

DATE: August 7, 2003
TO: John Monninger
FROM: Mary Jane Ross-Lee
SUBJECT: Telecon on July 9, 2003, between Transnuclear, Inc. (TN), Southern California Edison, Pacific Northwest National Labs, and SFPO staff, on Advanced NUHOMS Amendment 1 submittal

The following questions were presented to TN for clarification on their submittal.

Question on previous SER issue

(1) 2nd paragraph, SAR page A.4.1-1 states "All AHSM temperature distribution calculations presented in Chapter 4 were generated for 24 kW heat load per DSC, and therefore are not repeated here."

2nd paragraph, SER for the Advanced NUHOMS FSAR, page 4-1, last sentence states "Should the applicant request approval of heat loads higher than these [14 kW and 13.706 kW] for the storage of spent fuel in a NUHOMS 24PT1-DSC, the staff will conduct an independent review of a separate submittal at that time.

It appears that the SER is requesting TN to conduct a new analysis to justify the 24 kW rating ... please explain why you have chosen not to conduct a new analysis.

Response: Applicant stated that new analysis was not necessary, that the previously submitted analysis was complete.

Questions relating to 24PT4 canister position within AHSM:

Ref. DWG NUH-03-4011, Sheet 4, Section D

1) What is distance from canister top surface to inside surface of AHSM wall?

Response: 6 inches

2) What is the distance from canister bottom surface to inside surface of AHSM door?

Response: 6 inches

Questions relating to heat shield size and position within AHSM:

Ref. DWG NUH-03-4011, Sheet 4, Section or Detail number indicated in question

1) In Section D there appears to be no air gap between the outer heat shield and the inside surface of the AHSM front wall. Is there an air gap and, if so, what is it?

Response: ½ inch

2) Same question as #1 for the inner heat shield

Response: ½ inch

3) In Section D the outer heat shield appears to end at the same axial position as the canister top surface. Is this correct or does the shield extend beyond the canister end?

Response: Shield ends 5 ½ inches away from the inside surface of the module (with the gap between canister and wall of 6 inches, this means that the shield extends ½ inch beyond the canister end).

4) Same question as #3 for the inner heat shield.

Response: same as #3

5) What is the width of the inner heat shield (ref. Detail 7)?

Response: 6 inches

6) Above the inner heat shield, what is the spacing between the two outer heat shields (ref. Detail 7)?

Response: 5 inches

7) The support structure heat shield (Item 60) is not shown in Rev 2 of the drawing set. Is it still used in the current design? Lost #60 when section moved.

Response: It is still there and is shown in Section D (but not labeled).

8) If the support structure heat shield is still used, has the shield mounting and location changed from that shown in Rev 0 of Sheet 4?

Response: Still same mount except for 3 mounting points on each edge rather than 2.

9) If the support structure heat shield is still used, does it extend beyond the concrete base and project over part of the inlet air plenum (ref. Section D)?

Response: Extends 2 1/4 inches over plenum. Also has ½ inch gap at other end (between shield and module wall).

Canister Modeling question:

Please supply the shell outer surface radial temperature boundary values specified for all cases reported in Table A.4.1-1 (on page A.4.1-2) and Table A.4.4-3 (on page A.4.4-11) of the April 2003, Rev. 0 version of the SAR for the 24PT4 cask. Specify the source of the selected boundary values, and document the reason for any differences between the values used for the 24PT4 cask and those reported in Table 8.1-24 (page 8.1-85) of NUH-003, Rev. 6.

Response: by TN in conference call on 7/9/03:

for 70 F ambient: 373 F, 353 F, 328 F (top, side, bottom, respectively)

for 104 F ambient: 399 F, 377 F, 351 F

This accounts for 2 of the 14 unique cases cited in Tables A.4.1-1 and A.4.4-3. On July 10, TN submitted a file of additional information. That file is attached.