

PMSTPCOL NPEmails

From: Eudy, Michael
Sent: Tuesday, April 12, 2011 12:09 PM
To: jaagles@stpegs.com; Chappell, Coley; Bill Mookhoek
Cc: STPCOL; Hilsmeier, Todd
Subject: (Non Public): Staff findings from audit of STP's implementation of D-RAP
Attachments: Agenda for telcon with STP on April 13 2011.docx

Importance: High

Gentlemen,

Here is Todd Hilsmeier's feedback on his recent DRAP audit. We are prepared to discuss during tomorrow morning's OI call.

We don't believe there is any "non public" information in here, but please advise. Thanks.

Michael A. Eudy - Project Manager
U.S. Nuclear Regulatory Commission
NRO/DNRL/NGE1&2
301-415-3104

From: Hilsmeier, Todd
Sent: Friday, April 08, 2011 6:37 PM
To: Eudy, Michael
Cc: Hilsmeier, Todd
Subject: RE: Staff findings from audit of STP's implementation of D-RAP

Hello Mike,

If you can, could you please send STP the following agenda for the telecon on April 13. It contains the questions that I have so they can prepare.

Thanks,
Todd

From: Eudy, Michael
Sent: Friday, April 08, 2011 11:53 AM
To: Hilsmeier, Todd
Subject: RE: Staff findings from audit of STP's implementation of D-RAP

Thanks Todd.

From: Hilsmeier, Todd
Sent: Friday, April 08, 2011 11:52 AM
To: Eudy, Michael
Cc: Foster, Rocky; Anand, Raj; Mrowca, Lynn; STPCOL
Subject: RE: Staff findings from audit of STP's implementation of D-RAP

Hello Mike,

Yes I can meet with them.

Thanks,
Todd

From: Eudy, Michael
Sent: Friday, April 08, 2011 11:31 AM
To: Hilsmeier, Todd
Cc: Foster, Rocky; Anand, Raj; Mrowca, Lynn; STPCOL
Subject: RE: Staff findings from audit of STP's implementation of D-RAP

Thanks for the quick info Todd.

Can you meet with them this coming Wed 4/13 at 9am during the OI call ?

From: Hilsmeier, Todd
Sent: Thursday, April 07, 2011 6:30 PM
To: Eudy, Michael
Cc: Foster, Rocky; Anand, Raj; Mrowca, Lynn; STPCOL
Subject: Staff findings from audit of STP's implementation of D-RAP

On April 7, 2011, the staff performed at the Westinghouse Twinbrook office an audit of STP's implementation of the D-RAP.

Below provides the staff's findings:

- STP updated their D-RAP procedures to address the findings from the audit on February 23, 2011. The staff concludes that these updates are acceptable. Upon documenting these findings in an audit report, **Confirmatory Item 17.04-8 (i.e., development of D-RAP procedures) in the STP Chapter 17 SER can be closed.**
- STP's records that document the development of a comprehensive list of risk-significant SSCs show that STP has made a large step towards developing this list. These records remain draft until they are reviewed and approved at the next STP expert panel meeting. The table below shows the remaining tasks necessary for STP to develop a comprehensive list of risk-significant SSCs.

Tasks for Developing a Comprehensive List of Risk-Significant SSCs (based on FSAR Section 17.4S.1.4)	Status
1) Identify all plant systems	Completed
2) Identify functions performed by each plant system	Completed
3) Determine risk significance of each system function	Completed (Draft)
4) Identify system function(s) supported by each component	TBP
5) Identify a risk categorization of each component based on PRA insights and deterministic insights	TBP
6) Designation of the overall categorization of the component, based upon the higher of the PRA categorization and the deterministic categorization	TBP

7) Identification of critical attributes for components determined to be safety/risk-significant	TBP
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TBP = to be performed

- Some parts of the draft list of risk-significant functions (generated under Task 3) were unclear, which the staff will document and share with STP.
- Since Tasks 4 through 7 have not yet been performed for, at a minimum, a sample of system functions/components, the staff cannot close Confirmatory Item 17.04-9 in the STP Chapter 17 SER (i.e., the list of risk-significant SSCs within the scope of D-RAP is being developed appropriately and in accordance with the process described in FSAR Section 17.4S.1.4). As such, Confirmatory Item 17.04-9 will remain open until the staff can confirm proper implementation of Tasks 4 through 7 for a sample of system functions/components.

Path Forward:

Communicate with STP:

- 1) the parts of the draft list of risk-significant functions that were unclear.
- 2) the remaining items that the staff needs to audit in order to close Confirmatory Item 17.04-9 (i.e., implementation of Tasks 4 through 7 for a sample of system functions/components).
- 3) Discuss presentation to ACRS on April 21, 2011.

Thanks,
Todd

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Subject: (Non Public): Staff findings from audit of STP's implementation of D-RAP
Sent Date: 4/12/2011 12:09:22 PM
Received Date: 4/12/2011 12:09:25 PM
From: Eudy, Michael

Created By: Michael.Eudy@nrc.gov

Recipients:

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Agenda for telcon with STP on April 13 2011.docx		24381

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Agenda for Telecon with STP on April 13, 2011

On April 7, 2011, the staff performed at the Westinghouse Twinbrook office an audit of STP's implementation of the DRAP based on the provided STP records and documents. The staff scheduled a telecon with STP for April 13, 2011 to discuss the following related to the DRAP audit and the upcoming ACRS Subcommittee meeting.

- (1) Staff comments/questions on the table titled "STP 3 4 DRAP System Screening" (my comments/questions are in red text) that was reviewed at the Westinghouse Twinbrook office

WBS	System	Modeled in PRA	DRAP to Add/Expand	NRC Comments/Questions
C12	Control Rod Drive System (CRD)	Yes	?	It is not clear whether or not C12 is added to DRAP. The expert panel notes state "to revisit later." What does that mean?
C41	Standby Liquid Control System (SLC)	Yes	?	It is not clear whether or not C41 is added to DRAP. The expert panel notes state "drill-down later." What does that mean?
C51	Neutron Monitoring System (NMS)		?	The "panel checklist" gives C51 a weighted score of 65. Therefore, it should be included in DRAP. However, it is not clear in the table showing the "DRAP System Screening" results that this system is included in DRAP.
C85	Steam Bypass and Pressure Control System (SBPC)		?	The "panel checklist" gives C85 a weighted score of 48 (and two questions have a score of 15). Therefore, it should be included in DRAP. However, it is not clear in the table showing the "DRAP System Screening" results that this system is included in DRAP.
D11	Process Radiation Monitoring System (PRMS)		Yes	The "panel checklist" gives D11 a weighted score of 15 (and all questions have a score less than 15). Therefore, it is not clear why this system is in DRAP, as shown in the "DRAP System Screening" results.
E22	High Pressure Core Flooder (HPCF)	Yes	Yes	The "panel checklist" gives E22 a 0 score for Question #4 (i.e., Is the loss of function safety-significant for shutdown or mode changes?). Based on Sections 19.8.6 and 19K.8, the HPCF is considered risk-significant during shutdown for controlling

				inventory in the event of a loss of normal shutdown cooling (RHR). Therefore, is it appropriate that Question #4 have a score of 0?
E31	Leak Detection and Isolation System (LDS)	Yes	?	It is not clear whether or not E31 is added to DRAP. No basis is provided (e.g., expert panel notes, PRA notes, panel checklist).
P15	Alternate Feedwater Injection System (AFI)			The expert panel notes states "possible future inclusion in PRA when designed". This system should also be subjected to the deterministic method (i.e., panel checklist). What does the deterministic method say about this system's risk significance?
P21	Reactor Building Cooling Water (RBCW)	Yes	?	It is not clear whether or not P21 is added to DRAP. No basis is provided (e.g., expert panel notes, PRA notes, panel checklist).
P22	Turbine Building Cooling Water (TBCW)		?	The "panel checklist" gives P22 a score of 16 on Question #3. Therefore, it should be included in DRAP. However, it is not clear in the table showing the "DRAP System Screening" results that this system is included in DRAP.
P41	Reactor Service Water System (RSW)	Yes	?	The "panel checklist" gives P41 a weighted score of 100. Therefore, it should be included in DRAP. However, it is not clear in the table showing the "DRAP System Screening" results that this system is included in DRAP.
P42	Turbine Service Water System (TSW)	Yes	?	See comment for P22 (TBCW)
P54	High Pressure Nitrogen Gas Supply System (HPN2)	Yes	?	It is not clear whether or not P54 is added to DRAP. No basis is provided (e.g., expert panel notes, PRA notes, panel checklist).
R22(13K) R22(4KN) R22(4KE) R23(480N) R23(480E)	Yes			It is not clear whether or not these systems are added to DRAP. No basis is provided (e.g., expert panel notes, PRA notes, panel checklist).

R24(MCC) R46(VACE) S11(25KT) S12(25KT) T10(PCS) T11 T12 T13 T22(SGTS) T41(DWC) T53(SPTM) U43(FPS) U51(CBHV) U52(RBHV) U57(UHHV) U71(RB) U72(TB) U73(CB) U80(UHS) U81(FPPH)				
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- (2) FSAR Section 17.4S.1.4 (“Methods of Analysis for Risk Significant SSC Identification”) describes the methodology that STP is using to identify the risk-significant SSCs. Based on the audit of the records provided at the Westinghouse Twinbrook office, it is the staff’s understanding that STP has performed the following tasks to identify the risk-significant systems/system functions in accordance with FSAR Section 17.4S.1.4:
- a. “Identification of functions performed by the subject plant system.”
 - b. “Determination of the risk significance of each system function.”

It is the staff’s understanding that the following tasks remain to be performed by STP to identify the risk-significant components in accordance with FSAR Section 17.4S.1.4:

- a. “Identification of the system function(s) supported by that component.”
- b. “Identification of a risk categorization of the component based on probabilistic risk assessment (PRA) insights (where the component is modeled).”
- c. “Development of a risk categorization of the component based on deterministic insights.”
- d. “Designation of the overall categorization of the component, based upon the higher of the PRA categorization and the deterministic categorization.”
- e. “Identification of critical attributes for components determined to be safety/risk significant.”

In order to close Confirmatory Item 17.04-9 in the STP Chapter 17 SER, the staff would need to audit the implementation of Tasks a through e listed above for a sample of system functions/components.

- (3) The ACRS Subcommittee meeting for Chapter 17 is April 21, 2011. Section 17.4S has one (1) ACRS Action Item as described below:

“Address when the DRAP list will be effectively populated. How does the staff ensure the D-RAP list and the process related to it (COLA vs. ITAAC) is acceptable”

STP agreed in a previous ACRS meeting to provide/present several examples of implementation of the methodology under FSAR Section 17.4S.1.4. It would be nice if we can close this ACRS action item during this upcoming ACRS meeting.