NRR-PMDAPEm Resource

From: Lingam, Siva

Sent: Wednesday, May 02, 2012 3:20 PM

To: Mackaman, Clyde Douglas

Cc: Broaddus, Doug; Ulses, Anthony; Mendiola, Anthony; Parks, Benjamin; Huang, Tai; Wu,

Shih-Liang

Subject: RE: Sequoyah, Units 1 & 2 - AREVA Advanced W17 HTP Fuel Transition (TAC Nos. ME6538

and ME6539)

Per our telephone conference this afternoon, RAI 1 d. can be deleted. Rest of the official RAIs remain same as noted below:

- 1. ANP-2970Q1(NP) discusses the number of cases that were analyzed to evaluate clad swelling, rupture and relocation (ADAMS Accession No. ML12118A166). In ANP-2970(NP), on Page 2-1, Footnote 3 states, "AREVA decided to run 93 cases (reporting the 92nd case) for the Sequoyah analysis for three main reasons: 1) current AOR Sequoyah RLBLOCA results, 2) high peaking values analyzed, and 3) the greater pressure drop in the 17x17 HTP fuel w/ integral flow mixers. The allowance to execute more cases is discussed in EMF-2103(P)(A), Section 5.2.1." Please provide the following additional information:
 - a. Was the decision to execute 93 cases made prior to or after completing an analysis using the standard number of cases?
 - b. For both the original and swelling, rupture, and relocation cases, please provide the highest PCT value obtained from the 93 cases.
 - c. Please confirm that the same approach (i.e., eliminating the highest value case as beyond the required upper tolerance limit) was used for the swelling, rupture, and relocation study.
 - d. Please provide the modeling guidelines that are used to assist the analyst in deciding to execute additional cases.
 - e. Please provide additional detail concerning the reasons given above for executing additional cases. What about the current AOR results leads one to decide to execute additional cases? Did the eliminated case have a peaking factor value that was an outlier from the rest of the population? How does the pressure drop cause the population of results to de-stabilize?

From: Lingam, Siva

Sent: Wednesday, May 02, 2012 11:22 AM

To: 'Mackaman, Clyde Douglas'

Subject: RE: Sequoyah, Units 1 & 2 - AREVA Advanced W17 HTP Fuel Transition (TAC Nos. ME6538 and ME6539)

Please note the following for this afternoon's conference call to discuss the subject LAR RAIs from SRXB:

Bridge No.: 888-323-9867 Passcode: 66167 followed by #

Date: May 2, 2012 (Wednesday)

Time: 2:00 PM (Eastern Daylight Time)

From: Lingam, Siva

Sent: Wednesday, May 02, 2012 6:50 AM

To: 'Mackaman, Clyde Douglas'

Cc: Broaddus, Doug; Ulses, Anthony; Parks, Benjamin; Huang, Tai; Ward, Leonard; Wu, Shih-Liang; Mendiola, Anthony **Subject:** Seguoyah, Units 1 & 2 - AREVA Advanced W17 HTP Fuel Transition (TAC Nos. ME6538 and ME6539)

Please note the following additional official RAI for the subject LAR.

- 2. ANP-2970Q1(NP) discusses the number of cases that were analyzed to evaluate clad swelling, rupture and relocation (ADAMS Accession No. ML12118A166). In ANP-2970(NP), on Page 2-1, Footnote 3 states, "AREVA decided to run 93 cases (reporting the 92nd case) for the Sequoyah analysis for three main reasons: 1) current AOR Sequoyah RLBLOCA results, 2) high peaking values analyzed, and 3) the greater pressure drop in the 17x17 HTP fuel w/ integral flow mixers. The allowance to execute more cases is discussed in EMF-2103(P)(A), Section 5.2.1." Please provide the following additional information:
 - a. Was the decision to execute 93 cases made prior to or after completing an analysis using the standard number of cases?
 - b. For both the original and swelling, rupture, and relocation cases, please provide the highest PCT value obtained from the 93 cases.
 - c. Please confirm that the same approach (i.e., eliminating the highest value case as beyond the required upper tolerance limit) was used for the swelling, rupture, and relocation study.
 - d. Please provide information to show the magnitude by which the limiting input parameters for the highest value cases exceeded the rest of the sampled population. For instance, provide scatter plots similar to those in Chapter 3 of ANP-2970(P) with the eliminated case shown on the results, and specifically identified.
 - e. Please provide the modeling guidelines that are used to assist the analyst in deciding to execute additional cases.
 - f. Please provide additional detail concerning the reasons given above for executing additional cases. What about the current AOR results leads one to decide to execute additional cases? Did the eliminated case have a peaking factor value that was an outlier from the rest of the population? How does the pressure drop cause the population of results to de-stabilize?

Siva P. Lingam U.S. Nuclear Regulatory Commission Project Manager (NRR/DORL/LPL2-2) Sequoyah Nuclear Plant Crystal River Nuclear plant (EPU) Location: O8-D5; Mail Stop: O8-G9a

Telephone: 301-415-1564; Fax: 301-415-1222

E-mail address: siva.lingam@nrc.gov

Hearing Identifier: NRR_PMDA

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Mail Envelope Properties (Siva.Lingam@nrc.gov20120502152000)

Subject: RE: Sequoyah, Units 1 & 2 - AREVA Advanced W17 HTP Fuel Transition (TAC

Nos. ME6538 and ME6539)

Sent Date: 5/2/2012 3:20:23 PM 5/2/2012 3:20:00 PM Received Date:

From: Lingam, Siva

Created By: Siva.Lingam@nrc.gov

Recipients:

"Broaddus, Doug" < Doug. Broaddus@nrc.gov>

Tracking Status: None

"Ulses, Anthony" <Anthony.Ulses@nrc.gov> Tracking Status: None

"Mendiola, Anthony" < Anthony. Mendiola@nrc.gov>

Tracking Status: None

"Parks, Benjamin" <Benjamin.Parks@nrc.gov>

Tracking Status: None

"Huang, Tai" <Tai.Huang@nrc.gov>

Tracking Status: None

"Wu, Shih-Liang" <Shih-Liang.Wu@nrc.gov>

Tracking Status: None

"Mackaman, Clyde Douglas" <cdmackaman@tva.gov>

Tracking Status: None

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Files Size Date & Time

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Options

Priority: Standard **Return Notification:** No Reply Requested: Nο Sensitivity: Normal

Expiration Date: Recipients Received: