

April 05, 2001

Mr. Alex Marion, Director
Engineering
Nuclear Energy Institute
1776 I Street, N.W., Suite 400
Washington, D.C. 20006-3708

SUBJECT: MRP MEETING ON CRDM CRACKING DISCUSSION TOPICS

Dear Mr. Marion:

The staff will be meeting with the Electric Power Research Institute's Materials Reliability Program (MRP) on Thursday, April 12, 2001, to discuss the generic implications and proposed industry actions of the circumferential cracking found on pressurized water reactor (PWR) control rod drive mechanism (CRDM) upper head penetrations at Oconee Unit 3.

In addition to a discussion of the Oconee circumferential CRDM cracking, the NRC staff requests that the MRP's presentation on their proposed actions to address the generic aspects of the CRDM cracking issue include, but not be limited to, the following items:

- A discussion of how the results of the CRDM cracking found at Oconee is being utilized by the MRP to address this issue on a generic basis. In order to provide sufficient background, the staff requests that an overview of the Oconee CRDM cracking be given, and include, as a minimum, the results of non-destructive examinations (NDE) and any destructive examinations performed to date, a discussion of the repairs performed or planned, the licensee's plans for resolving this issue, the implications of this experience on the reliability of ongoing inspections, and the potential for circumferential failure of a PWR CRDM penetration.
- Discussion of the inspection plans, schedule, scope and method to be utilized in performing NDE of the CRDMs. This discussion is requested to include a listing of all PWRs that are either in, or will be coming down for, an outage during the current outage season, any inspections that have been or will be performed by these licensees, and whether licensees will expand the scope of inspections beyond that presently required by Generic Letter (GL) 88-05, "Boric Acid Corrosion of Carbon Steel Reactor Pressure Boundary Components in PWR Plants," dated March 17, 1988 (e.g., removal of insulation, etc.).
- The schedule for and scope of a generic safety assessment of PWR CRDMs, supported by deterministic and/or risk-informed assessments, that establishes a technical justification for continued operation with potentially degraded penetrations until such time as comprehensive inspections can be performed of the PWR CRDMs.

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- A discussion of the implications of this recent service experience on the commitments made in response to GL 97-01, "Degradation of Control Rod Drive Mechanism Nozzle And Other Vessel Closure Head Penetrations," dated April 1, 1997.

If you have any question regarding this request, please contact Jack Strosnider of my staff at (301) 415-3298.

Sincerely,

/RA/Signed by B. Sheron

Brian Sheron, Associate Director
Project Licensing & Technical Analysis
Office of Nuclear Reactor Regulation

Project No. 689

cc: See next page

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