

**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)