NRC FORM 699 (03-2013)

U.S. NUCLEAR REGULATORY COMMISSION

CONVERSATION RECORD

DATE OF SIGNATURE: 06/26/2017

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU	DATE OF CONTACT	TYPE OF CONVERSATION
Don Shaw, Licensing Manager	06/26/2017	☐ E-MAIL ☑ TELEPHONE ☐ INCOMING ☑ OUTGOING
E-MAIL ADDRESS: don.shaw@areva.com	TELEPHONE NUMBER: (410) 910-6878	

ORGANIZATION	DOCKET NUMBER(S)
TN America's LLC	07201004
LICENSE NUMBER(S)	CONTROL NUMBER(S)

SUBJECT

Telecom to TN Americas LLC to discuss TN's response to NRC NOV (ML17074A099) as well as TN's email response to NRC concerning staffs thermal inquiry (ML17125A236).

SUMMARY

The purpose of the telecom was to provide TN Americas, LLC (TN) with the results of the NRC's assessment of TN's response to NOV as well as TN's response to staffs thermal inquiry concerning peak cladding temperatures as documented in TN's 10 CFR 72.48 / LR No. 721004-1586, R(0) (ML17125A022).

Refer to Page 2 for information sent 6/26/2017 to TN via email concerning results of TN's response to Thermal Inquiry.

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ACTION REQUIRED (IF ANY)

We have determined that your response to the violation for departure from a MOE, 10 CFR 72.48(c)(2)(viii) is acceptable and that your response included the reason for the violation; corrective steps taken and the results achieved; corrective steps taken to avoid further violations; and the date when full compliance was achieved. At this time, we have no further questions regarding departure from a MOE.

However, your response to staffs Thermal Inquiry concerning peak cladding temperature did not provide any additional quantitative information to address our questions. NRC expectation is that there is sufficient analysis and documentation to demonstrate that 72.48 criteria (c)(2)(vii) is satisfied. We intend to review and verify your analysis regarding this issue as a follow-up inspection to be performed the week of July 17, 2017.

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NAME OF PERSON DOCUMENTING CONVERSATION: Earl Love

SIGNATURE: Earl Love 6/26/2017

CONVERSATION RECORD (continued)

SUMMARY: (Continued from page 1)

TN responded to the staffs concern on April 20, 2017 in a document that split the NRC inquiry into three distinct aspects.

The staff has since determined that your response is inadequate in that you did not provide any additional quantitative information to address the staff's questions.

o TN claims that the 752°F PCT limit does not apply to damaged fuel assemblies which have no regulatory bases for temperature limits and therefore the staff's concern with the small margin has no basis.

There is an inconsistency between TNs response and the 72.48 evaluation. In the response letter, you state the cladding temperature limit for load cases with damaged fuel is N/A. The 72.48 evaluation states that the evaluation is performed for load cases with intact fuel only and intact and damaged fuel. TN believes the 752°F does not really apply to the load case with damaged fuel and that they applied it as an extra conservatism but they neglect to address that there is a mix of intact and damaged fuel. Staff finds that even though there may be up to 16 damaged fuel assemblies in a cask, since there will be intact fuel as well, the 752°F limit is applicable and TN's assertion that the small margins are for fuel assemblies that do not require temperature limits is not accurate.

o In response to item two, TN does not address staffs concern that conservatisms are not quantified, instead they simply point back to the 72.48 overview of the conservatisms staff is already aware of.

TN additionally points to the first 72.48 evaluation and the results obtained using a different methodology to assess the amount of conservatism. Staff finds that this is an estimate of conservatism and does not provide reasonable assurance PCT limit will not be exceeded and fuel integrity will be maintained.

o Lastly, TN wonders that since the methodology used in this 72.48 is based on methodology which was already review and approved by the NRC in Amendment 10 to CoC 1004, why staff is asking these questions.

Staff does not find this an adequate response to our question since they do not even attempt to provide a quantification of how conservatisms, uncertainties, and errors accounted for in the thermal model affect the thermal analysis in a way that demonstrates the storage cask provides adequate heat removal capacity and gives assurance that the predicted PCT will not exceed the recommended 752°F limit.

Staff approved the previous design basis as was appropriate at the time in part because the margin at the time was adequate so the reviewer didn't ask for quantification. This smaller margin calls for quantification since it is so close to the limit.