

Exelon Generation Company, LLC
Dresden Nuclear Power Station
6500 North Dresden Road
Morris, IL 60450-9765

www.exeloncorp.com

SVPLTR #10-0010

February 25, 2010

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Dresden Nuclear Power Station, Unit 2
Facility Operating License No. DPR-19
NRC Docket No. 50-237

**Subject: Owner's Activity Report Submittal
Fourth 10-Year Interval 2009 Refueling Outage Activities**

This letter submits the Owner's Activity Report (i.e., Form OAR-1) and Invesel Visual Inspection (IVVI) Report for the Dresden Nuclear Power Station (DNPS) Unit 2 refueling outage (D2R21) which began on November 2, 2009, and was completed on December 2, 2009. This is the second refueling outage conducted in the second inspection period of the fourth 10-year inservice inspection interval for DNPS Unit 2. A copy of the Owner's Activity Report and IVVI Report are provided as attachments to this letter.

This Owner's Activity Report is submitted in accordance with American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code Case N-532-4, "Repair/Replacement Activity Documentation Requirements and Inservice Summary Report Preparation and Submission," and Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1," Revision 15. Code Case N-532-4 requires an Owner's Activity Report Form OAR-1 to be prepared and certified upon completion of each refueling outage. In accordance with the conditions of Code Case N-532-4, this OAR-1 form is being submitted within ninety days of the completion of the refueling outage.

The IVVI results are provided to report vessel internal inspections and to support B-N-1 and B-N-2 relief request examination completion.

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February 25, 2010
U.S. Nuclear Regulatory Commission
Page 2

Should you have any questions concerning this letter, please contact Ms. Marri Marchionda-Palmer, Regulatory Assurance Manager, at (815) 416-2800.

Respectfully,



Tim Hanley
Site Vice President
Dresden Nuclear Power Station

Attachments: Owner's Activity Report, Form OAR-1
In-vessel Visual Inspection Report

cc: Regional Administrator – Region III
NRC Senior Resident Inspector, Dresden Station

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number Refueling Outage D2R21 OAR-1

Plant Dresden Nuclear Power Station, 6500 N. Dresden Road, Morris, IL 60450

Unit No. 2 Commercial Service Date 06/09/1970 Refueling Outage Number D2R21
(if applicable)

Current Inspection Interval 4th Inspection Interval
(1st, 2nd, 3rd, 4th, other)

Current Inspection Period 2nd Inspection Period
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the Inspection Plans 1995 Edition with 1996 Addenda

Date / Revision of Inspection Plans 05/23/2008/Revision 6

Edition and Addenda of Section XI applicable to repair/replacement activities, if different than the inspection plans N/A

Code Cases used: N-416-3, N-649

CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct; (b) the examinations and tests, meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of D2R21 conform to the requirements of Section XI (refueling outage number)

Signed *John N. Kish*, ISI Coordinator
(Owner or Owner's designee. Title)

Date 2/18/10

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Illinois and employed by The HSBCT of Hartford, Connecticut have inspected the items described in this Owner's Activity Report, and state that to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI

By signing this certificate neither the Inspector nor his employer makes any warranty expressed or implied concerning the repair/replacement activities and evaluation described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

[Signature]
(Inspector's Signature)

Commissions

IL 1546

National Board, State, Province, and Endorsements

Date 2/23/10

**TABLE 1
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED
EVALUATION FOR CONTINUED SERVICE**

Examination Category and Item Number	Item Description	Evaluation Description
Unit 2 Weld 2/1/0201A- 28/PD1A-D14;IGSCC Category F	During examination in D2R21, flaw depth changed from .25 inches to .32 inches. No change in length.	New evaluation submitted to NRC as required by previous SER. Verbal received 11/25/09 approving start-up. Continue to treat as Category F. Will examine again in D2R22. New evaluation submitted in letter dated 11/16/09, subject "Request for Approval of Pipe Flaw Evaluation"
Unit 2 Weld 2/1/0202B- 28/PS2-TEE/202-4B;IGSCC Category F	During D2R21, concerns raised involving examination limitations on Category F weld evaluation submittals. Based on discussion with NRC, decided to resubmit evaluations delineating limitations.	New evaluation submitted to NRC in letter dated 12/07/09, subject "Request for Approval of Updated Pipe Flaw Evaluation"

**TABLE 2
 ABSTRACT OF REPAIR/REPLACEMENT ACTIVITIES REQUIRED FOR CONTINUED SERVICE**

Code Class	Item Description	Description Of Work	Date Completed	Repair/ Replacement Plan Number
3	Leak Found On Unit 2 CCSW Vault Room Cooler	Repaired Leak On Cooler	10/09/09	RRP 2-09-022
1	Leak Found Upstream of Valve 2-202-5B Above Seat Drain Valves	Replaced Leaking Component, Cut Out Drain Valves and Capped	11/09/09	RRP 2-09-071

Dresden Unit 2

In-Vessel Visual Inspection Report

Refueling Outage D2R21

The ASME Section XI inspections credited during D2R21 IVVI activities include the once-per-period B-N-1 inspection of the reactor vessel interior and B-N-2 inspections of reactor vessel interior attachments. Credit is being taken for these examinations in accordance with Relief Request, "Alternative Requirements to ASME Section XI, B-N-1 and B-N-2 using BWRVIP Guidelines, Fleet Relief," submitted April 19, 2007, as approved in the Safety Evaluation dated April 30, 2008.

To implement the requirements of the Boiling Water Reactor Vessel Internals Project (BWRVIP), General Electric-Hitachi was contracted to perform the In-Vessel Visual Inspections (IVVI). The following components and assemblies were examined:

- 80 welds and components on jet pump assemblies in accordance with the BWR Jet Pump Assembly Inspection and Flaw Evaluation Guidelines (BWRVIP-41).
- Ten core spray piping welds, 50% of the core spray sparger nozzle welds, all of the core spray sparger end cap welds and all of the core spray sparger bracket welds in accordance with the BWR Core Spray Internals Inspection and Flaw Evaluation Guidelines (BWRVIP-18-A).
- One shroud vertical weld in accordance with the BWR Core Shroud Inspection and Flaw Evaluation Guidelines (BWRVIP-76).
- Attachment welds for two core spray piping brackets in accordance with BWR Vessel and Internals Project Lower Vessel ID Attachment Weld Inspection and Flaw Evaluation Guidelines (BWRVIP-48-A).
- First time dryer examinations were performed after one cycle of operation (new dryer installed in D2R20). All critical inspections were completed with no cracking identified. Dryer inspections were performed in accordance with BWR Vessel and Internals Project Steam Dryer Inspection and Flaw Evaluation Guidelines (BWRVIP-139).

The following augmented in-vessel examinations were also performed as part of the D2R21 IVVI activities:

- Four jet pump swing gate bolting tack welds were inspected for evidence of weld failure. These inspections were performed in response to previous tack weld failures. Jet pump 15 swing gate was replaced in D2R21 due to identified tack weld degradation. The new swing gate utilized ratchets in lieu of tack welds. The jet pump 19 swing gate installed in D2R20 was inspected after one cycle of operation.
- Three jet pump auxiliary wedges installed during the last two refuel outages were inspected. Minor wear was noted on one of the wedges. Dresden will continue to monitor this condition until repairs/replacements are performed.
- Inspected two jet pump sensing line clamps and one sensing line due to previous indications. No new degradation identified.
- Inspected the eight feedwater sparger end bracket surfaces for evidence of wear. These inspections were a follow-up to evidence of wear from the pins observed during D2R20. Six of the eight brackets showed evidence of wear similar to that observed during D2R20. Dresden will continue to monitor this condition while long-term repair options are being evaluated.
- Six SRM/IRM dry tubes were inspected in accordance with SIL 409 guidance.
- Inspected a steam separator guide rod top cone. The dryer had contacted the guide rod during installation in D2R20.

The above BWRVIP and augmented examinations resulted in no indications identified in the reactor interior surface as defined in B-N-1 or the reactor interior attachments as defined by B-N-2.

Additionally, the four Core Spray lower sectional pipes were replaced removing all known cracking in core spray piping (in-vessel). The new piping was installed with bolted connections. No underwater welding was performed as part of this replacement.