ArevaEPRDCPEm Resource

From: Tesfaye, Getachew
Sent: Wednesday, May 05, 2010 2:24 PM
To: ArevaEPRDCPEm Resource
Cc: Phan, Hanh; Fuller, Edward; Clark, Theresa; Mrowca, Lynn; Chowdhury, Prosanta; Colaccino, Joseph; Carneal, Jason
Subject: FW: Follow-up from phone call on RAI 349
Attachments: 04-28 NRC-AREVA Telcon - Additional Info Request.doc

Jason,
Please work with Ed Fuller to get the information requested by AREVA.
Thanks,
Getachew

From: BRYAN Martin (EXT) [mailto:Martin.Bryan.ext@areva.com]
Sent: Wednesday, May 05, 2010 2:18 PM
To: Tesfaye, Getachew
Cc: NOXON David B (AREVA NP INC); SZYMCZAK William J (AREVA NP INC)
Subject: Follow-up from phone call on RAI 349

Getachew,

Please see attached file that requests information from the NRC as discussed in the April 28, 2010 phone call between AREVA NP and the NRC on RAI 349 question 19-335. Let me know if you have any questions.

Thanks

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Hearing Identifier: AREVA_EPR_DC_RAIs
Email Number: 1384

Mail Envelope Properties (0A64B42AAA8FD4418CE1EB5240A6FED11293D2BA20)

Subject: FW: Follow-up from phone call on RAI 349
Sent Date: 5/5/2010 2:24:13 PM
Received Date: 5/5/2010 2:24:14 PM
From: Tesfaye, Getachew

Created By: Getachew.Tesfaye@nrc.gov

Recipients:
"Phan, Hanh" <Hanh.Phan@nrc.gov>
Tracking Status: None
"Fuller, Edward" <Edward.Fuller@nrc.gov>
Tracking Status: None
"Clark, Theresa" <Theresa.Clark@nrc.gov>
Tracking Status: None
"Mrowca, Lynn" <Lynn.Mrowca@nrc.gov>
Tracking Status: None
"Chowdhury, Prosanta" <Prosanta.Chowdhury@nrc.gov>
Tracking Status: None
"Colaccino, Joseph" <Joseph.Colaccino@nrc.gov>
Tracking Status: None
"Carneal, Jason" <Jason.Carneal@nrc.gov>
Tracking Status: None
"ArevaEPRDCPEm Resource" <ArevaEPRDCPEm.Resource@nrc.gov>
Tracking Status: None

Post Office: HQCLSTR02.nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	830	5/5/2010 2:24:14 PM
04-28 NRC-AREVA Telcon - Additional Info Request.doc	41026	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

AREVA – NRC Telcon
28 April 2:30 pm – 3:00 pm
Re : RAI Set 349 Question 19-335

As a result of the above call, AREVA requests additional information from the NRC to permit us to compare MAAP results to MELCOR as requested in Q19-335. AREVA also requests that NRC confirm the information relayed over the phone and repeated below.

I. Additional Information Requested – Induced SGTR Scenario

A. Cold leg break modeling details

- Break flow path area
- Break flow path elevation
- Break flow path length including segments used
- Any resistance coefficient assigned by the user to either the overall flow path or individual segments
- Discharge coefficient, and any other parameters or sensitivity coefficients that may have been used to enhance the choke flow calculation.
- Critical flow models used

B. Steam generator tube rupture modeling details

- SGTR break flow path area
- SGTR break elevation above SG tube sheet
- SGTR break flow path length including segments used
- Any resistance coefficient assigned by the user to either the overall flow path or individual segments
- Discharge coefficient, and any other parameters or sensitivity coefficients that may have been used to enhance the choke flow calculation.
- Critical flow models used

C. ISGTR Scenario Results

- Containment Fission Product versus time.
- Flow out of the ruptured SG tube (real time or integrated)
- RCS Fission Product versus time
- Water and gas flows rate out of the primary CL break
- Reactor water level versus time or reactor inventory (mass) versus time
- Key event times

II. NRC MELCOR Information for ISGTR (from telcon)

1. Loss of Offsite Power (LOOP)
2. 2" ID Cold Leg Break in RCS Loop w/pressurizer
3. CL Break Modeling:
    - Forward and Reverse Loss Coefficient = 1.0
    - Discharge Coefficient = 1.0
    - 1 segment
4. Stuck open relief valve(s) on one SG
5. Single Tube Rupture in SG w/Stuck open RV(s)
6. SAHRS available for passive flooding only
7. PARS available
8. NRC MELCOR Radionuclide Release Results:

	MELCOR	
	24 hours	**48 hours**
Noble Gases	23.0%	27.0%
I	17.0%	27.0%
Cs	13.0%	17.0%
Te	18.0%	24.5%
Mo	0.6%	0.7%
Ba	0.2%	0.2%
Ru	0.2%	0.2%