

NRR-PMDAPEm Resource

From: Mozafari, Brenda
Sent: Wednesday, August 28, 2013 10:44 AM
To: Nicely, Ken M.:(GenCo-Nuc) (ken.nicely@exeloncorp.com)
Cc: Wiebe, Joel; Wood, Kent; Jackson, Christopher
Subject: Conference call planned for Thursday - August 29 (re: NETCO inserts)

Ken,

Attached below is the supplemental information needs we will discuss tomorrow. This is a courtesy draft of the planned letter with an opportunity to supplement the original application. The final letter may be formally processed after our discussion on Thursday at 10:30 am:

DRAFT INTENDED TO FACILITATE CONFERENCE CALL

The licensee has performed the nuclear criticality safety analysis using an insert ^{10}B areal density of 0.0116 gm/cm^2 . As stated in the application, during the manufacturing process an uncertainty is applied to the areal density measurements to provide a 95% probability at a 95% confidence level (95/95) that those measurements meet or exceed 0.0116 gm/cm^2 areal density. While this provides 95/95 that a given batch of material meets or exceeds 0.0116 gm/cm^2 areal density, it also means that there is a 5% probability at a 95% confidence level that the measured ^{10}B areal density of a given batch is actually below 0.0116 gm/cm^2 . Based on this approach one would expect 5% of the batches to have a ^{10}B areal density below 0.0116 gm/cm^2 . Given the number of batches of material expected to complete the installation of inserts there would be potentially hundreds of inserts below the ^{10}B areal density used in nuclear criticality safety analysis. Since criticality is a local phenomenon, collocation of the inserts from a batch with a ^{10}B areal density below 0.0116 gm/cm^2 would result in a higher keff than estimated in the nuclear criticality safety analysis. In this regard the NRC staff requests the following additional information:

- How is the licensee controlling the installation of the inserts to ensure that none with a potential ^{10}B areal density less than 0.0116 gm/cm^2 are collocated?*
- How are the proposed Technical Specifications and material surveillances applicable, given that the actual as-built areal density of numerous inserts is potentially below the minimum acceptable standard of 0.0116 gm/cm^2 ?*

Section 2.7 of Holtec HI-2124245 R2 is essentially establishing a methodology for analyzing future fuel assemblies. However, the description of that methodology is incomplete. In this regard the NRC staff requests the licensee to provide full and complete description of the methodology including all analysis performed to support the methodology, assumptions both implicit and explicit, detailed implementation guidance, and all limitations and conditions.

Additionally, I have noted issues with the proprietary markings in the submittal.

Additionally, the NRC staff has noted numerous instances where material that is marked as proprietary does not meet the 10CFR2.390 criteria for withholding or are not properly marked in accordance with 10CFR2.390. For example the submittal claims that Holtec HI-2104790 is proprietary in its entirety. However, most of what is in the document is essentially verbatim out of a publicly available NRC NUREG/CR. Therefore it does not meet 10CFR2.390 criteria (b)(4)(iv) or

(b)(4)(v). Additionally, the proprietary version of HI-2124245 R2 does not have any proprietary markings on the text to indicate which portions are to be withheld and which are not.

The Bridge, in case I didn't inform you yet, is also attached below.

BRIDGE DETAILS:

Passcodes/Pin codes:

Participant passcode: 68041

For security reasons, the passcode will be required to join the conference.

Dial in numbers:

Country	Toll Numbers	Freephone/ Toll Free Number
USA		800-857-6177

Restrictions may exist when accessing freephone/toll free numbers using a mobile telephone.

In-Conference Features:

All participants must use a touch-tone phone to participate in an Audio Conference. The following features are available for you to use on your phone during an active conference:

- ◆ Press *0 operator assistance (small fee may apply)
- ◆ Press *6 mute/unmute individual line

Sincerely,

Brenda L. Mozafari
Senior Project Manager, NRR/DORL
U.S. Nuclear Regulatory Commission
Dresden 2/3 and QuadCities 1/2
301-415-2020
email: brenda.mozafari@nrc.gov

Hearing Identifier: NRR_PMDA
Email Number: 820

Mail Envelope Properties (Brenda.Mozafari@nrc.gov20130828104400)

Subject: Conference call planned for Thursday - August 29 (re: NETCO inserts)
Sent Date: 8/28/2013 10:44:28 AM
Received Date: 8/28/2013 10:44:00 AM
From: Mozafari, Brenda

Created By: Brenda.Mozafari@nrc.gov

Recipients:

"Wiebe, Joel" <Joel.Wiebe@nrc.gov>

Tracking Status: None

"Wood, Kent" <Kent.Wood@nrc.gov>

Tracking Status: None

"Jackson, Christopher" <Christopher.Jackson@nrc.gov>

Tracking Status: None

"Nicely, Ken M.:(GenCo-Nuc) (ken.nicely@exeloncorp.com)" <ken.nicely@exeloncorp.com>

Tracking Status: None

Post Office:

Files	Size	Date & Time
MESSAGE	4338	8/28/2013 10:44:00 AM

Options

Priority: Standard

Return Notification: No

Reply Requested: No

Sensitivity: Normal

Expiration Date:

Recipients Received: