Franke, Mark

From: Franke, Mark RJ
Sent: Monday, November 09, 2009 2:44 PM
To: Coursey, Michael
Subject: FW: Special Inspection Charter to Evaluate Crystal River Containment Building
Attachments: Crystal River SI Charter.pdf

From: Morrison, Catherine RJ
Sent: Tuesday, October 13, 2009 4:12 PM
To: Reyes, Luis; Franke, Mark; Borchardt, Bill; Mallett, Bruce; McCree, Victor; Munday, Joel; Sykes, Marvin; Wert, Leonard; Boyce, Tom (NRR); Saba, Farideh; Kennedy, Kriss; Christensen, Harold; Ninh, Son; Fletcher, Cecil; Khanna, Meena; Trocine, Leigh; Diaz-Toro, Diana; Orders, William; Lake, Louis
Subject: Special Inspection Charter to Evaluate Crystal River Containment Building

Please find the above referenced charter attached.

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C-55

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8931

October 13, 2009

MEMORANDUM TO: Louis F. Lake, Team Leader
Special Inspection

FROM: Luis A. Reyes */RA/*
Regional Administrator

SUBJECT: SPECIAL INSPECTION CHARTER TO EVALUATE CRYSTAL RIVER CONTAINMENT BUILDING

You have been selected to lead a Special Inspection to assess the circumstances associated with a delamination discovered in the concrete of the containment building at Crystal River Unit 3. Your onsite inspection should begin on October 13, 2009. Robert Carrion, Senior Reactor Inspector, George Thomas of NRR, Anthony Masters, Senior Construction Inspector, and an independent Structural Engineering Contractor (TBD) will assist you in this inspection.

A. Basis

Recently, the plant was shut down for a planned refueling outage as well as to replace the steam generators inside containment. In order to move the steam generators into containment, workers began removing concrete to create the necessary opening. During that work, a small gap was found while making approximately a 25 foot x 25 foot concrete cut (liner is still intact). The gap is about one half inch wide and 10 inches inward from the outside edge of the concrete and located just at the layer of horizontal tendons. The Crystal River containment is about 42 inches thick, contains both horizontal and vertical tensioned steel tendons, and is lined with steel plate.

The licensee is evaluating the extent of the condition. The discovery of this gap in the concrete does not represent an immediate safety concern because the plant is shut down.

In accordance with Management Directive 8.3, "NRC Incident Investigation Program," deterministic and conditional risk criteria were used to evaluate the level of NRC response for this event.

Based on the deterministic criteria that this issue involved possible adverse generic implications, the event was evaluated for risk in accordance with Management Directive 8.3. Due to lack of information on the structural integrity of the concrete containment and how it would interact with the free-standing steel liner during a seismic event in its current condition, a risk analysis was not able to be performed at this time. However, if

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the concrete containment reacted adversely with the free-standing steel liner during a seismic event, LERF would be adversely affected and a Special Inspection would be warranted. Therefore, Region II has determined that the appropriate level of NRC response is to conduct a Special Inspection.

B. Scope

The inspection is expected to perform data gathering and fact-finding in order to address the following:

1. Develop a complete description of the problems and circumstances surrounding the gap in the containment building.

2. Verify that the licensee has appropriately evaluated Operability and Reportability.

3. Review structural integrity testing data of the containment.

4. Assess the adequacy of the licensee's maintenance and inspection programs related to this event.

5. Assess the licensee's activities related to the problem investigation (e.g., root cause analysis, extent of condition, etc).

6. Assess the licensee's corrective action/"fix" in addressing the containment delamination issue.

7. Collect data necessary to develop and assess the safety significance of any findings in accordance with IMC 0609, "Significance Determination Process."

8. Determine potential generic issues or any design and construction inadequacies and make recommendations for appropriate follow-up actions (e.g., Information Notices, Generic Letters, and Bulletins).

C. Guidance

Inspection Procedure 93812, "Special Inspection," provides additional guidance to be used during the conduct of the Special Inspection. Your duties will be as described in Inspection Procedure 93812. The inspection should emphasize fact-finding in its review of the circumstances surrounding the event. Safety or security concerns identified that are not directly related to the event should be reported to the Region II office for appropriate action.

Your team will report to the site, conduct an entrance, and begin inspection no later than October 13, 2009. In accordance with IP 93812, you should promptly recommend a change in inspection scope or escalation if information indicates that the assumptions utilized in the MD 8.3 risk analysis were not accurate. A report documenting the results of the inspection should be issued within 45 days of the completion of the inspection. A copy of the inspection report shall be forwarded to the Crystal River Unit 3 License Renewal Inspection Team. The report should address all applicable areas specified in

Section 3.02 of Inspection Procedure 93812. At the completion of the inspection, you should provide recommendations for improving the Reactor Oversight Process baseline inspection procedures and the Special Inspection process based on any lessons learned.

This charter may be modified should you develop significant new information that warrants review. Should you have any question concerning this charter, contact Mark Franke at (404) 562-6349.

Docket No.: 50-302
License No.: DPR-72

References:

Inspection Procedure 93812, Special Inspection
Management Directive 8.3, NRC Incident Investigation Program
Inspection Manual Chapter 0609, Significance Determination Process
Inspection Manual Chapter 0612, Power Reactor Inspection Reports

cc: R. Borchardt, EDO
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