October 1, 2008

MEMORANDUM TO: Terence L. Chan, Chief
Piping and NDE Branch
Division of Component Integrity
Office of Nuclear Reactor Regulation

FROM: John C. Tsao, Senior Materials Engineer ***/RA/***
Piping and NDE Branch
Division of Component Integrity
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF PUBLIC MEETING ON SEPTEMBER 18, 2008, WITH NUCLEAR ENERGY INSTITUTE AND INDUSTRY REGARDING INLAY AND ONLAY APPLICATIONS ON DISSIMILAR METAL WELDS

On September 18, 2008, the U.S. Nuclear Regulatory Commission (NRC) staff met with Nuclear Energy Institute and other industry representatives in Rockville Maryland to discuss the regulatory approach to be used when applying weld inlay and onlay to mitigate potential primary water stress corrosion cracking (PWSCC) in Alloy 82/182 dissimilar metal butt welds. Westinghouse also presented a discussion on underwater laser beam welding.

The weld inlay and onlay are methods to apply weld layers on the inside pipe wall surface to mitigate potential PWSCC in Alloy 82/182 dissimilar metal butt welds. The industry provided three technical papers and discussed the technical basis of its regulatory approach in performing inlay and onlay installation relative to the use of the American Society of Mechanical Engineers Code, Sections III and XI, and code cases. Entergy plans to install weld onlays at ANO-1 in fall 2008. Indiana Michigan Electric Power Company plans to install inlays at D. C. Cook Unit 1 in fall 2009. The underwater laser beam welding will be implemented in the field in 2010. The staff provided feedback in the meeting and indicated it would further study the industry's proposed regulatory approach.

The meeting attracted about 40 persons from various industry groups and organizations. The preliminary feedback from the attendees is that the meeting was productive and constructive to achieve a common understanding between the NRC and industry on the regulatory approach that the industry plans to pursue regarding the weld inlay and overlay installation. A list of meeting attendees, presentation slides, and technical papers are enclosed.

Enclosures: 1. List of Attendees
2. Presentation Slides
3. Technical Reports

CONTACT: John Tsao, NRR/DCI/CPNB
301-415-2702

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2. Presentation Slides
3. Technical Reports

DISTRIBUTION
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Memo to Terence L. Chan dated October 1, 2008

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OFFICE	DCI/CPNB	DCI/CPNB
NAME	JTsao	TChan
DATE	10/1/2008	10/1/2008

OFFICIAL RECORD COPY

LIST OF ATTENDEES

Summary of Public Meeting On Regulatory Approach to Inlay, Overlay, and Underwater Laser Beam Welding Applications
September 18, 2008, in Rockville, Maryland

NAME	ORGANIZATION	CONTACT INFORMATION
Jay Collins	NRC/NRR/DCI/CPNB	Jay.Collins@nrc.gov
Michael Scarpello	AEP	Mkscarpello@AEP.com
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Edmund Sullivan	NRC/NRR/DCI	Ted.Sullivan@nrc.gov
Terence Chan	NRC/NRR/DCI/CPNB	Terence.Chan@nrc.gov
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Jim Cirilli	Exelon	James.Cirilli@exeloncorp.com
Mike Melton	NEI	Mam@NEI.org
Dave Waskey	AREVA	Dave.waskey@areva.com
Joseph Weicks	Entergy	jweicks@entergy.com
Terry McAlister	SCANA	tmcalister@scana.com

ENCLOSURE1

LIST OF ATTENDEES

Summary of Public Meeting On Regulatory Approach to Inlay, Overlay, and Underwater Laser Beam Welding Applications
September 18, 2008, in Rockville, Maryland

NAME	ORGANIZATION	CONTACT INFORMATION
Paul Donavin	AEP	pdonavin@aep.comrp.com
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Rob Tregoning	NRC/RES	Robert.Tregoning@nrc.gov
William Sims	Entergy	Wsims@entergy.com
Charles Harris	NRC/RES	Charles.harris@nrc.gov

PRESENTED SLIDES

Summary of Public Meeting On Regulatory Approach to Inlay, Overlay, and Underwater Laser Beam Welding Applications
September 18, 2008, in Rockville, Maryland

1. NRC – Industry Meeting Weld Onlay, Inlay and Underwater Laser Welding, Michael Melton, Nuclear Energy Institute.

2. Weld Onlay Mitigation & Repair, William Simms, Jamie Gobell, and Joseph Weicks, Entergy

3. Weld Inlay Technical Approach, Paul Donavin, Indiana Michigan Electric Power Company (American Electric Power)

4. RV Nozzle Clad Deposited by Underwater Laser Beam Welding (ULBW), Gary Elder, Westinghouse.

ENCLOSURE 2

TECHNICAL PAPERS

Summary of Public Meeting On Regulatory Approach to Inlay, Overlay, and Underwater Laser Beam Welding Applications
September 18, 2008, in Rockville, Maryland

1. Technical Paper—Use of Weld Inlays As a PWSCC Mitigation for Reactor Vessel Safe-End-to Primary Nozzle Welds

2. Technical Paper—Plant Application of Weld Onlay for Butt Weld Mitigation

3. Westinghouse Electric Company Technical Paper on Underwater Laser Beam Welding

ENCLOSURE 3