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February 17, 2006

Mr. James E. Dyer  
Director Office Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
11555 Rockville Pike  
Rockville, Md. 20852

Subject: ASME Actions to address Alloy 82/182/600 materials

References: 1. ASME Letter from Ken Balkey, Vice President, Nuclear Codes and Standards dated February 8, 2006.  
2. NRC letter from J. E. Dyer, Director Office of Nuclear Reactor Regulation, dated 20 December 2005

Dear Mr. Dyer:

Per Reference 1, we provided the approach that ASME would use during upcoming Code meetings in Portland, Oregon to respond to your letter in Reference 2. In that letter you requested that ASME Section XI take actions necessary to develop needed improvements to existing ASME Boiler and Pressure Vessel (B&PV) Code inspection requirements for managing primary water stress corrosion cracking (PWSCC) in butt weld connections in reactor coolant pressure boundary piping. The ASME approach would include presentations delivered at the February 13, 2006 meeting of the ASME Section XI Task Group on Alloy 600 by representatives from the Electric Power Research Institute Materials Reliability Project (MRP) and the U.S Nuclear Regulatory Commission Staff followed by discussion by other ASME stakeholders in attendance. The presented information and follow-on discussion would help ASME Section XI determine a course of action to address the subject issue.

Both the MRP and NRC presentations and the follow-on discussions were valuable in making that determination. A vote of the Task Group members and visiting stakeholders was taken, and the consensus was to proceed with ASME Code action to address the frequency of examination of dissimilar metal butt welds. On Tuesday, February 14, 2006, the Executive Committee of ASME Subcommittee XI reviewed the Task Group vote and approved by vote to have the Task Group move forward to develop an ASME Code Case providing appropriate examination frequency requirements for the piping butt welds of concern.

During the Task Group discussion, it was made evident that certain challenges will be involved in developing this Code Case. For example, writing this Code Case will entail the development of inspection frequencies and bases for these frequencies. Industry has mitigative actions underway to address PWSCC in reactor coolant pressure boundary piping, and bases will be needed for the inspection frequencies of both mitigated and non-mitigated welds. It was also recognized that some of the MRP information associated with this matter, particularly the technical and risk

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assessments used to support inspection frequencies and mitigative actions, are proprietary. The Task Group will need input from cognizant industry and regulatory representatives to assist in forming the technical basis for the Code Case. This type of cooperation occurred in the development of ASME Code Case N-729 for examination of partial penetration welds in PWR reactor pressure vessel heads, and we are hopeful that such cooperation will be provided in the future. However, ASME has developed other Code requirements for similar situations involving proprietary information.

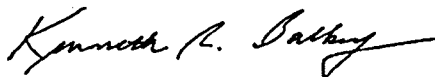
The Task Group plans to prepare a draft Code Case for consideration at their next meeting in May 2006 to start the Code development process. The Task Group will begin technical discussions at that meeting and will continue similar dialogue at follow-on ASME Code meetings to achieve consensus on the primary system butt weld examination frequency requirements using information that is brought forward at each meeting. Once consensus is attained by the Task Group, this Standards Action will be moved for review and approval by ASME Subcommittee XI, the ASME B&PV Standards Committee, and finally the ASME Board on Nuclear Codes and Standards. Upon ASME approval, this Code Case will allow for trial application of new examination requirements so that experience can be gained in parallel with ongoing industry actions prior to the revised examination requirements being incorporated into Section XI of the ASME B&PV Code.

We would like to thank both the representatives of the MRP and NRC Staff for taking the time to develop and deliver excellent presentations at the February 13 ASME Task Group meeting. The time and effort to support ASME Code activities by all our stakeholders is greatly appreciated.

Members of NRC Staff also indicated their willingness to help support the technical basis for this Code Case action. The ongoing participation of NRC Staff members in the ASME Code process is welcome and encouraged on this and other initiatives.

As significant activities are accomplished, updates will be provided to you and cognizant industry management. As always, if you have any questions, please do not hesitate to contact either me or Kevin Ennis in our New York office, at your convenience.

Sincerely,

A handwritten signature in cursive script, reading "Kenneth R. Balkey".

Kenneth R. Balkey, PE  
Vice President,  
Nuclear Codes and Standards

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cc: Dr. Brian W. Sheron, US NRC / NRR  
Mr. John Grobe, Director of Division of Component Integrity  
Mr. William Bateman, U.S. Nuclear Regulatory Commission  
Mr. Ted Sullivan, U.S. Nuclear Regulatory Commission  
Mr. Terence Chan, U.S. Nuclear Regulatory Commission  
Mr. Kevin Ennis, ASME Staff, Director, Nuclear Codes & Standards  
Mr. Richard Porco, Vice Chair, ASME Board on Nuclear Codes & Standards Operations  
Mr. Bryan Erler, Vice Chair, ASME Board on Nuclear Codes & Standards Strategic Initiatives  
Mr. Gary Park, Chair, ASME Subcommittee on Nuclear Inservice Inspection  
Mr. Richard Swayne, Vice Chair, ASME Subcommittee on Nuclear Inservice Inspection  
Mr. Robin Dyle, Chair, Task Group Alloy 600  
Mr. Guido Karcher, Chair, ASME Boiler & Pressure Vessel Standards Committee  
Mr. Mike Robinson, Chair, MRP Issue Integration Group (IIG)  
Mr. Jeff Gasser, Executive Chair of PWR Materials Management Program (PMMP)  
Mr. Dave Modeen, Chief Nuclear Officer, Electric Power Research Institute  
Mr. Alex Marion, Senior Director, Engineering, Nuclear Energy Institute