

April 26, 2006

MEMORANDUM TO: Christopher P. Jackson, Chief
Generic Communications and Power Uprate Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

FROM: Joseph A. Golla, Project Manager /RA/
Generic Communications and Power Uprate Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF MARCH 23, 2006, PUBLIC MEETING WITH NEI TO
DISCUSS UPPER VESSEL HEAD PENETRATION INSPECTIONS

On March 23, 2006, Nuclear Regulatory Commission (NRC) staff met with representatives of the Nuclear Energy Institute, and the Electrical Power Research Institute (EPRI) Material Reliability Program (MRP), in a public meeting at NRC headquarters in Rockville, Maryland. The enclosure provides a list of those in attendance at the meeting and additional industry representatives who participated via teleconference. Information presented by industry at the meeting is available in the NRC Agencywide Document Access and Management System (ADAMS) under accession number ML060870353. Industry previously met with the NRC on the MRP reorganization in a meeting on February 22, 2006 (see ADAMS Accession Number ML060580073).

At this meeting, industry presented an overview of recent MRP organizational changes and a discussion of the current program, and a proposed program to qualify ultrasonic inspections of control rod drive mechanism (CRDM) penetrations in pressurized water reactor vessel heads. The overview presented on the MRP reorganization indicated that the past organizational structure had been component or issue based and that the new structure will be a functional type of organization based on the Issue Task Groups (ITGs) of the MRP. It is intended that membership in the various MRP committees and groups be finalized prior to the summer Technical Advisory Group meeting. It was stated by EPRI/MRP members at the meeting that attributes of the new MRP organization are the ability to effectively handle emerging materials issues; more efficient use of utility personnel capability; funding allocation efficiency across ITGs; and the use of a functional type of organization, which has been successful for industry in the past.

The EPRI/MRP representatives further stated that a new "Inspection ITG" will be instituted as part of the MRP reorganization. The scope of this new ITG will include issues concerning how to inspect; inspection demonstrations and qualifications; nondestructive evaluation (NDE) interfaces with the regulator and other stakeholders; new NDE technologies; inspection methods; and NDE mock-ups and protocols. The EPRI/MRP representatives stated that the goal of the Inspection ITG is implementation of qualified NDE that provides reliable examination results.

The recently issued ASME Code Case for long-term CRDM penetration inspections (Code Case N-729) specifies NDE qualification standards, which the NRC Division of Component Integrity (DCI) staff finds to be insufficient. DCI staff has documented its position on NDE qualification standards in a letter dated April 25, 2005, from M. Mayfield (NRC) to G. Park (ASME).

The EPRI/MRP presented elements of the current CRDM performance demonstration program and a proposed CRDM performance demonstration program. The major difference between the two programs is that the new program will go beyond the demonstration of inspection methods by including a CRDM Qualification Process for procedures and personnel. The EPRI/MRP representatives stated that a qualification program is required to ensure that the CRDM examinations for the fleet are consistently reliable. The EPRI/MRP representatives also stated that the program will be designed to ensure confident comparison of examination results across the industry and that the new Inspection ITG will develop a NDE qualification program that addresses the relevant inspection attributes and ensures the reliability of CRDM penetration examinations. It was also stated that the existing MRP demonstration program will be critically examined to maximize the use of existing resources and results.

The EPRI/MRP representatives indicated the following qualification attributes that industry would like to be present in the qualification program: reliable and repeatable examinations, quality program, statistical basis, and maintaining "truth data security." The EPRI/MRP representatives asked for feedback from the NRC on the qualification attributes of the program. The NRC stated that the qualification of procedures and personnel based on blind demonstration was appropriate, but that specific details such as acceptance criteria still had to be developed and agreed upon.

The EPRI/MRP representatives indicated that the qualification process is intended to follow the basic requirements of ASME Code Case N-729 and the ASME Code Section V, Article 14 with the use of an "intermediate rigor" qualification program rather than a "low rigor" qualification program as currently called for in Code Case N-729. The NRC asked questions regarding the Article 14 levels of rigor with respect to qualification of CRDM penetration inspections. The industry representatives indicated that most of the technical justification for the CRDM penetration inspection qualification process is complete and that the "two party agreement," as required by Article 14, will be between the NRC and an industry organization such as MRP or EPRI. The industry representatives presented an overview of security, procedure qualifications, personnel qualification goals, and project milestones.

The alternative NDE program will be reviewed by DCI staff, however, both groups recognize that this issue will require increased activity and communications to reach satisfactory resolution. ASME Code Case N-729 was developed by ASME with the intent that the inspection requirements of the Code Case will provide an acceptable alternative to those of NRC Order EA-03-009. Currently, there is rulemaking activity to incorporate ASME Code Case N-729 by reference into 10 CFR 50.55a with certain conditions, including conditions to address qualification of the inspections.

At the end of the meeting the NRC asked for public comments. As there were none the meeting was adjourned.

Project No. 689

Enclosure:
As stated

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ADAMS ACCESSION NUMBER: ML061030549

OFFICE	LA:PGCB:DPR	CPNB:DCI	BC:CPNB:DCI	PGCB:DPR	BC:PGCB:DPR
NAME	CHawes - w/ comment	TChan	ESullivan	JGolla	CJackson
DATE	04/20/2006	04/20/2006	04/20/2006	03/14/2006	04/26/2006

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List of Attendees for March 23, 2006
Meeting of NEI and EPRI MRP and NRC

NAME	ORGANIZATION
Alley, Tom	Duke Energy
Chan, Terence	NRC/NRR/DCI
Chapman, Nancy *	Bechtel
Collins, Jay	NRC/NRR/DCI
Golla, Joe	NRC/NRR/DPR
Gruss, Kim	NRC/NRR/DCI
King, Christine*	EPRI
Lareau, Jack	Westinghouse
Lupold, Tim	NRC/NRR/DCI
Moyer, Carol	NRC/RES
Naujock, Don	NRC/NRR/DCI
Richter, Mark	Constellation Energy
Riley, Jim	NEI
Santos, Cayetano	NRC/ACRS
Selby, Greg	EPRI
Spanner, Jack	EPRI
Sullivan, Edmund	NRC/NRR/DCI

* Participated via teleconference

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VESSEL HEAD INSPECTIONS ON MARCH 23, 2006

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JRiley, internet: jhr@nei.org

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