

Docket 70-1100
License SNM-1067

APR 20 1994

Mr. Robert E. Sheeran, Facilities Manager
Windsor Nuclear Fuel Manufacturing
Combustion Engineering, Inc.
1000 Prospect Hill Road
Windsor, Connecticut 06095-0500

Dear Mr. Sheeran:

SUBJECT: DECOMMISSIONING FUNDING PLAN (TAC NO. L21635)

The Nuclear Regulatory Commission and its contractor have reviewed the decommissioning funding plan (DFP) submitted by Combustion Engineering, Inc. (CE) in support of renewal of License SNM-1067. The review included the original DFP submitted July 2, 1992, and additional information submitted November 10, 1993, in response to an NRC request for additional information transmitted to CE on August 2, 1993.

We have concluded that the DFP must be supplemented by additional information, as specified in the enclosed request for additional information (RAI), before additional review or consideration of NRC approval can proceed.

Prior to formalizing responses and prior to initiation of any projects resulting from the questions, CE should discuss the questions with NRC through telephone discussions and/or meetings to ensure that the intent of the questions is clear. Additionally, CE is requested to provide written responses to the questions within 30 days of the date of this letter. Please reference the above TAC No. in future correspondence related to this request.

If you have any questions, please contact me on (301) 504-2604.

Sincerely,

Sean Soong
Licensing Section 2
Licensing Branch
Division of Fuel Cycle Safety
and Safeguards, NMSS

ORIGINAL SIGNED BY

Enclosure: As stated

cc w/encls:
Mr. J. F. Conant, Manager
Nuclear Materials Licensing

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REQUEST FOR ADDITIONAL INFORMATION
DECOMMISSIONING FUNDING PLAN
COMBUSTION ENGINEERING-WINDSOR FACILITY
DOCKET 70-1100

On November 10, 1993, Combustion Engineering, Inc. (CE) in Windsor, Connecticut, provided additional information and documents concerning the decommissioning funding plan (DFP) and surety bond for License SNM-1067. CE submitted this information in response to a U.S. Nuclear Regulatory Commission request for additional information (RAI) dated August 2, 1993. The original DFP was submitted on July 2, 1992. CE did not submit a revised cost estimate or surety bond with the additional information. Therefore, the additional information was reviewed in light of the existing cost estimate and surety bond, which are in the amounts of \$1,999,980 and \$2,000,000, respectively.

Upon review of the information provided, NRC has determined that the DFP must be modified and/or supplemented by additional information, as specified below.

(1) Provide Additional Detail to Support the Cost Estimate

CE did not provide specific information that was requested by NRC in the RAI, including the dimensions of the buildings to be decommissioned, the dimensions of individual facility components, the volumes of materials at the facility, and the quantity of waste to be generated in decontaminating each facility component. It is possible that this information is included in the "almost two dozen other tables" CE mentions in the RAI response as being available at CE's offices. NRC has determined that this information is needed to evaluate the adequacy of the cost estimate.

NRC requests that CE submit additional detail in support of the cost estimate to demonstrate that it has provided reasonable cost estimates for all major decommissioning activities. The cost estimating tables in Appendix F of Regulatory Guide 3.66 (Ref. 1) and the tables in Appendices A through E of NUREG/CR-1754, Addendum 1 (Ref. 2), provide guidance to licensees on considerations for, and methods of preparing, cost estimates that NRC staff use in evaluating and reviewing DFPs.

(2) Substantiate the Extent of Contamination at the Facility

The decommissioning cost estimate submitted July 2, 1992, did not adequately document its assumptions regarding the contamination levels at certain areas of the facility. The estimate stated:

"Ancillary areas and other buildings [other than Buildings 5, 6, and 17] are not anticipated to contain significant amounts of residue since unclad uranium was not handled in significant amounts. For these areas and buildings, verification surveys will be performed to document that they do not require decontamination. As part of the Decommissioning Plan a more thorough characterization of contaminated areas will be undertaken."

In response to NRC's request to provide additional information about the level of contamination at the ancillary areas and buildings, the licensee's current (11/10/93) submission states the following:

"Since their inception, activities related to uranium bearing fuel manufacturing operations have been confined to Buildings 5, 6, 17, and 21 and our records indicate that unclad radioactive materials associated with manufacturing operations were limited to these areas. The estimates submitted take into account the extent of the contamination in Buildings 5, 6, 17, and 21."

Thus, it now appears that Building 21 will require decontamination and decommissioning, in addition to the three buildings originally identified in the cost estimate.

NRC has determined that CE must revise its cost estimate to include the cost of decontaminating and decommissioning Building 21 and, in that revision, must also provide information in support of these costs, consistent with Question (1), above. NRC also requests further clarification of the extent of contamination at other parts of the facility. In particular, CE's response, as stated above, is limited only to manufacturing operations and does not address potential uses of nuclear material that may have occurred elsewhere.

(3) Provide Additional Justification for Use of a 10 percent Contingency Factor

CE provided a justification for its use of a 10 percent contingency factor (as opposed to the recommended 25 percent given in NUREG/CR-1777) in the responses to RAI#1. CE's basic argument is that the 10 percent number is conservative for the Windsor facility because of low-specific activity materials, high degrees of operational quality assurance, and the low volumes of waste.

The 25 percent contingency factor was developed to protect against unforeseen decommissioning costs. For example, the contingency factor helps guard against the possibility that contamination levels will not be as low as expected at the time of decommissioning. Facilities with low contamination levels will require relatively few decontamination activities and disposal of relatively little waste, and consequently, the absolute dollar value of a 25 percent contingency factor would automatically be lower for such facilities.

NRC requests CE either (1) increase its contingency factor to 25 percent of decommissioning costs or (2) provide additional justification for the use of a lower factor. Additional justification would need to further clarify how and why the Windsor facility differs from other NRC licensed facilities with similar functions (which may employ a 25 percent contingency factor).

(4) Revise Schedule A of the Standby Trust Agreement to Indicate Costs

In the first RAI, NRC requested that the licensee modify Schedule A of the standby trust agreement to include and reflect the cost estimate. In response, however, CE has not made the revision, but instead suggests that Schedule A should be revised at a later time. Specifically, CE states that (1) the cost of decommissioning is stated in the DFP, and (2) it will give the current decommissioning cost estimate to the trustee at the time of activation of the standby trust agreement.

Specification in Schedule A of the estimated costs of decommissioning is important to allow the trustee to properly administer the conditions and requirements of the agreement. For example, the amount of the cost estimate can be critical to determining whether a particular withdrawal should be allowed. Therefore, NRC considers further delay to be unwarranted and requests that CE modify Schedule A to specify the cost estimate (as revised to address above Questions 1-3).

References:

1. U.S. Nuclear Regulatory Commission, "Standard Format and Content of Financial Assurance Mechanisms Required for Decommissioning Under 10 CFR Parts 30, 40, 70, and 72," Regulatory Guide 3.66, June 1990.
2. Short, S.M., "Technology, Safety and Costs of Decommissioning Reference Non-Fuel-Cycle Facilities: Compendium of Current Information," NUREG/CR-1754, Addendum 1, Pacific Northwest Laboratory, Richland Washington, for U.S. Nuclear Regulatory Commission.