

June 30, 2003

MEMORANDUM TO: Mark A. Satorius, Chief  
Performance Assessment Section  
Inspection Program Branch  
Division of Inspection Program Management  
Office of Nuclear Reactor Regulation

FROM: John W. Thompson, Senior Reactor Operations Engineer /RA/  
Inspection Program Branch  
Division of Inspection Program Management  
Office of Nuclear Reactor Regulation

SUBJECT: PUBLIC MEETING SUMMARY ON THE REACTOR OVERSIGHT  
PROCESS MONTHLY MEETING HELD ON JUNE 18, 2003

On June 18, 2003, a Reactor Oversight Process (ROP) public meeting was held at the One White Flint North Building, Room 13B4. Meeting participants discussed degraded cornerstone and action matrix ROP policy issues, proposed changes to the significance determination process (SDP) manual chapter appendices, and open and new Frequently Asked Questions (FAQs) on the performance indicators (PIs).

During the afternoon portion of the meeting, participants discussed the Emergency Preparedness (EP) Alert and Notification System Reliability PI guidance and the related Calvert Cliffs open FAQ 31.7. The Working Group decided to resolve FAQ 31.7 in concert with the resolution of the generic aspects of the issue associated with FAQ 31.7. The staff's draft response to FAQ 31.7 (Attachment 6) will be held in abeyance until resolution of the generic issue.

Attachments 1 and 2 contain the ROP public meeting attendance list and agenda. Attachments 3 and 4 contain update status activity milestones for the draft SDP manual chapter appendices and draft guidance for the scrams with loss of normal heat removal PI, respectively. Attachment 5 is the draft maintenance risk assessment SDP. Meeting participants also discussed ongoing and new PI FAQs for the remainder of the public meeting (Attachment 7).

The next combined meetings of the MSPI and ROP Working Groups is scheduled for July 23 and 24, 2003, respectively.

Attachments: As stated

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DATE:	06/30/03

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**ATTENDANCE LIST**  
**INDUSTRY/STAFF ROP PUBLIC WORKSHOP MEETING**  
June 18, 2003

<b>NAME</b>	<b>AFFILIATION</b>
John Thompson	NRC
Mark Satorius	NRC
Robert Kahler	NRC
Kevin Williams	NRC
Kathryn Brock	NRC
Ted Quay	NRC
Steven Long	NRC
Adel El-Bassioni	NRC
Robert Perch	NRC
Doug Coe	NRC
Eric Weiss	NRC
Cindi Carpenter	NRC
Tom Houghton	NEI
Alan Nelson	NEI
Ken Heffner	Progress
Jay Phelps	STPNOC
Deann Raleigh	LIS, Scientech
W.E. Mookhoek	STPNOC
Dale F. Ambler	Exelon
Daniel Marks	Palo Verde
Carey W. Fleming	Winston & Strawn
Gary Welsh	INPO
John Tripoli	PPL
Jenny Weil	McGraw-Hill
Greg Gibson	SoCal Edison
Jim Sumpter	NPPD
Leonard Sueper	NMC

# **ROP MONTHLY WORKING GROUP MEETING**

## **AGENDA**

OWFN 013B4  
June 18, 2003

- 8:00 a.m. Welcome and Introduction
- 8:15 a.m. General discussion on ROP inspection processes, improvements and initiatives
- 8:30 a.m. Discussion on Proposed SDP changes
- 10:15 a.m. Public Discussion & Break
- 10:30 a.m. Update on Degraded Cornerstone Definition and its impact on the Action Matrix
- 10:45 a.m. Discussion of FAQs Associated w/Scrams w/LONHR
- 12:00 p.m. Break for Lunch
- 1:00 p.m. Discussion of the EP Alert and Notification System Reliability PI and the Calvert Cliffs FAQ
- 2:15 p.m. Public Discussion & Break
- 2:30 p.m. Discussion of other FAQs
- 4:00 p.m. Adjourn

## SDP ACTIVITIES

(Updated 6/17/03)

<b>TASK</b>	<b>LEAD</b>	<b>STATUS</b>
Containment	SPSB, El-Bassioni	No change- Provided to NEI for comment on May 23, 2003 with proposed schedule for final issuance 12/03
Shutdown	SPSB, Pohida	Basis document will be provided to NEI July/Aug 03; public workshop to follow; final SDP targeted for Nov 03
Steam Generator Tube Integrity	SPSB, Long	Internal/external stakeholder comments have been considered. Public workshop proposed - tabletop review (August?)
Fire Protection	SPSB, Wong/Perch	Revised draft should be available in October 03. Public meeting to follow. Final issuance planned for May 04.
Maintenance Rule	SPSB, Wong	Under SPSB review - low priority - July 03 target to issue
Spent Fuel Safety	SPSB, Wilson IIPB, Koltay/Merzke	No change - Under development for October 03 presentation to NEI.

## DRAFT

### UNPLANNED SCRAMS WITH LOSS OF NORMAL HEAT REMOVAL

#### Purpose

This indicator monitors that subset of unplanned automatic and manual scrams in which the normal heat removal path was lost either prior to the scram, concurrent with the scram, or following the scram. Such events or conditions are potentially more risk-significant than uncomplicated scrams.

#### Indicator Definition

The number of unplanned scrams while critical, both manual and automatic, during the previous 12 quarters in which the normal heat removal path was lost either prior to the scram, concurrent with the scram, or following the scram and prior to establishing reactor conditions that allow use of the plant's normal long term heat removal systems.

#### Data Reporting Elements

The following data are reported for each reactor unit:

- the number of unplanned automatic and manual scrams while critical in the previous quarter with a loss of the normal heat removal path either prior to the scram, concurrent with the scram, or following the scram that occurred prior to establishing reactor conditions that allow use of the plant's normal long term heat removal systems.

#### Calculation

The indicator is determined using the values reported for the previous 12 quarters as follows:

value = total unplanned scrams while critical in the previous 12 quarters with a loss of the normal heat removal path either prior to the scram, concurrent with the scram, or following the scram that occurred prior to establishing reactor conditions that allow use of the plant's normal long term heat removal systems.

#### Definition of Terms

*Normal heat removal path*, for purposes of this performance indicator, is the path used for heat removal from the reactor during normal plant operations. It is the same for all plants – the path from the main condenser through the main feedwater system, the steam generators (PWRs) or reactor vessel (BWRs), the main steam isolation valves (MSIVs), the turbine bypass valves, and back to the main condenser.

*Scram with loss of the normal heat removal path* occurs when any of the following conditions happen:

Attachment 4

- complete loss (all operating trains) of main feedwater flow prior to or concurrent with a reactor scram unless:
  - the reactor scram was due to excessive feedwater flow, or
  - the plant has a motor driven main or startup feedwater pump that is undamaged, has power and all necessary support systems available, and can be used, if desired, in manual or automatic control from the control room without diagnosis or repair
- complete loss (all operating trains) of main feedwater flow following a reactor scram unless:
  - main feedwater was intentionally secured or tripped as a result of the reactor scram due to plant design or in accordance with the normal scram recovery procedure, or
  - the plant has a motor driven main or startup feedwater pump that is undamaged, has power and all necessary support systems available, and can be used, if desired, in manual or automatic control from the control room without diagnosis or repair
- insufficient main condenser vacuum to remove decay heat prior to, concurrent with, or following a reactor scram. Insufficient main condenser vacuum would be demonstrated by use of a system other than the main condenser (one or more atmospheric dump valves [PWRs], or safety relief valves to the suppression pool [BWRs], or HPCI/RCIC [BWRs]) to remove decay heat.
- complete closure of at least one MSIV in each main steam line prior to, concurrent with, or following a reactor scram unless:
  - MSIVs are closed to limit the cooldown when the main condenser is, in accordance with normal shutdown procedures, no longer the preferred method of continuing the cooldown. However, MSIV closure due to performance deficiencies, off-normal conditions, or to mitigate or prevent equipment problems would count.
- failure of turbine bypass capacity that results in insufficient bypass capability remaining to maintain reactor temperature and pressure following a reactor scram. Insufficient turbine bypass capacity would be demonstrated by use of a system other than the main condenser (one or more atmospheric dump valves [PWRs], or safety relief valves to the suppression pool [BWRs], or HPCI/RCIC [BWRs]) to remove decay heat.

*Scram* means the shutdown of the reactor by the rapid addition of negative reactivity by any means, e.g., insertion of control rods, boron, use of diverse scram switch, or opening reactor trip breakers.

*Criticality*, for the purposes of this indicator, typically exists when a licensed reactor operator declares the reactor critical. There may be instances where a transient initiates from a subcritical condition and is terminated by a scram after the reactor is critical—this condition would count as a scram.

*Diagnosis*, for the purposes of this indicator, is an investigation or analysis of the cause of a condition, situation, or problem. The following guidelines apply:

An operator's use of information readily available to him/her does not constitute diagnosis. If more extensive data collection is required, this would be considered diagnosis.

Leaving the operator's station, using telephones or radios in order to gather information is considered diagnosis.

If the operator's first attempt to correct the condition, situation, or problem is unsuccessful (i.e., start a motor driven main feedwater pump), any further actions would be considered to require diagnosis

*Unplanned scram* means that the scram was not an intentional part of a planned evolution or test as directed by a normal operating or test procedure. This includes scrams that occurred during the execution of procedures or evolutions in which there was a high chance of a scram occurring but the scram was neither planned nor intended.

### **Clarifying Notes**

*Examples that do not count:* loss of all main feedwater flow, condenser vacuum, or turbine bypass capability caused by loss of offsite power; partial losses of condenser vacuum or turbine bypass capacity in which sufficient capability remains to remove decay heat; momentary operation of PORVs or safety relief valves; and an unplanned scram at low power within the capability of the PORVs if the main condenser has not yet been placed in service or has been removed from service prior to the unplanned scram.

*Repair*, for the purpose of this indicator, includes the installation of jumpers.

Unplanned scrams counted for this indicator are also counted for the *Unplanned Scrams per 7000 Critical Hours* indicator.



FAQ 31.7 NRC Response

No, Calvert Cliffs Nuclear Power Plant (CCNPP) is not reporting the results of the siren tests correctly. There was not a change in testing methodology, only a change in the number of times the test was performed. The licensee has still considered each individual test as an opportunity to identify failures and has taken corrective actions for each individual test failure. However, the PI data reported a success even though there were individual failures identified and entered into the corrective action system. As a result, the PI does not reflect the licensee actions taken in response to the individual tests.

Development of the ANS PI was a joint effort by the NRC, NEI, and industry representatives. It was developed out of the recognition that some measure of licensee performance in the maintenance of EP related equipment was appropriate. When the spectrum of EP related equipment was considered, the ANS manifests as the most risk significant. Thus, the ANS PI is assumed to monitor equipment performance and subsequent corrective actions.

In summary, CCNPP is not reporting the results of the siren test correctly and shall recalculate the ANS PI data for the affected quarters per the requirements of NEI 99-02.