

July 7, 2011

MEMORANDUM TO: Timothy R. Lupold, Chief  
Piping and NDE Branch  
Division of Component Integrity  
Office of Nuclear Reactor Regulation

FROM: Ali Rezai, Materials Engineer */RA/*  
Piping and NDE Branch  
Division of Component Integrity  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF PUBLIC MEETING HELD ON JUNE 6 AND 7, 2011,  
WITH THE ELECTRIC POWER RESEARCH INSTITUTE  
PERFORMANCE DEMONSTRATION INITIATIVE  
REPRESENTATIVES (TAC NO. ME2257)

On June 6 and 7, 2011, the staff of U.S. Nuclear Regulatory Commission (NRC) participated in a public meeting with the representatives from the Electric Power Research Institute (EPRI) Performance Demonstration Initiative (PDI) program at Hilton Washington D.C., Rockville Hotel and Executive Meeting Center, 1750 Rockville Pike, Rockville, Maryland. EPRI provides PDI's business operations and technical support. PDI is a nuclear power industry initiative established to develop and administer the qualification requirements of Appendix VIII, "Performance Demonstration for Ultrasonic Examination Systems," to Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) and to develop and administer the demonstrations and qualifications of ultrasonic testing (UT) examinations of butt welds that are associated with other inspection programs.

The purpose of the meeting was to discuss PDI's approach for implementing selected aspects of Appendix VIII and associated items. The subjects discussed were: a) the PDI activities on the proposed ASME Code actions affecting UT examinations, b) status report on the PDI piping program, c) status report on the PDI reactor pressure vessel (RPV) qualification program, d) status report on the NRC funded nondestructive examination (NDE) projects at the Pacific Northwest National Laboratory (PNNL), e) NRC rulemaking affecting performance-based NDE, f) PDI program for qualification of mitigated dissimilar metal (DM) welds, g) PDI activities related to NRC/EPRI memorandum of understanding (MOU), and h) discussion on small diameter ferritic weld examination. These meetings are a continuation of formal dialog between the NRC and the industry on PDI's implementation of Appendix VIII and other NDE issues of mutual interest. The dialog provides opportunities to discuss testing difficulties, review PDI's program methodology for the selected supplements, and address issues regarding the ASME Code. The meeting participants and agenda are listed in Enclosures 1 and 2, respectively. Open items and/or new action items are described in Enclosures 3 and 4. Handouts and/or presentations provided at the meeting are listed in Enclosure 5.

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### PDI ACTIVITIES ON ASME CODE ISSUES

PDI discussed its ASME Code activities (draft code cases and the pending items) directly related to Appendix VIII that PDI needs to take action on at the next ASME Code meetings. Draft ASME Code Case N-653-1, "Qualification Requirements for Overlaid Piping Welds," is a revision to Supplement 11 that has already been approved by Task Group (TG) Appendix VIII, Subgroup on NDE (SGNDE), and Working Group on Procedure Qualification and Volumetric Examination (WGPQVE). It will be presented to the ASME Code Standards Committee in the August ASME Code meeting. ASME Code Case N-653-1 will update Supplement 11 to current industry practices and broadens the language to include pressurized water reactor (PWR) weld overlay (WOL) samples. It allows overlays over similar, dissimilar metal (DM) welds, cast stainless steel (CSS), and wrought stainless steel.

TG on CSS is closely monitoring the ongoing EPRI and PNNL studies of UT techniques on the CSS mockups. TG is working on a code case and supporting white paper to add a new Supplement 2 to Appendix III for UT examination of CSS. This will strengthen the guidance in Appendix III. TG is also monitoring the Structural Integrity (SI) probabilistic fracture mechanics study funded by the industry, to determine the critical flaw size for CSS materials. TG plans to use the outcome of this study to develop Supplement 9 to Appendix VIII.

The NRC staff asked PDI whether there are specimens and/or mockups on cast austenitic stainless steel (CASS) materials at PDI disposal. PDI responded that several samples are available with CASS materials, but no qualification on CASS is presently being done. It includes samples with squeezed electro-discharge machined (EDM) flaws, small diameter pipe weld with full structural weld overlay (FSWOL), and 14 inch diameter ½ inch thick pipe weld with optimized weld overlay (OWOL). These samples are used for detection and sizing applications. There is one axial flaw in the weld that the UT examinations were unable to detect. Weld overlays are reasonably tolerant to 100% through-wall axial flaw and 75% through-wall circumference flaw in the original base metal weld material.

PDI reported on recent inquiries regarding the ASME Code required examination coverage when the weld crown and/or weld buildup extends some distance over the base metal (beyond the normal weld bevel). The ASME Code regards weld bevel as the structural edge of the weld and advises going past the bevel (heat-affected zone) to define examination volume. Therefore, the weld bevel would designate the examination volume of the inner 1/3, not the extended weld toe at the outer surface. PDI pointed out that the more information regarding weld as-built geometry provided to the NDE inspectors examining the weld, the more appropriate examinations could be performed by the inspectors.

### NRC RULEMAKING AFFECTING ASME CODE, SECTION XI, APPENDIX VIII AND I-3000

The NRC staff discussed the current (2011) NRC rulemaking that affects ASME Code, Section XI, Appendix VIII and Article I-3000. The final rule takes effect 30 days after it was published in the Federal Register on June 21, 2011. The final rule incorporates by reference the 2005 Addenda through 2008 Addenda of Sections III and XI of the ASME Code, ASME Code Case N-722-1, "Additional Examinations for PWR Pressure Retaining Welds in Class 1 Components Fabricated With Alloy 600/82/182 Materials," and ASME Code Case N-770-1, "Alternative Examination Requirements and Acceptance Standards for Class 1 PWR Piping and Vessel Nozzle Butt Welds Fabricated With UNS N06082 or UNS W86182 Weld Filler Material

With or Without Application of Listed Mitigation Activities.”

The final rule requires the plants with the interval code of record of the ASME Code, Section XI:

- 2001 Edition and earlier, apply Appendix VIII and Article I-3000 as modified by Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(b)(2)(xv) and (xxiv)
- 2002 Addenda through 2006 Addenda, apply Appendix VIII and Article I-3000 from the 2001 Edition of the ASME Code, Section XI, as modified by 10 CFR 50.55a(b)(2)(xv) and (xxiv)
- 2007 Edition and later, apply Appendix VIII and Article I-3000 from the 2007 Edition and later

The final rule requires the plants update their ISI program and begin implementing Appendix VIII and Article I-3000 from the 2007 Edition through 2008 Addenda of the ASME Code, Section XI, in accordance with the following timelines:

- Up to 12 months after the effective date of the rule (July 21, 2011), the plants should adapt the 2001 Edition of Appendix VIII if updating their ISI program, along with the limitations of 10 CFR 50.55a
- Between 12 to 18 months after the effective date of the rule (July 21, 2011), the plants may delay implementing until 18 months after the effective date of the rule
- After 18 months from the effective date of the rule (July 21, 2011), the plants that are updating their ISI code of record program, are to begin implementing Appendix VIII using the 2007 Edition through 2008 Addenda of the ASME Code, Section XI.

The final rule in 10 CFR 50.55a(b)(2)(xv)(A)(2) adds requirements to allow for an add-on qualification for DM austenitic welds with no austenitic base metal side to an existing Supplement 10 qualification. However, no scanning requirements for CASS components are included in the final rule.

Regarding the use of UT in lieu of radiographic testing (RT), the interchangeability of these two volumetric examination techniques are not permitted by the regulation now. However, the NRC is currently pursuing a research study on the use of UT and RT interchangeability.

Regarding future rule making, the NRC staff is reviewing the 2009 Addenda through 2011 Addenda of the ASME Code. ASME Code Case N-784, “Experience Credit for Ultrasonic Examiner Certification,” and ASME Code Case N-799, “Dissimilar Metal Welds Joining Vessel Nozzles to Components,” are also currently under the NRC staff review. The NRC staff has major concerns on ASME Code Case N-784 where there is a significant reduction in training hours and it disconnects Appendix VII from Appendix VIII. The industries assumption was that candidates had received extensive training and had participated in a substantial number of inspections that gave them a large wealth of knowledge that should be transferrable to nuclear power plant components. It is apparent that ASME Code Case N-784 lacks technical bases and supporting data, has no defined minimum training criteria (i.e., NDE knowledge, component

familiarity, and regulations), and lacks process details (i.e., uniformity and/or standardization). Regarding ASME Code Case N-799, the Appendix VIII qualification requirements are needed for CASS components.

The NRC staff discussed an idea regarding the use of blind Round-Robin testing, and how it could be used to extend and expand qualifications and whether this could satisfy blind performance demonstration requirements. This topic created a lot of discussions between meeting participants. The industry commented that they would be discussing it at the next issues meeting. Then, it will be discussed at a meeting between the NRC, EPRI, and PNNL which is scheduled for July 2011.

#### ULTRASONIC CABLE EQUIVALENCY

PDI presented the status of its UT cable equivalency project. However, there was no new information being presented. The focus of the project is only conventional manual UT techniques. The results were documented in EPRI report 1021059, "Nondestructive Evaluation: Ultrasonic Cable Equivalency," which is publicly available for download at the EPRI website. As a result of this project, EPRI plans to update all its Generic Procedures for cable variation in 2011. Further, PDI presented the results of the project to Task Group Appendix VIII at the first quarter ASME Code, Section XI, meeting.

In response to a question from the meeting participant, PDI confirmed that the mixed-matched connectors and cables were tested and no significant effect on UT was found. In addition, PDI stated that the automated UT qualifications are generally done for maximum cable length.

#### PDI PIPING PERFORMANCE DEMONSTRATION PROGRAM UPDATE

PDI presented status update on its piping performance qualification activities during the first half of 2011. Under PDI's personnel qualifications program, fifty candidates including nine Fast-Track candidates were tested on manual UT and four candidates were tested on automated UT. The program was not busy this spring and the low turnout was attributed to possibly long spring refueling outage.

PDI reported that EPRI has recently developed and implemented a new personnel training program called "NDE Fast-Track Work Force Development Project." The kickoff of this program has produced 9 Fast-Track candidates who were tested on manual UT by PDI in spring 2011 and 3 candidates were passed. It is noted that the program is aimed to reduce the time required to qualify an NDE candidate from five years to one. It serves as an alternative method for achieving hours of hands-on experience. PDI indicated that the target skill set for an NDE technician is a level II UT with an ASME Code, Section XI, Appendix VIII, performance-based qualification. The program uses the collaboration of a few outside educational institutions to offer a training curriculum. It is noted that EPRI provides training, training materials, course curriculum, and instruction to the institutions' instructors with the goal of providing 1050 hours of hands-on experience, as prescribed in Appendix VII. It is expected that the NDE candidate going through Fast-Track Program will have a greater understanding of theoretical ultrasonics as well as an increased ability to use flaw discrimination techniques due to the number of flawed mockups to which they will be exposed during the 1050 hours of hands-on experience. It is

anticipated that the program will produce between 12 and 24 technicians per year per each educational institution. Thus, PDI believes that its Fast-Track program will significantly contribute to the supply of new qualified technicians.

The PDI committee is working to establish and finalize ground rules for equipment equivalency process in accordance with the ASME approved Code Case N-780. The EPRI NDE Center is requiring blind demonstration for any change(s) made to the essential variables which includes equipment. PDI reported that a number of new samples were built. These new samples are being fingerprinted and worked into the piping program. Review and work on revising and updating the generic piping procedures are ongoing. Draft revisions to generic procedures PDI-UT-1 and PDI-UT-3 are posted on EPRI(Q) website ([www.epriq.com](http://www.epriq.com)) and are slated to go live on July 1, 2011. These procedures have been updated to include guidance for embedded flaws. Guidance for focal depth and contouring of wedges for refracted longitudinal (RL) probes has also been incorporated in these generic procedures. Work is ongoing with nuclear steam supply system (NSSS) vendors on inspection issues of new plant components and configurations.

#### PDI REACTOR PRESSURE VESSEL DEMONSTRATION PROGRAM UPDATE

PDI reported that the RPV qualification program activities are slowing down. For the next meeting, PDI is considering to integrate the RPV program update into the piping program update and have one presentation.

The manual UT personnel qualifications under the ASME Code, Section XI, Supplements 4 and 6 (RPV Shell Welds) and Supplement 8 (bolting) were completed. The ongoing activity includes the statistical analysis of RPV performance demonstration data. Scheduled activities include the manual UT personnel qualifications under Supplements 4, 5, 6 and 7 (RPV Shell Welds and Nozzle Inner Radius (IR)) and the automated UT personnel qualifications under Supplements 4, 5, 6 and 7 (RPV Shell Welds and Nozzle IR).

#### PDI WELD OVERLAY PROGRAM

The expansion of weld overlay (WOL) library of specimens and the WOL performance qualifications activities were presented. The program targets fabrication of DM weld samples with full structural weld overlay (FSWOL) and optimized weld overlay (OWOL). The PDI reasons for the expansion are:

- Make the test specimens more closely resemble plant geometries
- Fabricate more OWOL blocks
- Increase the populations and range of flaw sizes
- Expand the upper thickness range for FSWOL to a range between 1.6 inches and 1.7 inches.

The results of UT fingerprinting of the flaws in the weld, showed that changes to the flaws occur with the WOL process. The WOL process is causing the existing flaws to appear smaller in

post-WOL measurements which indicate that the axial and hoop stresses are being more compressive as a result of WOL installation.

#### PNNL UPDATE ON NRC FUNDED PROJECTS

PNNL presented updates on the progress of NDE projects (i.e., sponsored by the NRC). The focus of the talk was phased array UT study on thin-walled CASS pipe sections that was recently completed. It is expected that ASME actions will occur as a result of PNNL findings. PNNL only tested piping 1.6 inches thick. It is noted that EPRI has recently agreed with many of the PNNL detection findings and supports the development of an ASME Appendix III Code Case. This prompted a lot of discussions on when PDI should be including CASS in their qualifications program, most notably, Supplements 2 and 10. An industry representative commented that EPRI began developing implementation plans for the thin-walled CASS examinations. PDI representative agreed that it would assist ASME in the development of code case and performance demonstration.

A utility representative brought up concerns about the American Society of Mechanical Engineers Nondestructive Examination (ANDE). Consequently, technical discussions concerning training and qualification issues regarding the ANDE heated up between the meeting participants. Several utility representatives commented on the burden that it may cause and the cost that may be incurred by the industry including utilities in implementing the ANDE requirements as compared to its benefits in term of quality of qualification. Utility personnel asked the NRC staff specific questions about the staff's concerns surrounding NDE personnel qualifications. The NRC staff acknowledged its support for better methods for the initial and continued NDE personnel qualifications. The NRC staff also expressed concerns about the recent ASME proposed changes and/or significant reductions to the current training hour requirements as well as the types of training requirements. The technical bases for the proposed and current NDE personnel qualifications requirements should be determined. This will assist the NRC in assessing the initial basis for the current training hour requirements and personnel qualifications and its relationship to the merits behind the ASME proposed reduced training hours. The NRC staff and EPRI will be meeting later this year to discuss issues surrounding training and qualifications. It is expected that a collaborative task will be developed.

#### DRAFT APPENDIX III, SUPPLEMENT 2, FOR CAST STAINLESS STEEL

PDI discussed a proposed draft code case to the ASME Code, Section XI, Appendix III, that incorporates UT inspection requirements for CASS base materials in piping welds. It is noted that the basis for the inspection requirements needs to be determined. The purpose of code case will be to improve the inspection reliability for CASS base materials. The inspection requirements will be based on the results obtained from development activities on CASS by various entities using low frequency conventional and phased array UT as well as lessons learned from qualified Appendix VIII piping weld applications. The important features proposed in the code case will be operator training (classroom and hands-on laboratory) phased array UT inspection, and encoded scans for off-line data analysis. Appendix III does not require performance demonstration of procedures or personnel.

### DISCUSSION ON SMALL DIAMETER FERRITIC WELD EXAMINATION

PDI discussed small diameter ferritic weld examination and the issue raised by an NRC inspector regarding Supplement 2 requirements. The original PDI position paper (2003) required minimum pipe size of 2 inches for austenitic and 4 inches for ferritic steel. Qualification for both materials is performed in accordance with the requirements of Supplement 12 of the ASME Code, Section XI, Appendix VIII. However, the risk-informed (RI) inservice inspection (ISI) programs require examination down to 2 inches for ferritic piping. PDI has put together a review of the performance, procedures, and techniques that are used to inspect pipe based on Supplements 2, 3, and 12. PDI contends that there is a compelling case that since the procedures for small diameter austenitic and ferritic piping are the same and that austenitic piping is more challenging, then the inspection of 2 inches ferritic piping has been established.

The NRC did not take issue with any safety aspects of PDI's action. However, the NRC has maintained that PDI positions affecting performance demonstration be incorporated in the ASME Code. PDI will forward their position as an intent inquiry at the next ASME Code Committee meetings in August 2011.

### REVIEW CONTENTS OF MEMORANDUM OF UNDERSTANDING RELATED TO PDI

PDI presented an overview (see handout Enclosure 5) of the contents of the memorandum of understanding (MOU) specifically related to the PDI activities. The MOU was signed on March 14, 2007, between the NRC Office of Nuclear Regulatory Research (RES) and EPRI to allow and encourage cooperation and sharing of information pertaining to research supporting nuclear safety till 2013. PDI's MOU activities are:

- PDI will participate in the review of PNNL's technical letter report documenting the technical basis used to create Appendix VIII,
- EPRI (including PDI personnel) will:
  - Task 1: Assess PDI performance demonstration test data supporting the root mean square error (RMSE) depth sizing screening criterion for cracks detected from the inside surfaces, and share information for PNNL's review.
  - Task 2: Develop a technical basis "white paper" if needed for proposed changes to the current 0.125 inch RMSE screening criterion. (Note: there may be overlap between the MOU and Mr. Lupold (NRC: Nuclear Reactor Regulation (NRR)) letter to Mr. Fuller (PDI Chair) dated November 8, 2010 (Agency-wide Documents Access and Management System (ADAMS) Accession no. ML103120653)

### PDI RESPONSE TO THE NRC LETTER REQUESTING REVIEW OF THE PDI DATA PERTAINING TO FLAW DEPTH SIZING FROM ID EXAMINATIONS

The key PDI related activity in the MOU includes development of the EPRI communication plan for the PDI data assessment and analysis regarding RMSE depth sizing for inspection from the inner diameter (ID) surface. PDI provided some guidance regarding the requests to expedite actions within PDI for funding new activities. PDI stated that a request needs to contain the

answer to following questions: what needs to be done?, why it needs to be done?, and what are the benefits for doing the work? PDI elaborated that this information is necessary for requesting funding to support conducting the work. The preferred way for submitting the request is to submit as if it was a proposal for getting funding. This would help the EPRI staff get approval for doing the work. It is noted that the most realistic time frame for performing the RMSE PDI database review would be in the fall of 2011. (Note: Mr. Lupold (NRC:NRR) letter to Mr. Fuller (PDI Chair) dated November 8, 2010 (ADAMS Accession no. ML103120653) also addressed PDI's guidance. NRC:NRR is planning on participating in an assessment this fall (October-November 2011 time frame)).

#### OPEN ITEMS AND/OR NEW ACTION ITEMS

Enclosure 3 provides details about the status of open items from the November-December 2010 NRC/PDI meeting. Enclosure 4 contains details about new action items created during the June 2011 NRC/PDI meeting and the open items from the November-December 2010 NRC/PDI meeting that are not completed and/or closed.

#### NEXT MEETING

The next semiannual NRC/PDI meeting is scheduled for December 6 and 7, 2011, at the Laguna Cliffs Marriott, 25135 Park Lantern, Dana Point, California, ([www.lagunaciffs.com](http://www.lagunaciffs.com)). The meeting will commence at 1:00 p.m. on December 6 and end at 5:00 p.m. on December 7, 2011.



T. Lupold

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Enclosures:

1. Attendance List
2. Meeting Agenda
3. Review of Open Items from November-December 2010 NRC/PDI Meeting
4. Open Items and/or New Action Items during June 2011 NRC/PDI Meeting
5. List of Handouts and/or Presentations

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**ADAMS Accession Number: ML11189A187**

<b>OFFICE</b>	NRR/DCI/CPNB	NRR/DCI/CPNB	NRR/DCI/CPNB
<b>NAME</b>	ARezai	DNaujock	TLupold
<b>DATE</b>	06/27/2011	06/28/2011	7/7/2011

**OFFICIAL RECORD COPY**

ATTENDANCE FOR NRC/PDI MEETING  
June 6 and 7, 2011

<b>NAME</b>	<b>ORGANIZATION</b>
Ali Rezai	USNRC
Bob Hardies	USNRC
Bruce Bennett	Wesdyne
Carl Latiolais	EPRI
Carlos M. Banera	IHI Southwest Tech
Carol Nove	USNRC
Damon Priestley	Progress Energy
David L. Anthony	Exelon
Don Naujock	USNRC
Greg Selby	EPRI
J. Fred Hull	LMR
James McArdle	Duke Energy
Jeff L. Devers	LMT
John Tsao	USNRC
Kevin Hacker	Dominion
Mark Huting	Xcel
Mike Anderson	PNNL
Randy T. Linden	PPL Susquehanna
Richard Fuller	First Energy
Robert Davis	USNRC
Ronnie Swain	EPRI
Stephen Cumblidge	USNRC
Steve Doctor	PNNL
Tim Lupold	USNRC
Tom Bilik	USNRC

AGENDA FOR PUBLIC MEETING

WITH THE ELECTRIC POWER RESEARCH INSTITUTE – PERFORMANCE  
DEMONSTRATION INITIATIVE  
AT HILTON WASHINGTON D.C. / ROCKVILLE HOTEL  
AND EXECUTIVE MEETING CENTER  
1750 ROCKVILLE PIKE  
ROCKVILLE, MD  
JUNE 6 AND 7, 2011

Monday, June 6, 2011, 1:00 p.m. – 5:00 p.m.

1. Introductions
2. Review of Previous Action Items
3. Status of ASME Code Nondestructive Examination Activities
4. Rulemaking Affecting UT Performance-Base NDE
5. Cable Equivalency Work
6. Status of the PDI Piping Program
7. Status of the PDI Reactor Pressure Vessel Program
8. Adjourn

Tuesday, June 7, 2011, 9:00 a.m. – 5:00 p.m.

1. Status of Weld Overlay, Inlay, and Onlay Program
2. Status of PNNL Work on Cast Stainless
3. Appendix III Rewrite (Cast Stainless Steel)
4. Status of PDI Response to the NRC Letter Requesting Review of the PDI Data  
Pertaining to Flaw Depth Sizing from ID Examinations
5. Review of PDI Activities Related to NRC/EPRI MOU
6. Discussion on Small Diameter Ferritic Weld Examination
7. Operating Experience
8. Items of Mutual Interest
9. Review of Action Items
10. Next Meeting
11. Public Comment
12. Adjourn

REVIEW OF OPEN ITEMS  
FROM NOVEMBER-DECEMBER 2010 NRC/PDI MEETING

NRC Actions:

1. PNNL will request from EPRI the WOL mockup to obtain information on aspects of a standard test set with regard to how much information is provided to the candidate on the nature of flaws in the test set.

Status: Ongoing. This item will be carried over from prior to the June 2010 meeting.

Completion Date: Discussed during November-December 2010 meeting (targeting March 2011 for request).

Status Decision in June 2011 Meeting: It was decided in June 2011 meeting that this will be carried over and become open action item 1 for June 2011 meeting.

2. The NRC staff will provide to PDI the ADAMS Accession no. for the PNNL reports presented during meeting in the PNNL presentation.

Completion Date: December 31, 2010.

Status Decision in June 2011 Meeting: It was decided in June 2011 meeting that this was completed on December 31, 2010 and closed. ADAMS Accession no. ML092540501.

3. The NRC Office of Nuclear Reactor Regulation (NRR) sent a letter dated November 8, 2010, (ADAMS Accession no. ML103120653), to PDI Chair addressing the RMSE issues and requesting access to PDI, piping DM weld, performance demonstration database. The NRC letter requested response from PDI prior to the next semiannual management meeting in June 2011.

Status: Ongoing. The NRC is waiting for PDI response prior to the next semiannual management meeting in June 2011.

Completion Date: Open.

Status Decision in June 2011 Meeting: The June 2011 NRC/PDI meeting indicated some overlap with the MOU. NRC:NRR is awaiting a response from PDI.

PDI Actions:

1. PDI will provide a copy of cable equivalency report to the NRC:NRR Piping and NDE Branch Chief.

Completion Date: February 28, 2011.

Status Decision in June 2011 Meeting: This was completed in May 2011 and closed. The cable equivalency EPRI report 1021059 can be downloaded from EPRI website

2. PDI will bring forward the RMSE ID depth sizing issue to the PDI steering committee and the EPRI NDEC IC. Recommend focused meeting with all relative parties to discuss this issue.

Status: Ongoing.

Status Decision in June 2011 Meeting: PDI presented at the June 2011 meeting. This was completed in May 2011 and closed.

OPEN ITEMS AND/OR NEW ACTION ITEMS  
FROM JUNE 6 AND 7, 2011 MEETING

NRC Actions:

1. PNNL will request from EPRI the WOL mockup to obtain information on aspects of a standard test set with regard to how much information is provided to the candidate on the nature of flaws in the test set.

Status: Ongoing. This item was carried over from prior to the June 2010 NRC/PDI meeting. PNNL sent an official request letter dated June 1, 2011, to PDI and EPRI.  
Completion Date: Scheduled for June 2011, PNNL will get with EPRI on overlay program implementation.

PDI Actions:

1. Add agenda item covering Cast progress within the ASME Code (Appendix III); Include roadmap overview showing how we are moving towards Appendix VIII (thin-walled)
2. PDI to review the NRC assessment of MRP-262.

Completion Date: December 2011.

3. PDI to introduce intent inquiry addressing small diameter ferritic welds. This inquiry will include meeting minutes.

Completion Date: August 2011 ASME Code meeting (Report back to the NRC during December 2011 meeting)

4. Complete communication plan and schedule meeting with the NRC to evaluate ID depth sizing

Status: Ongoing.

Completion Date: Fall 2011.

5. Provide status on when a review of PNNL proposed changes to the NUREG documenting the basis for Appendix VIII will be reviewed.

Status: Ongoing.

Completion Date: December 2011.

LIST OF HANDOUTS AND/OR PRESENTATIONS

ADAMS ACCESSION NO.: ML111590893

1. ASME Code Update
2. NRC Rulemaking Affecting ASME Section XI Appendix VIII and I-3000
3. Ultrasonic Cable Equivalency, Applicable to Conventional Manual Ultrasonic Examination Techniques
4. PDI Piping Program Update
5. PDI Reactor Pressure Vessel (RPV) Qualification Program Update
6. PDI Weld Overlay Program – Test Specimen Library Expansion
7. Update of Nondestructive Examination (NDE) Projects Funded by NRC at PNNL
8. Overview of Contents in MOU Related to PDI
9. Discussion on Small Diameter Ferritic Weld Examination
10. New DRAFT Appendix III, Supplement 2 for UT of Cast Stainless Steel
11. Action Item List – November-December 2010
12. Action Item List – June 2011
13. June 2011 NRC/PDI Meeting Agenda