

2007-225 \_\_\_\_\_ BWR Vessel & Internals Project (BWRVIP)

August 03, 2007

Document Control Desk  
U. S. Nuclear Regulatory Commission  
11555 Rockville Pike  
Rockville, MD 20852

Attention: Matthew A. Mitchell

Subject: BWRVIP Summary of BWR Dissimilar Metal Weld Survey

Reference: BWRVIP Letter 2007-173 from Rick Libra (BWRVIP Chairman) to Matthew A. Mitchell (NRC), "Information on BWR Dissimilar Metal Weld Examinations," dated June 22, 2007.

The purpose of this letter is to summarize the results of the survey conducted by the BWRVIP to obtain pertinent information from the BWR utilities regarding dissimilar metal welds and associated examination data from 1998 to the present. This information was compiled and previously transmitted to the NRC by the BWRVIP letter 2007-173 referenced above. This letter summarizes the details of the survey with particular emphasis on the Category D dissimilar metal weld inspection status of the U. S. BWR fleet.

The dissimilar metal weld survey collected information on the quantity of dissimilar metal welds, identified the category of the weld in accordance with BWRVIP-75-A, indicated the types of weld stress improvements applied, and summarized the weld examination history for each weld category.

Survey Results:

- The total number of dissimilar metal welds within the scope of BWRVIP-75-A is 1000. The number of welds in each category is:
  - Category A - 343
  - Category B - 103
  - Category C - 361
  - Category D - 166
  - Category E - 27
- 28 of the 35 U.S. BWRs have performed examinations on all Category D dissimilar metal welds that fully comply with the requirements of ASME Code Section XI, Appendix VIII, Supplement 10. These plants account for 65 of the 166 Category D weld population.
- 7 of the 35 U.S. BWRs have performed examinations on a portion of their Category D dissimilar metal welds that fully comply with the requirements of ASME Code Section XI, Appendix VIII, Supplement 10. These plants account for the remaining 101 of the 166

Together . . . Shaping the Future of Electricity

A047

LRR

Category D weld population. Of the 101 welds, 68 have been examined with a Supplement 10 examination and 33 remain. Each of the licensees with remaining Supplement 10 Category D welds exams has communicated their examination schedules for completing the exams in their BWRVIP survey response. This information is provided in the enclosed table.

Please note that the enclosed table contains proprietary information that was extracted from the BWRVIP letter 200-173 referenced above. Therefore, the request contained in the BWRVIP letter 200-173 to withhold the information from public disclosure also applies to the enclosed proprietary table.

A non-proprietary version of the table is also enclosed. This non-proprietary table is identical to the enclosed proprietary table except that the proprietary information has been deleted.

The BWRVIP remains committed to work on this issue and support the member utilities. However, questions regarding plant specific data or planned actions should be directed to the licensee.

If you have any technical questions on this subject please call Bob Geier (Exelon, BWRVIP Assessment Committee Technical Chairman) at 630.657.3830 or Bob Carter (EPRI) at 704.595.2019.

Sincerely,

A handwritten signature in black ink, appearing to read "Rick Libra". The signature is written in a cursive, flowing style.

Richard Libra  
DTE Energy  
Chairman, BWR Vessel and Internals Project

EPRI Non-Proprietary Information

**Category D Weld  
ASME Code Section XI Appendix VIII Supplement 10  
Examination Status**

<b>Plant ID</b>	<b># Cat. D Welds</b>	<b># Welds Examined w/Supp 10</b>	<b>Category D Weld Exam Schedules</b>
1	2	0	Remaining 2 welds are scheduled to be examined during the next refueling outage in the fall of 2008
4	9	5	Remaining 4 welds are scheduled to be examined during the next refueling outage in the spring of 2008
6	31	26	Remaining 5 welds are scheduled to be examined during the next refueling outage in January 2008
13 (See note 1)	21	5	5 of the remaining 16 welds are scheduled to be examined during the next refueling outage in the fall of 2008, with additional exams being considered. The schedule for the remaining exams is under review, with a targeted completion date for all exams during the fall 2010 refueling outage.
23 (See note 2)	4	2	Remaining 2 welds are scheduled to be examined during the next refueling outage in March 2009
24	28	27	Remaining 1 weld is scheduled to be examined during the next refueling outage in March 2008
26	6	3	Remaining 3 welds are scheduled to be examined during the next refueling outage in the fall of 2008
<b>Totals</b>	<b>101</b>	<b>68</b>	<b>33 Category D Welds Remaining to Examine</b>

Note 1: Revised examination schedule for Plant 13 supersedes information provided in BWRVIP letter 2007-173.

Note 2: Plant 23 is re-evaluating the categorization of ten (10) nozzle-to-safe end welds. The welds are currently Category A. The safe-ends were replaced and fabrication records indicate that the original Alloy 182 butter remains and the DM welds were not stress relieved. Therefore, the possibility exists that these welds might be reclassified as Category D. This issue has been captured in plant 23's Corrective Action Program. Five of these welds have been examined using a Supplement 10 method. The remaining five are scheduled for Supplement 10 examination at the next refueling outage in 2009. This Plant 23 information is new and in addition to that provided in BWRVIP letter 2007-173.