

WOG/NRC Meeting to Discuss WOG Fluid System and PAM Programs

December 10, 2003

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WOG Fluid System Completion Time Extension Program

Objective

- Provide the technical justification to extend Fluid System Completion Times

Approach

- Risk Informed approach consistent with Regulatory Guides 1.174 and 1.177
 - Three tiered approach
 - Address impact on CDF and LERF
 - Calculate ICCDP and ICLERP (for both scheduled and repair activities)
 - Address defense-in-depth
 - Address safety margins

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WOG Fluid System Completion Time Extension Program

Technical Specification Completion Times Evaluated

- 3.5.2, “ECCS- Operating”- 72 hours to 7 days
- 3.6.6A, “Containment Spray and Cooling Systems- 72 hours to 7 days
- 3.6.6D, “QS System”- 72 hours to 7 days
- 3.7.5, “AFW System”- 72 hours to 7 days
- 3.7.7, “CCW System”- 72 hours to 7 days
- 3.7.8, “SW System”- 72 hours to 7 days

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WOG Fluid System Completion Time Extension Program

Topical Report to be Submitted for NRC Review and Approval

- Generic Completion Time extension methodology
- Plant specific results
- Participating Plants
 - North Anna 1 and 2 (Lead Plant)
 - Surry 1 and 2
 - Millstone 3
 - Vogtle 1 and 2
 - Prairie Island 1 and 2
 - Callaway

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WOG Fluid System Completion Time Extension Program

Implementation of Completion Time extensions

–Dependent on plant specific risk analysis

- Option 1

- Scheduled and repair activities meet Reg Guide 1.177 criteria

- 7 day Completion Time

- Option 2

- Scheduled and repair activities meet Reg Guide 1.177 criteria

- 7 day Completion Time for a subsystem (HHSI)

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WOG Fluid System Completion Time Extension Program

Implementation of Completion Time extensions

–Dependent on plant specific risk analysis (cont.)

- Option 3

- Scheduled activities meet Reg Guide 1.177 criteria

- Repair activities do not meet Reg Guide 1.177 criteria

- 7 day Completion Time for scheduled activities

- 72 hour Completion Time for repair activities

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WOG Fluid System Completion Time Extension Program

Implementation of Completion Time extensions (cont.)

–Dependent on plant specific risk analysis (cont.)

- Option 4

- Scheduled activities meet Reg Guide 1.177 criteria

- Repair activities meet Reg Guide 1.177 criteria with a Common Cause evaluation

- 7 day Completion Time

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WOG Fluid System Completion Time Extension Program

Implementation of Completion Time extensions (cont.)

–Dependent on plant specific risk analysis (cont.)

- Option 5

- Scheduled activities meet Reg Guide 1.177 criteria

- Repair activities meet Reg Guide 1.177 criteria with a Common Cause evaluation

- 72 hour Completion Time without a Common Cause evaluation

- 7 day Completion Time with a Common Cause evaluation

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WOG Fluid System Completion Time Extension Program

North Anna 1 and 2 Lead Plant LAR

–3.5.2, “ECCS- Operating”

- Retain the current 72 hour Completion Time
- Add a 7 day Completion Time and a Required Action to perform a Common Cause evaluation with a [24] hour Completion Time (not required for LHSI subsystem)

–3.6.6, “Quench Spray System”

- Revise Completion Time from 72 hours to 7 days

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WOG Fluid System Completion Time Extension Program

North Anna 1 and 2 Lead Plant LAR

–3.7.5, “AFW System”

- Revise Completion Time for AFW pump from 72 hours to 7 days

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WOG Fluid System Completion Time Extension Program

North Anna 1 and 2 Lead Plant LAR

–3.7.8, “Service Water System”

- Retain 72 hour Completion Time to restore 1 SW pump
- Add 7 day Completion Time to restore 1 SW pump and a Required Action to perform a Common Cause evaluation with a [24] hour Completion Time

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WOG Fluid System Completion Time Extension Program

TSTF

- The TSTF will be prepared containing a Reviewer’s Note discussing the various Completion Time implementation options

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WOG Post Accident Monitoring Redefinition Program

Objective

- Determine the Post Accident Monitoring (PAM) instruments that should be included in the Technical Specifications based on their use in Accident Management

Background

- WCAP-11618 identified the RG 1.97 Type A PAM instruments in the W STS (NUREG-0452)
- RG 1.97 Type A PAM instruments satisfied Criterion 3 of the Interim Policy Statement Criteria
- WCAP-11618 also identified the RG 1.97 Category 1 PAM instruments in the W STS (NUREG-0452)

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WOG Post Accident Monitoring Redefinition Program

Background (cont.)

- RG 1.97 Category 1 PAM instruments did not satisfy any of the Interim Policy Statement Criteria and were not important to risk
- WOG proposed to relocate the RG 1.97 Category 1 PAM instruments in the W STS (NUREG-0452) out of the Technical Specifications
- NRC review of WCAP-11618 was unable to confirm that RG 1.97 Category 1 PAM instruments were not important to risk

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WOG Post Accident Monitoring Redefinition Program

Background (cont.)

- NRC review of WCAP-11618 stated that recent PRAs have shown that RG 1.97 Category 1 instruments were risk significant, and that the Owners Groups should develop further risk-based justification to support relocating any or all RG 1.97 Category 1 instruments from the STS

- Tech Spec 3.3.3, "PAM Instrumentation," in NUREG-1431, Rev. 0 issued in 1992 contains a Reviewer's Note that states that all plant specific RG 1.97 Type A and Category 1 instruments should be included in the Technical Specifications

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WOG Post Accident Monitoring Redefinition Program

Background (cont.)

- PAM Instrumentation contained in NUREG-1431, Rev. 0 issued in 1992 was based on design basis accident analysis requirements and generic insights from PRAs available at that time

Approach

- Review PAM instrumentation as it is currently used in Accident Management

- Review of Accident Management used to justify the elimination of Post Accident Sampling System

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WOG Post Accident Monitoring Redefinition Program

Approach (cont.)

–Develop generic methodology that reviews:

- Design Basis Accidents
- Emergency Response Guidelines
- PRA
- Severe Accident Management Guidance
- Emergency Plan

–Submit Topical Report containing generic methodology for NRC review and approval

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WOG Post Accident Monitoring Redefinition Program

Approach (cont.)

–Apply generic methodology on a plant specific basis to determine which RG 1.97 instruments satisfy 10 CFR 50.36 Criterion 3 (Type A) and Criterion 4 (Category 1)

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WOG Post Accident Monitoring Redefinition Program

Lead Plant License Amendment Request to be submitted for NRC review and approval

- Apply generic methodology to Beaver Valley Unit 1 and 2
- Determine which Beaver Valley Unit 1 and 2 RG 1.97 instruments satisfy 10 CFR 50.36 Criterion 3 (Type A) and Criterion 4 (Category 1)