NRC FORM 699 (03-2013)

U.S. NUCLEAR REGULATORY COMMISSION

CONVERSATION RECORD

DATE OF SIGNATURE: 09/18/2018

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU	DATE OF CONTACT	TYPE OF CONVERSATION
Department of Energy Idaho Operations Office	08/24/2018	☐ E-MAIL ☑ TELEPHONE ☐ INCOMING ☑ OUTGOING
E-MAIL ADDRESS	TELEPHONE NUMBER	

ORGANIZATION	DOCKET NUMBER(S)
Department of Energy Idaho Operations Office	72-20
LICENSE NUMBER(S)	**CONTROL NUMBER(S)**
SNM-2508	001028/L-2017-RNW-0019 and 000993/L-2017-LNE-0007

SUBJECT

Discuss technical request for additional information (RAI) on Three Mile Island, Unit 2 (TMI 2) Independent Spent Fuel Storage Installation (ISFSI) renewal application

SUMMARY

Department of Energy Idaho Operations Office (DOE-ID) attendees: Scott Ferrara, Steven Wahnschaffe, Chris Backus, Brian Gutherman

NRC attendees: Kristina Banovac, Ricardo Torres, Mike Call

A teleconference was held between DOE-ID and NRC representatives to discuss the January 29, 2018, technical RAIs on the TMI-2 ISFSI renewal application (ML18030A172). DOE requested the teleconference to provide its planned approach to respond to several RAIs involving lightweight concrete (Licon) and discuss whether this approach was consistent with NRC's storage renewal guidance.

DOE-ID noted that it scoped the Licon material into the license renewal, as the Licon was included in the shielding, criticality, and thermal safety analyses for the TMI-2 ISFSI. As DOE ID was working on the RAI responses, it found limited information on aging mechanisms and aging effects on Licon material.

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ACTION REQUIRED (IF ANY)

DOE-ID plans to respond to the RAIs by September 30, 2018.

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NAME OF PERSON DOCUMENTING CONVERSATION

Kristina Banovac

SIGNATURE

CONVERSATION RECORD (continued)

SUMMARY: (Continued from page 1)

Because of the limited information and data, DOE-ID plans to take a conservative approach by assuming the worst-case Licon degradation for the various safety analyses and analyzing the impacts of this Licon degradation on the safety analyses and margins. For example, if the worst-case assumption for the shielding analysis is the complete loss of Licon, DOE would analyze this to determine the changes in dose with the complete loss of Licon. For the criticality analysis, DOE would analyze replacement of the Licon with water or a void and also reconfiguration of the fuel debris into the most reactive geometry to determine the changes in reactivity.

DOE-ID clarified that it is not revising or changing the design-basis safety analyses for the TMI 2 ISFSI. Rather, the new analyses regarding the worst-case Licon degradation would be used to support the aging management review in the license renewal application and to support the conclusion that no aging management program (AMP) or aging management activities are needed for the Licon in the requested period of extended operation.

The NRC staff noted that analyses may be used in license renewal applications and the aging management review to justify the exclusion of an aging mechanism or effect or a subcomponent from the scope of an AMP (i.e., not requiring any aging management activities). This is discussed in Section 3.5 of NUREG-1927, Rev. 1 (ML16179A148). If there is limited information or data on aging mechanisms/effects, analyses can be used to support the conclusion that no aging management activities are needed.

The NRC staff also provided additional clarification on RAI 2-4, which was discussed at the June 7, 2018, public meeting. The staff noted that DOE's RAI response regarding incorporation by reference of the aging management information from the CoC No. 1004 renewal (regarding the OS-197 transfer cask) should also include any revisions to the proposed UFSAR supplement, as appropriate. The staff also noted that the incorporation by reference of the OS 197 transfer cask AMP should be clear as to responsibility for inspections or other aging management activities when the transfer cask is not in DOE's possession, for clear AMP implementation in the future.