

From: [Kuprenas, Michael A CIV USN NNPP \(USA\)](#)
To: [Garcia Santos, Norma](#)
Cc: ["Yu, Dong H. \(Daniel\) \(Contractor\)"](#)
Subject: [External_Sender] RE: NRC 699_3-24-20_dmt_Rev1.pdf
Date: Friday, April 03, 2020 10:49:43 AM

Norma,

Some clarifications:

To provide a more accurate description of the SARP analysis, revise the three points to:

- #1: the top of the package (curved surface) receives stronger insolation than the side walls (flat vertical surfaces)
- #2: only the top half (cylindrical portion) of the package is exposed to the sun, and
- #3: no radiation occurs from the bottom half and ends of the package.

Not included in the notes, but I believe an important part of the telephone discussion was the justification that because of the way the analysis was performed, using a different area would have an insignificant effect on the results. Something like:

The applicant noted that regardless of what portions of the package the sun is assumed to shine on, since the SARP analysis only allowed radiation to occur from the same area as insolation occurred, increasing the area analyzed would not result in a change in the internal temperature due to insolation. This result is expected since both heat in and heat out are proportional to area, thus changing the area simultaneously for both insolation and radiation would not result in an increase in the package internal temperature. Increasing the area analyzed would however decrease the already tiny heat up from the internal heat source (more area would allow more heat to leave the package).

Thank you,

Mike Kuprenas

From: Garcia Santos, Norma <Norma.GarciaSantos@nrc.gov>
Sent: Thursday, April 02, 2020 2:57 PM
To: Kuprenas, Michael A CIV USN NNPP (USA) <michael.kuprenas@navy.mil>
Cc: 'Yu, Dong H. (Daniel) (Contractor)' <Dong.Yu@unnpp.gov>
Subject: [Non-DoD Source] RE: NRC 699_3-24-20_dmt_Rev1.pdf

Good afternoon,

I will go over the document. I cropped pictures of the summary pertaining to the teleconference summary for 3/24. Please review and provide comments, if needed.

Thanks,

Norma Garcia Santos

Project Manager
Division of Fuel Management
Office of Nuclear Material
Safety and Safeguards
U.S. Nuclear Regulatory Commission

Telephone No.: 301-415-6999

Email: Norma.Garcia-Santos@nrc.gov

From: Kuprenas, Michael A CIV USN NNPP (USA) <michael.kuprenas@navy.mil>

Sent: Thursday, April 02, 2020 12:06 PM

To: Garcia Santos, Norma <Norma.GarciaSantos@nrc.gov>

Cc: 'Yu, Dong H. (Daniel) (Contractor)' <Dong.Yu@unnpp.gov>

Subject: [External_Sender] NRC 699_3-23-20_dmt_Rev1.pdf

Norma,

Some comments embedded in the attached. Let me know if you can read them. If not I'll pull them out and send separately.

Mike