

Communication Plan

Point Beach Red Finding for Potential AFW Common Mode Failure

PURPOSE:

To facilitate the coordinated communication of a final high safety significance (Red) finding associated with the potential common mode failure of auxiliary feedwater (AFW) at Point Beach. There is the strong potential that this issue will generate a substantial amount of public and industry interest because of the relatively high safety significance and the fact that it is only the second Red finding issued in the country. The purpose is to also provide a comprehensive plan for the communication of activities associated with the conduct of the follow-up inspection at the Point Beach Nuclear Plant to NRC stakeholders. The stakeholders include the Nuclear Management Company (licensee), the public, state and local officials, NRC management, and the Commission.

GOAL:

Increase public confidence by providing clear and timely communications to all stakeholders regarding the results of the Special Inspection conducted in response to this issue, the results of the Regulatory Conference conducted with the licensee, and the NRC planned activities, including the conduct of the follow-up inspection at Point Beach Nuclear Plant.

STRATEGY:

Region III and NRR will coordinate and facilitate the internal and external communication of the potential common mode failure of AFW at Point Beach and the plans for and results of the follow-up inspection. This will be accomplished through internal meetings, telephone notifications, a non-public exit meeting, and issuance of the inspection report.

REVIEWS OF COMMUNICATION PLAN:

The Communication Plan will be reviewed periodically and updated as necessary to incorporate changes in planned regulatory activities or in response to significant plant issues.

Information in this record was deleted
in accordance with the Freedom of Information
Act, exemptions 5
FOIA- 2003-0094

AUDIENCE:

- External Stakeholders

- General public
- Media
- Public interest groups
- Nuclear Management Company
- Nuclear industry organizations
- Licensees
- States
- Congress

- Internal Stakeholders

- Commission
- Executive Director of Operations
- Office of Nuclear Reactor Regulation
- Office of Public Affairs
- NRC employees in headquarters
- NRC employees in regions

Details

The following lists the actions and responsibilities for implementing this communication plan. Dates may change but the sequence of notifications needs to be adhered to.

1. Brief and discuss issue with RIII Management (Jim Dyer)
RIII DRS
2. Brief and discuss with NRR Management (Jon Johnson & Bill Borchardt)
RIII DRS
3. Re-caucus with Regional and NRR Management to make a final determination on treating the issue as an old design issue.
RIII DRP
5. Brief Executive Team
EDO's office
6. Final Significance Determination Letter review and concurrence
RIII DRP/OE/NRR IIPB
7. Brief Commissioner TAs
EDO's Office
8. Issue Final Significance Determination Letter (fax to licensee/e-mail to Resident Office)
Report will be made publically available on ADAMS 5 working days later
RIII DRP
9. Notify HQ Public Affairs Officer
RIII Public Affairs Officer
10. Notify NRC Office of Congressional Affairs (OCA)
OCA to notify Congressional Counterparts (if deemed necessary)
RIII Public Affairs Officer
11. Notify State and Local Officials
RIII State Liaison Officer
12. Issue Press Release
RIII Public Affairs Officer
13. Notify licensee of follow-up inspection dates

14. Follow-up inspection entrance
Team Leader
15. Daily de-briefs with the licensee during the inspection
Team Leader
16. Brief and discuss the results of the inspection with RIII Management
Team Leader
17. Conduct inspection exit meeting with the licensee
Team Leader
18. Inspection report review and concurrence
RIII DRP/OE/NRR
19. Issue inspection report
*Report will be made publically available on ADAMS 5 working
days later*
RIII DRP
20. Notify HQ Public Affairs Officer
RIII Public Affairs Officer

Distribution: J. Dyer
J. Caldwell
J. Grobe
R. Caniano
J. Strasma
Ho Nieh
J. Colaccino
B. Clayton
R. Lickus
B. Wetzel
J. Johnson
M. Johnson

Briefing on Issuance of Point Beach AFW SDP Finding

Background

Nuclear Management Company (NMC), the licensee for Point Beach, identified that there was a potential for dead-heading auxiliary feedwater (AFW) pumps due to the AFW minimum flow recirculation valves failing closed. In a dead-headed condition, the pumps would fail within minutes due to overheating. The dead-heading could occur by operator actions in response to a transient. The AFW minimum flow recirculation valves at Point Beach, by original design, fail closed upon a loss of instrument air. Certain transients, such as loss of off-site power (LOOP), loss of instrument air (LOIA), loss of service water (LOSW), and seismic event, will result in a loss of instrument air.

The emergency operating procedures (EOPs), under many transient conditions, direct operators to control AFW flow to mitigate either overcooling of the reactor coolant system or over-filling of the steam generators. The EOPs failed to caution operators that reducing AFW flow to minimal levels could result in failure of AFWs pumps upon a LOIA due to overheating. For example, in the case of a LOOP, the instrument air compressor is initially lost because it's stripped from the vital buses. The turbine-driven AFW pumps automatically start on a loss of power to the buses for the main feed pumps. The motor-driven pumps automatically start due to the low steam generator level. Depending on the nature of the transient, operators would take action to control AFW flow to mitigate overcooling of the reactor coolant system or over-filling of steam generators.

Operator actions to control AFW flow will be required within a few minutes into the transient to mitigate overcooling of the reactor coolant system. At such time, the AFW minimum flow recirculation valves would likely still be open due to remaining air pressure in the instrument air header. However, the AFW minimum flow recirculation valves would subsequently reposition (without operator action) due to loss of instrument air header pressure. Consequently, the pumps would be in a dead-headed condition and pump damage would occur within a short period of time.

In the case of over-filling the steam generators, operator actions will be required as soon as 13 minutes into a transient. When operators control AFW flow at that time, the operators may fail to recognize that the recirculation valves have failed shut and the AFW pump(s) would be in a dead-headed condition.

A common mode failure of the auxiliary feedwater pumps would result in substantially reduced mitigation capability for safely shutting down the plant in response to certain transients. Decay heat removal capability using steam generators would be adversely affected and other means of decay heat removal may not be available. The significance was determined to be high largely due to the relatively high initiating event frequencies associated with the involved transients and the high likelihood of improper operator actions due to the procedural inadequacies.

NRC Action

The NRC held a regulatory conference with NMC, on April 29, 2002 to discuss the Red finding. The regulatory conference provided NMC the opportunity to present their views on the issues. At the conference, the NMC agreed with the significance determination of Red. The NMC also agreed

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that inadequate procedural guidance had existed and that a violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," had occurred. The NMC presented their view the issue could not have been identified through routine licensee efforts and that a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," had not occurred. NMC also presented the view that the issue does not warrant further NRC inspection because the should be treated as an "old design issue" under the assessment process. The NRC disagreed with NMC's view that the issue could not have been identified through routine licensee efforts. As such, the NRC considered the violation of 10 CFR Part 50, Appendix B, Criterion XVI, to be valid.

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