



NUCLEAR ENERGY INSTITUTE

All Members  
MTM

David J. Modeen  
DIRECTOR, ENGINEERING  
NUCLEAR GENERATION DIVISION

December 14, 2000

Dr. Brian W. Sheron  
Associate Director for Project Licensing and Technical Analysis  
Office of Nuclear Reactor Regulation  
Mail Stop O5-E7  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**SUBJECT: Reactor Coolant Pipe Cracking Experience**

**PROJECT NUMBER: 689**

Dear Dr. Sheron:

The U. S. nuclear industry has been following carefully the investigation of recently identified cracking in large diameter reactor coolant piping at the V. C. Summer plant in this country and at several foreign plants. The industry appreciates the potential significance of these cracks and crack-like indications. While the immediate attention of the NRC staff and South Carolina Electric and Gas is appropriately focused on the identification of the root cause, corrective action and repair of the V. C. Summer plant, the industry is taking steps to align its resources to address the potentially generic implications of these pipe cracks. This letter briefly describes our intent.

The EPRI-managed Materials Reliability Project (MRP) will lead the industry effort. The MRP was established in 1998 to provide a utility-directed oversight structure to proactively address and resolve, on a consistent industry-wide basis, selected PWR materials issues. The MRP's specific objectives are to:

- Resolve existing and emerging performance, safety, reliability, operational, and regulatory PWR materials issues that meet specific screening criteria.
- With the direct involvement of NEI, serve as the focal point for industry-wide PWR materials-related regulatory issues.
- Fully integrate any work undertaken with owners group activities and, where appropriate, ASME Code activities.

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The MRP will coordinate and integrate the technical efforts of other industry organizations that will be involved. For example, Westinghouse Corporation, Framatome Technologies, the EPRI NDE Center and specialized experts have already provided direct support to the V. C. Summer staff. As more information becomes available, specific activities and participants will become more evident.

In each of the past two years, the MRP Executive Steering Committee has briefed senior NRC managers on the accomplishments and future activities of the MRP. Similarly, the NRC staff has had numerous technical interactions with MRP Issue Task Groups addressing thermal fatigue cracking, Alloy 600 head penetration cracking, reactor vessel integrity and reactor vessel internals issues. The NRC staff is quite familiar with the capabilities of the MRP.

Mr. Jack Bailey, Vice President of Engineering for the Tennessee Valley Authority, was recently appointed chairman of the MRP Senior Representatives. He is the executive point of contact for the generic industry effort. At the more technical level, Jack will be assisted by Mr. Larry Mathews, chairman of the MRP Alloy 600 Issue Task Group. Larry will be responsible for developing and implementing the MRP action plan to address the technical issues that arise. As called for by the MRP charter, NEI will provide the regulatory interface for the MRP with the NRC staff. Kurt Cozens will be the NEI point of contact for your staff.

Successful understanding and resolution of any issues arising from the investigation of the cause and repair of the pipe cracking at V. C. Summer requires a concerted effort by the industry and the NRC. We look forward to a productive dialogue with the NRC staff in the months ahead. As initial steps in that process, we anticipate a working level meeting in January followed by a senior management meeting in February. We hope to be in a position to discuss preliminary steps as well as convey our commitment to these efforts.

Please call me if you have any questions regarding this information.

Sincerely,

A handwritten signature in cursive script, appearing to read "David J. Modeen", with a long horizontal flourish extending to the right.

David J. Modeen

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- c: Mr. Jack R. Strosnider, Jr., U. S. Nuclear Regulatory Commission  
Mr. Peter Wen, Jr., U. S. Nuclear Regulatory Commission  
Mr. Jack A. Bailey, TVA (Chairman, EPRI MRP Senior Representatives)  
Mr. Steven A. Byrne, South Carolina Electric and Gas  
Mr. Robert Bryan, TVA (Chairman, Westinghouse Owners Group)  
Dr. Theodore Marston, EPRI  
EPRI MRP Executive Steering Committee Members  
Mr. Richard Bernier, APS (Chairman, CEOG)  
Mr. Howard Crawford (Chairman, B&WOG)  
Mr. Andrew Drake, Westinghouse (WOG Project Manager)  
Mr. Gordon Bischoff, Westinghouse (CEOG Project Director)  
Mr. David J. Firth, Framatome Technologies (Manager B&W Services)  
Mr. Michael Short, Southern California Edison (MRP IIG Chairman)  
Mr. Larry Mathews, Southern Nuclear Operating Company (MRP Alloy 600  
ITG chairman)  
Dr. Avtar Singh, EPRI  
Mr. Robert Waselus, South Carolina Electric and Gas