION
BY THE OFFICE OF NUCLEAR REACTOR REGULATION
2011 DECOMMISSIONING FUNDING STATUS REPORT
FOR PALO VERDE NUCLEAR GENERATING STATION,
UNITS 1, 2, AND 3

By letter dated March 30, 2011, APS submitted to the U.S. Nuclear Regulatory Commission (NRC) the 2011 Decommissioning Funding Status (DFS) report for Palo Verde Nuclear Generating Station, Units 1, 2, and 3 (PVNGS 1, 2, and 3), as required under Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.75(f)(1) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML110950393).

The NRC staff has reviewed the information provided by the licensee and determined that the following additional information is needed to complete the review:

RAI #1: Minimum DFA calculation:

Provide an explanation for the adjustment factors used in the DFS report. If necessary, provide a corrected submittal for that part of the report.

On March 30, 2011, APS 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. Within its DFS report submittal, APS used an energy factor different than indicated by the BLS and used the burial factor from Example 1 (the Washington Site PWR Direct Disposal burial factor) in NUREG-1307, Rev. 14, "Report on Waste Burial Charges: Changes in Decommissioning Waste Disposal Costs at Low-Level Waste Burial Facilities."

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)."

Also, as stated under 10 CFR 50.75(c)(2):

[e]scalation factors for labor and energy [. . .] are to be taken from regional data of U.S. Department of Labor Bureau of Labor Statistics and [. . .] escalation factor for waste burial and is to be taken from NRC report NUREG-1307, "Report on Waste Burial Charges."

NUREG-1307 states that:

[f]or plants that have no disposal site available for LLW (e.g., plants not located within the Atlantic, Northwest, and Rocky Mountain Compacts), NUREG-1307, Rev. 14 assumes the costs for disposal is the same as that provided for the Atlantic Compact for lack of a better alternative at this time. . .

ENCLOSURE

RAI #2: 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 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, APS reported the following for the licensees of PVNGS 1, 2, and 3:

APS:

5 percent rate of escalation in decommissioning costs, and
6.75 percent rate of earnings on decommissioning funds.

Salt River Project Agricultural Improvement and Power District (SRP):

5.92 percent rate of escalation in decommissioning costs, and
7.65 percent rate of earnings on decommissioning funds.

El Paso Electric Company (EPE):

5.2925 percent rate of escalation in decommissioning costs, and
7.3310 percent rate of earnings on decommissioning funds.

Southern California Edison Company (SCE):

7.2 percent rate of escalation in decommissioning costs, and
5.25 percent rate of earnings on decommissioning funds.

Public Service Company of New Mexico (PNM):

5 percent rate of escalation in decommissioning costs, and
9.5 percent rate of earnings on decommissioning funds.

Southern California Public Power Authority (SCPPA):

6 percent rate of escalation in decommissioning costs, and
6.83 percent rate of earnings on decommissioning funds.

Los Angeles Department of Water and Power (LADWP):

5 percent rate of escalation in decommissioning costs, and
7 percent rate of earnings on decommissioning funds.

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

the 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. . .

RAI #3: Escalation of costs to 2010 for site-specific study:

Provide the site specific cost estimate in 2010 dollars and describe the cost escalation factor(s) used to escalate the cost estimate to 2010 dollars in a total and year-to-year format. If applicable, provide an updated site-specific cost estimate that takes into account license renewal of PVNGS 1, 2, 3 on April 21, 2011.

On March 30, 2011, APS provided a site-specific cost estimate for the amount of decommissioning funds estimated to be required. The cost estimate also had year-to-year expenses but was in 2007 dollars. Also, APS indicated that the 2010 cost estimate had not been approved yet by the time of the submittal of the DFS report.

As required under 10 CFR 50.75(e)(1)(i) and (ii), while providing the site-specific cost estimate in relation to the costs, the licensee must provide the site-specific cost estimate in current year dollars of the most current year.

RAI 4: Decommissioning costs timeframe inconsistencies:

Clarify the inconsistencies in decommissioning costs timeframes presented by each of the licensees.

On March 30, 2011, APS provided a site-specific cost estimate for the decommissioning of PVNGS 1, 2, and 3 for immediate decommissioning. In the DFS report, each licensee provided the following timeframes for expected costs during decommissioning.

APS:

Decommissioning costs until 2037 for PVNGS 1, 2, and 3.

SRP:

Decommissioning costs until 2037 for PVNGS 1, 2, and 3.

EPE:

Decommissioning costs until 2031 for PVNGS 1, 2033 for PVNGS 2, and 2035 for PVNGS 3.

SCE:

Decommissioning costs until 2031 for PVNGS 1, 2033 for PVNGS 2, and 2034 for PVNGS 3.

PNM:

Decommissioning costs until 2037 for PVNGS 1, 2, and 3.

SCPPA:

Decommissioning costs until 2025 for PVNGS 1, 2026 for PVNGS 2, and 2027 for PVNGS 3.

LADWP:

Decommissioning costs until 2025 for PVNGS 1, 2026 for PVNGS 2, and 2027 for PVNGS 3.

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.

RAI #5: Contributions to trust funds:

Provide clarification in relation to the annual contributions of SCPPA and LADWP decommissioning trust funds.

On March 30, 2011, APS provided the PVNGS 1, 2, 3, DFS report where each licensee listed their annual contributions to their respective trust funds. However, SCPPA indicated negative contributions of \$4,046,138 per year until 2020, \$2,475,754 in 2021, and \$1,176,842 in 2022. Also, LADWP indicated negative contributions of \$1,368,422 per year until 2020, \$450,596 in 2021, and \$76,366 in 2022.

As stated under 10 CFR 50.75(h)(1)(iv):

Except for withdrawals being made under §50.82(a)(8) or for payments of ordinary administrative costs (including taxes) and other incidental expenses of the fund [. . .] in connection with operation of the fund, no disbursement or payment may be made from the trust. . .