



NUCLEAR ENERGY INSTITUTE

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**SUBJECT:** Industry Survey Questions on PWR Head Inspections

**PROJECT NUMBER: 689**

During the March 19, 2002, public meeting we indicated that we would provide you the results of the Materials Reliability Program (MRP) assessment of the survey conducted on PWR reactor pressure vessel closure head inspections. The MRP performed this survey to assess the status of licensee actions relating to the corrosion observed at the Davis-Besse plant.

The survey posed the following questions:

1. At your most recent inspection, did you do a sufficient visual examination over 100% of the head to have detected external surface corrosion or accumulation of boric acid crystals?
2. If the visual inspection was not 100% (or was in some way hampered), can you confidently say that you don't have external head corrosion?
3. If Ultrasonic Testing (UT) or another non-visual approach was used at your most recent inspection, was the UT examination capable of detecting corrosion of the low alloy steel head material (changes in back reflection)? Did you perform a full length UT of the RPV nozzles to the top of the head?
4. For plants with Spring 02 outages (all susceptibility 'classes'), what plans can you make/how will you show that there is not significant boric acid corrosion?

The licensee responses are provided in Enclosure 1. The MRP binned the plants in five categories and a description of each category is provided in Enclosure 2. The matrix in Enclosure 3 summarizes the results in terms of plant susceptibility ranking for head nozzle primary water stress corrosion cracking (Bulletin 2001-01) and the categorization derived from the survey. Please note that this survey was

Dr. Brian W. Sheron

March 28, 2002

Page 2

conducted prior to NRC issuing Bulletin 2002-01 and the release of the Davis-Besse root cause evaluation. The information requested for the 15-day response to the bulletin should provide additional details relative to inspection and maintenance programs, inspection results and the material condition of the reactor pressure vessel head.

Please contact at 202-739-8080, [am@nei.org](mailto:am@nei.org), if you have any questions about this material.

Sincerely,

A handwritten signature in cursive script that reads "Alex Marion".

Alex Marion

AM/maa  
Enclosures

c: Mr. William H. Bateman, U. S. Nuclear Regulatory Commission  
Mr. Steven D. Bloom, U. S. Nuclear Regulatory Commission