NRC FORM 699
(05-2012)

U.S. NUCLEAR REGULATORY COMMISSION

CONVERSATION RECORD

DATE: 3/20/2014

TIME: 10 : 00 ☑ AM ☐ PM

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU: See below.

TELEPHONE NO.:

E-MAIL ADDRESS:

ORGANIZATION: Energy Solutions

SUBJECT: Request for Supplemental Information Teleconference

TYPE OF CONVERSATION
- ☐ IN-PERSON
- ☐ E-MAIL
- ☑ TELEPHONE
- ☐ INCOMING
- ☑ OUTGOING

SUMMARY

Energy Solutions: Steve Sisley and Bob Quinn
Nuclear Regulatory Commission (NRC): Chris Allen, Joe Borowsky, Ricardo Torres and Ian Tseng

The teleconference call began at approximately 10:00 A.M. Eastern Standard Time. The purpose of the call was to discuss supplemental information requests the NRC were sending Energy Solutions. A copy of the supplemental information requests provided to Energy Solutions is attached. Energy Solutions addressed the first two thermal information requests by stating that the NRC had all the information being requested. The NRC asked if either new computer input or output files or new calculations had been generated, and Energy Solutions responded negatively. They also explained that the thermal analyses for the lid configuration already approved by the NRC should bound the alternative lid configuration for which Energy Solutions was seeking approval because a thermal barrier in the lid configuration approved by the NRC had been removed from the alternative lid configuration. The NRC requested Energy Solutions provide this information in writing and Energy Solutions agreed. Energy Solutions also committed to providing the data requested in both the third thermal information request and the thermal observation. For the first structural and materials observation, Energy Solutions inquired what was the regulatory basis for the question. The NRC responded that it was unclear from the drawings which welds were important to safety. The NRC also explained that this information would assist in determining if the proposed changes to nondestructive examination techniques of welds was appropriate. Energy Solutions committed to providing the information requested in the structural and materials observation and correcting the editorial mistake discussed in the second structural and materials observation. The call concluded at approximately 10:30 A.M. Eastern Standard Time.

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ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION	SIGNATURE	DATE
Chris Allen	William C. Allen	March 26, 2014

ACTION TAKEN

TITLE OF PERSON TAKING ACTION	SIGNATURE OF PERSON TAKING ACTION	DATE

Energy*Solutions*

DOCKET NO. 71-9321

REQUEST FOR SUPPLEMENTAL INFORMATION

Thermal

1. Provide the ANSYS input and output files (.db, text readable files, etc.) that support the thermal analyses discussed in Chapter 3 of the SAR.

   The application did not adequately describe the normal conditions of transport (NCT) and hypothetical accident conditions (HAC) thermal analyses that support the conclusions made in the thermal chapter. The ANSYS files would provide model details and help staff perform the thermal review.

   This information is needed to determine compliance with 10 CFR 71.33.

2. Provide the following calculations, referenced on SAR page 3-12, that support the thermal analyses:

   a) Energy Solutions Document No. TH-022, Rev. 1 (steady-state thermal analyses of 3-60B cask) and,
   b) Energy Solutions Document No. TH-023, Rev. 3 (HAC thermal analyses of 3-60B cask).

   The application did not adequately describe the NCT and HAC thermal analyses that support the conclusions made in the thermal chapter. The above documents would provide details and help staff perform the thermal review.

   This information is needed to determine compliance with 10 CFR 71.33.

3. Provide allowable temperatures, and their references, for seals and impact limiter foam.

   In order to perform a thermal review, the allowable temperature of the impact limiter foam should be provided so that it can be compared with calculated values. Likewise, references that list the allowable temperatures of the foam and various seal materials should be provided for verification.

   This information is needed to determine compliance with 10 CFR 71.33.

Observations

Thermal

1. Clarify whether the maximum temperature of the seals during NCT and HAC include all of the seals, such as lid, drain, etc.

   Table 3-1 and Table 3-2 provide a maximum seal temperature during NCT and HAC, respectively, but there is no indication that this represents the maximum value of all the seals used in the package.

   This information is needed to determine compliance with 10 CFR 71.33.

Structural & Materials

1. Provide a classification for all structures, systems, and components (SSCs), including welds, according to their importance to safety. Engineering justification should be provided for weld classification based on their role in the package.

   All SSCs should be identified as either important to safety (ITS) or not important to safety (NITS), either in the SAR or on the licensing drawings. ITS components should be further categorized into one of three classification categories (A, B, or C), based on the component's importance to safety. Further guidance can be found in NUREG/CR-6407: "Classification of Transportation Packaging and Dry Spent Fuel Storage System Components According to Importance to Safety." Note also that per NUREG-CR-6407: "Welds that join a component (such as a cylinder longitudinal seam weld) are the same classification as the components they are a part of."

   This information is needed to ensure compliance with requirements in 10 CFR 71.101(b) and 71.107(a).

2. Verify correct referencing to a Quality Assurance Program in Section 8.1.5, "Component and Material Tests."

   The section references a Quality Assurance Program as detailed in Appendix B of 10 CFR Part 71. Appendix B does not exist. The Quality Assurance Program is detailed in Subpart H of 10 CFR Part 71.

   This information is needed to ensure compliance with requirements in 10 CFR 71.7(a).