

Attachment 1 to OG-12-xxx

WCAP-17100-P Supplement 1
Pre-Submittal Meeting

Non-Proprietary Class 3 Presentation

October 18, 2012



Westinghouse

Westinghouse Non-Proprietary Class 3
PWR Owners Group
October 18, 2012 Meeting with NRC
WCAP-17100-P Supplement 1 Pre-Submittal Meeting



INTRODUCTION

Roy Linthicum
Exelon Generation
Chairman, RMSC

Agenda

TIME		TOPIC	Lead
0830	0845	Introduction	Linthicum
0845	0900	Proposed Contents of Supplement to WCAP-17100-P	Lutz
0900	0905	Opportunity for Public Comment	-
0905	0930	Results of Actuation Testing for Model 93, 93A-1 and 100 RCPs	Lutz
0930	0945	Results of Survivability Tests for All RCPs	Lutz
0945	1000	Break	
1000	1100	Results of Farley Post-Operational Test	Elder
1100	1115	Enhancements to the SHIELD Seal	Elder
1115	1130	Impact on Models in WCAP-17100-P/NP-A	Lutz
1130	1200	Summary, Discussion, Closing Remarks	All

Background (1/3)

- The PWROG sponsored the development and NRC review of WCAP-17100-P-A/NP-A “PRA Model for the Westinghouse Shutdown Seal” to facilitate the NRC acceptance of regulatory applications that credit the Shutdown Seal (SDS)
- The NRC approved the analytical models in WCAP-17100-P-A/NP-A, Revision 1 as appropriate for use by licensees subject to certain clarifications and limitations in their Safety Evaluation (SE)

Background (2/3)

- NRC SE for WCAP-17100-P-A/NP-A, Revision 1 states (among other limitations):
 - “Currently, the model shall be used to describe the consequences of loss of reactor seal cooling in PRAs after the SDS is installed on Model 93A RCPs”
 - “In order to use the PRA model for the other RCPs, e.g., Models 93, 93A-1, 100, etc., the modified SDS components and entire SDS package for those specific RCP models shall be subject to the same tests as described in WCAP-17100-P/NP, Revision 1”
 - “The test apparatus(s) shall simulate those specific RCP models”

Background (3/3)

- NRC SE for WCAP-17100-P-A/NP-A, Revision 1 further states:
 - “The failure probability value derived from these tests should not exceed the value noted for Model 93A RCPs as provided in WCAP-17100-P/NP, Revision 1”
 - “The NRC staff expects that all additional test data and licensee guidance will be made available for NRC review and approval as part of supplements or revisions to WCAP-17100-P/NP, Revision 1”

Meeting Purpose (1/1)

- Supplement 1 to WCAP-17100-P/NP is in final draft form
- The meeting purpose is to summarize the proposed contents of WCAP-17100-P/NP Supplement 1 to:
 - Familiarize the NRC staff with the contents of the Supplement
 - Elicit initial NRC feedback on the contents to help assure acceptance and efficient review
- The following presentations provide a summary of the contents of the Supplement

Questions?

“Our Vision is to integrate risk informed decision making into all aspects of plant operation to enhance safe, event free, and cost competitive generation of electrical power”

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Contents of Supplement to WCAP-17100-P/NP

Bob Lutz

Consulting Engineer

Westinghouse Electric Company

Program Technical Lead

Supplement Contents (1/3)

- Supplement 1 to WCAP-17100-P/NP is in final draft form and includes:
 - The physical differences between the Shutdown Seal for each RCP model
 - The testing results for the Shutdown Seal actuation reliability for the Westinghouse Model 93, 93A-1 and 100 reactor coolant pumps (RCPs)
 - Comparison to the test results in WCAP-17100-P-A/NP-A for the Model 93A RCP

Supplement Contents (2/3)

- Supplement 1 to WCAP-17100-P/NP will also include:
 - The testing results for the Shutdown Seal survivability under station blackout conditions to 168 hours for all Westinghouse RCP models
 - Differences in tests compared to those in WCAP-17100-P-A/NP-A
 - Comparison to the test results in WCAP-17100-P-A/NP-A
 - A comparison of the analytical models for the Shutdown Seal

Supplement Contents (3/3)

- Finally, Supplement 1 to WCAP-17100-P/NP will also include:
 - A discussion of the Farley Post-Operation Test of the Shutdown Seal, the subsequent root cause analysis and the conclusions
 - A summary of the minor modifications being made to the Shutdown Seal as a result of observations during the root cause analysis investigations

Questions?

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