

PMSTPCOL PEmails

From: Tai, Tom
Sent: Monday, June 29, 2009 4:08 PM
To: Stillwell, Daniel
Cc: STPCOL
Subject: Draft RAI 3103 for STP Chapter 19
Attachments: RAI 3103 19-xx.doc

Bill,

Attached for your information and use is an advance copy of draft RAI 3103 for Chapter 19.1.

If you need a conference call to clarify the requested information, please contact me. If a conference call is not needed, please send me an email and I will continue the formal process of issuing the RAI to STPNOC.

Regards

Tom Tai
DNRL/NRO
(301) 415-8484
Tom.Tai@NRC.GOV

Hearing Identifier: SouthTexas34Public_EX
Email Number: 1409

Mail Envelope Properties (C56E360E9D804F4B95BC673F886381E71FBAEA828E)

Subject: Draft RAI 3103 for STP Chapter 19
Sent Date: 6/29/2009 4:08:00 PM
Received Date: 6/29/2009 4:08:02 PM
From: Tai, Tom

Created By: Tom.Tai@nrc.gov

Recipients:
"STPCOL" <STP.COL@nrc.gov>
Tracking Status: None
"Stillwell, Daniel" <dwstillwell@STPEGS.COM>
Tracking Status: None

Post Office: HQCLSTR02.nrc.gov

Files	Size	Date & Time
MESSAGE	419	6/29/2009 4:08:02 PM
RAI 3103 19-xx.doc	33274	

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

Request for Additional Information No. 3103 Revision 2

South Texas Project Units 3 and 4
South Texas Project Nuclear Operating Co
Docket No. 52-012 and 52-013
SRP Section: 19 - Probabilistic Risk Assessment and Severe Accident Evaluation
Application Section: 19.1

QUESTIONS for PRA Licensing, Operations Support and Maintenance Branch 2 (ESBWR/ABWR Projects) (SPLB)

19-***

In accordance with 10CFR Part 52, a COL application is required to contain a description of the plant-specific PRA and its results. In addition, if the COL application references a design certification, then the plant-specific PRA information should be updated to account for site-specific design information and any design changes or departures. The staff reviewed the shutdown hurricane risk discussion outlined in Section 19.Q.6 of the STP FSAR. The Abnormal Procedure for STP Units 1 & 2 which covers hurricanes, requires a plant shutdown prior to the arrival on site of hurricane winds in excess of 73 miles per hour. The applicant stated that the tornado analysis provided in the reference ABWR DCD would bound the hurricane analysis with respect to high winds. There is no site-specific analysis to support this assumption. The staff is requesting the applicant to provide the following information, as applicable, associated with the site-specific high winds shutdown risk assessment that considers the shared fire water system:

- a. High Winds Shutdown CDF and LERF.
- b. Top 100 cutsets for CDF and LERF.
- c. Description of the significant core damage sequences and large release sequences.
- d. Risk-importance measures Fussel-Vesely (FV) and Risk Achievement Worth (RAW) for component basic events.
- e. Risk-importance measures (FV and RAW) for HEPs (human error probabilities).
- f. Risk-importance measures (FV and RAW) for CCFs (common cause failures).
- g. List of SSCs that were identified as risk significant for input into the RAP program.
- h. Description of the methodology used to identify risk significant SSCs for input into the RAP program.

19-***

In accordance with 10CFR Part 52, a COL applicant is required to contain a description of the plant-specific PRA and its results. In addition, if the COL application references a design certification then the plant-specific PRA information should use the PRA information for the design certification and be updated to account for site-specific design information. The staff reviewed the internal and external shutdown flood risk discussion in Section 19.Q.6 of the STP FSAR. The applicant stated that the risk during shutdown from internal and external floods is very small. Although site specific internal and external full power flooding sequences were evaluated in Section 19.R of the STP

FSAR, there is no risk analysis or estimation of the site-specific shutdown frequency of internal and external floods. The staff is requesting the applicant to provide the following information, as applicable, associated with the site-specific shutdown risk assessment of internal and external flooding events:

- a. Total CDF and LRF.
- b. Top 100 cutsets for CDF and LRF.
- c. Description of the significant core damage sequences and large release sequences.
- d. Risk-importance measures including Fussel-Vessely (FV) and Risk Achievement Worth (RAW) for component basic events.
- e. Risk-importance measures (FV and RAW) for HEPs (Human Error Probabilities).
- f. Risk-importance measures (FV and RAW) for CCFs (Common Cause Failures)
- g. List of SSCs that were identified as risk significant SSCs for input into the RAP program.
- h. Description of the methodology used to identify risk significant SSCs for input into the RAP program.