

REQUEST FOR ADDITIONAL INFORMATION
REGARDING REQUEST TO AMEND SNM-42, CHAPTER 10,
DECOMMISSIONING COST ESTIMATE

1. Clarify that Salvage Value is not taken as a Credit (NUREG-1757, Volume III, Appendix A, page A-29). In its discussion of key assumptions for the Decommissioning Cost Estimate (DCE), NUREG-1757 suggests that, "The cost estimate should clearly state that it does not take credit for any salvage value that might be realized from the sale of potential assets (e.g., recovered materials or decontaminated equipment) during or after decommissioning. If estimated credits are taken for salvage value but are not fully realized at the time of decommissioning, the cost estimate (as well as the financial assurance) may be significantly low."

The submission, however, in Section 10.2.2.3 of Chapter 10 states that "Contaminated equipment may be sold for use at another fuel cycle facility" and that "Equipment may be sold for use at non-nuclear facilities."

If accurate, add a statement to the DCE indicating that no credit is taken for such sales.

2. Clarify that Labor Costs are based on Cost of an Independent Third-Party Contractor (NUREG-1757, Volume 3, Appendix A, pages A-26). NUREG-1757, Volume 3, Appendix A, recommends that the DCE should be based on an assumption that work will be performed by an independent third-party contractor. This will help to ensure that if the licensee is unable or unwilling to carry out decommissioning the financial assurance will provide sufficient funds for the U.S. Nuclear Regulatory Commission (NRC) to hire a contractor to perform the work.

Neither the "Basis for Estimate" section of Appendix 10-3 nor Table 1, "Summary of Downblending Areas Decommissioning Cost Estimate," state that independent third-party labor costs are used or provide any information about the source of the labor rate that is included in Table 1. Similarly, neither the "Cost Basis" section of Appendix 10-4 nor Table 2, "RTRT Decommissioning Cost Estimate Details," state that independent third-party labor costs are used or provide any information about the source of the labor rate that is included in Table 2. Appendix 10-5 does state at page 10-40 that, "Labor rates are based on local non-union rates provided by local contractors."

Clarify whether each component of the DCE is based on third-party labor costs and, if not, revise the DCE to use independent third-party labor rates.

3. Demonstrate that the DCE is based on Adequate Supporting Detail (NUREG-1757, Volume 3, Appendix A, pages A-26 and A-31-35).

Appendices 10-3, 10-4, and 10-5 to the submission each include a single table summarizing the decommissioning activities to be undertaken by work breakdown

structure (WBS), the total man-hours per WBS, and the total cost. In Appendices 10-3 and 10-4 total man hours apparently are multiplied by a single \$135 per hour labor rate to obtain total cost, while Appendix 10-5 contains separate rates per hour for 10 different labor categories (although how those labor rates are used to obtain total costs cannot be determined from the tables in the appendix). The submission includes statements that, "Supporting details are available on-site in decommissioning files required by 10 CFR 70.25," (page 10-17 of Appendix 10-3 and page 10-26 of Appendix 10-4). Appendix 10-5 states only that a, "detailed cost estimate has been developed," (page 10-40) but does not reference a source for any supporting details.

It cannot be determined from the submitted material whether the DCE was adequately based, as NUREG-1757 requires, on reasonable and detailed assumptions concerning the decommissioning activities. On page A-26, NUREG-1757 recommends the following:

A DCE should contain a substantial level of detail, consistent with the guidance presented in this section, to allow NRC to fully evaluate the adequacy of the estimate. A series of cost estimating tables are provided at the end of this section to assist licensees in preparing DCE that contain sufficient detail and are likely to be acceptable to NRC. *NRC staff recommends that licensees pattern their cost estimates after the cost estimating tables presented at the end of this section (emphasis in original).*

The Tables presented in Sections A.3.6 through A.3.9 of NUREG-1757, Volume 3, for example, encourage licensees to identify each decommissioning activity to be conducted, and to describe the labor costs for each activity in terms of such labor categories as Supervisor, Craftsman, Health Physicist, Clerical, etc. Similarly, the tables encourage licensees to describe each relevant feature of the facility in terms of dimensions, components, or other relevant features affecting the scope of the decommissioning required.

Provide the aforementioned "supporting details" for the NRC's review to ensure that they incorporate the required level of detail.

4. Provide Additional Explanation for Omission of Management Costs (NUREG-1757, Volume 3, Appendix A, page A-29).

At page 10-17 the license states the following: "Contingency amounts to cover management of the decommissioning effort are not included in this estimate since the activities will be only a small portion of those required for the Naval Reactors (NR) facilities and the management of those activities is covered by the NR financial assurances." As noted above under Comment (2) above, the DCE should be based on the costs of a third party conducting the work, including necessary management. The WBSs listed in Appendices 10-3 and 10-4 include Work Planning but do not explicitly reference management. Appendix 10-5 includes a WBS for Project Administration and a

labor rate for "Superintendent" but also does not explicitly refer to management. Therefore, the statement appears to be accurate that management costs are not included in the cost estimate. It cannot be determined from the materials in the submission if the NR areas are entirely separate from the areas covered by the DCE addressed in Appendices 10-3, 10-4, and 10-5, and whether decommissioning of all areas is expected to occur simultaneously. The submission does not describe how management from the Naval Reactors decommissioning activities, potentially carried out by U.S. Department of Energy (DOE) or a DOE contractor, would be feasible over a potential third-party contractor selected by NRC for Downblending, Research Test Reactors (RTR) and Targets (TRTR) , and Lynchburg Technology Center portions of the facility.

Explain the basis for the omission of management of the decommissioning effort from the cost estimate and to make clear how management of the decommissioning activities for the Downblending Areas, the RTR and former TRTR Facility, and the Lynchburg Technology Center will be provided.

Additionally, the basis for the statement that, "Management of those activities is covered by the NR financial assurances," should be provided. If the licensee is relying on terms of the NR contract with DOE presented in Appendix 10-1 and/or the Letter of Attestation between Babcock & Wilcox and DOE presented in Appendix 10-2, the licensee should identify the clause(s) relied upon.

Additionally, explain the reference to management as a "contingency." Unless a satisfactory explanation for the omission of management costs is provided, add the costs for management of decommissioning activities to the decommissioning cost estimate.

5. Page 10-40 of Appendix 10-5 states that the cost estimate "was generated utilizing essentially the same methodology as recommended in Appendix F or Regulatory Guide 3.66." In addition, the licensee should review NUREG-1757, Volume 3, to ensure that its recommendations have been implemented in the submitted decommissioning cost estimates.

References to NUREG-1727, Appendix F and Regulatory Guide 3.66 should be replaced with NUREG-1757, Volume 3, where applicable.