NRC FORM 699
(03-2013)

U.S. NUCLEAR REGULATORY COMMISSION

CONVERSATION RECORD

DATE OF SIGNATURE
9/10/14

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU	DATE OF CONTACT	TYPE OF CONVERSATION
See below	09/3/2014	☐ E-MAIL ☑ TELEPHONE ☐ INCOMING ☑ OUTGOING
E-MAIL ADDRESS	TELEPHONE NUMBER (817) 200-1194	

ORGANIZATION	DOCKET NUMBER(S)
Nuclear Regulatory Commission	72-1040, 72-1045
LICENSE NUMBER(S)	CONTROL NUMBER(S)
N/A	

SUBJECT
Calloway ISFSI Pad Discussion

SUMMARY
NRC participants: Chris Allen, Ricardo Torres, David Tang, Ray Kellar and Lee Brookhart

Region IV personnel briefly explained that the vendor constructing the Callaway ISFSI concrete pad intended to install a 2" (-½", + ½") layer of concrete beyond the steel rebar to both sides of the ISFSI pad and a 3" (-½", + ½") layer of concrete below the steel rebar on the bottom of the ISFSI pad, and that the vendor was taking this approach because they felt it was allowed by the American Concrete Institute (ACI) building code requirements. Region IV personnel stated the standard practice was to apply a 2" (-0, +½") layer of concrete to the sides of the pad and a 3" (-0, +½") layer of concrete to the bottom of the pad. They stated the vendor's actions were also not per Note 9 of the drawing being employed for construction of the ISFSI pad. In addition, Region IV personnel believed the vendor was incorrectly interpreting the ACI building code. Headquarters (HQ) personnel asked if a 72.48 evaluation had been performed. They were told that a 72.48 evaluation had not been performed because the licensee believed they were in compliance with both the Final Safety Analysis Report for the system being deployed and the ACI code. (Later, it was determined that a 72.48 evaluation could not have been performed since a Certificate of Compliance for the system being deployed had not been issued and the general licensee was performing work "at risk".) After several minutes of discussion about tolerances in Sections 7.7.1 and 7.5.2.1 of the ACI code, HQ personnel reached the conclusion, as had Region IV personnel, that the ACI code tolerances were being

Continue on Page 2

ACTION REQUIRED (IF ANY)
Notify general licensee that the tolerances on the construction drawing should be utilized.
Hold a teleconference between NRC HQ, NRC Region IV, the general licensee and the general licensee's vendor.

Continue on Page 3

NAME OF PERSON DOCUMENTING CONVERSATION
Chris Allen

SIGNATURE
William C. Allen

CONVERSATION RECORD (continued)

SUMMARY: (Continued from page 1)

misinterpreted. It was decided that Region IV personnel would contact the licensee and inform them that, until sufficient justification was provided for a layer of concrete less thick than that specified on the drawing, the concrete thicknesses specified in the drawing should be utilized. HQ personnel would set up a teleconference to discuss the situation with the licensee if such a discussion was necessary.

Region IV personnel also discussed the vendor's use of metal "chairs" in the construction of the ISFSI pad, a practice with which they they were unfamiliar. The licensee had explained to Region IV personnel that the purpose of these "chairs" was to provide spacing between the reinforcing bars and the formwork on the sides of the ISFSI pad. The licensee had also explained that a plastic covering would be placed those portions of the "chairs" used for this purpose. Region IV was concerned the "chairs" would be a path for corrosion to the reinforcing bars on areas that are backfilled with earth. It was necessary to end the call before this issue could be discussed in detail. (Note: As mentioned in the "Action Required" section above, a teleconference was held with the licensee. Based upon the teleconference discussions, the licensee determined use of the "chairs" was unnecessary. See attached e-mail.)

Allen, William

From: Brookhart, Lee
Sent: Wednesday, September 10, 2014 9:53 AM
To: Allen, William; Kellar, Ray
Subject: RE: Callaway Chairs

No, that is why they removed them the day before

From: Allen, William
Sent: Wednesday, September 10, 2014 8:53 AM
To: Brookhart, Lee; Kellar, Ray
Subject: RE: Callaway Chairs

Since the licensee will use a 2" side clearance, will the "chairs" be used at all?

From: Brookhart, Lee
Sent: Wednesday, September 10, 2014 9:50 AM
To: Kellar, Ray; Allen, William
Subject: RE: Callaway Chairs

Yes they all did have plastic coatings on the chair ends that were in contact with the forms. The licensee did have them removed the day before the pour because they were not need to assist in the 2" side clearance.... But the pour was once again unsuccessful due to issues at the batch plant providing inconsistent concrete. Approximately 8 trucks were rejected and only two poured after which Holtec called it quits. The idea was they needed to figure out why concrete was coming with such wide tolerances in the measured slump, and did not want to continue all day rejecting 80% of the trucks showing up onsite. The placed concrete was washed out of the rebar and now the licensee is on hold till Holtec figures out what's going on.

Lee

From: Kellar, Ray
Sent: Tuesday, September 09, 2014 10:34 AM
To: Allen, William
Cc: Brookhart, Lee
Subject: RE: Callaway Chairs

Lee is on his way back currently. The licensee had major problems with concrete consistency again. He stated that all the chairs were plastic tipped, but I also understood that the licensee was removing all the chairs. He should be back in the office tomorrow.

From: Allen, William
Sent: Tuesday, September 09, 2014 10:28 AM
To: Kellar, Ray
Cc: Brookhart, Lee
Subject: RE: Callaway Chairs

Was the issue of chair use ever resolved?

From: Kellar, Ray
Sent: Friday, September 05, 2014 2:38 PM
To: Allen, William

Cc: Brookhart, Lee; Simpson, Eric
Subject: Callaway Chairs

Chris,

We had a follow-up call with Callaway to discuss the observation about the metal chairs that were used against the formwork that would be exposed to earth. The licensee believes that they no longer use the chairs and we haven't been back out to verify this. Eric will be traveling out on Monday to look over the forms and rebar before the scheduled concrete placement on Tuesday morning.

You might want to check with the materials engineer to see if he has a concern with metal chairs that have a plastic coating being exposed to the earth and in contact with the rebar. This goes back to our discussion on ensuring that we don't' have a corrosive environment.

Ray

*Ray L. Kellar, **P.E.***
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