

RS-06-040

March 10, 2006

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

Dresden Nuclear Power Station, Unit 3  
Renewed Facility Operating License No. DPR-25  
NRC Docket No. 50-249

**Subject:** Additional Information Supporting Relief Request CR-28, Inservice Inspection Program Relief Regarding Reactor Pressure Vessel Longitudinal Shell Weld Examination Coverage for Third 10-Year Inservice Inspection Interval

- References:**
1. Letter from D. Bost (Exelon Generation Company, LLC) to U. S. NRC, "Relief Request CR-28, Inservice Inspection Program Relief Regarding Reactor Pressure Vessel Longitudinal Shell Weld Examination Coverage for Third 10-Year Inservice Inspection Interval," dated May 6, 2005
  2. Letter from M. Banerjee (U. S. NRC) to C. M. Crane (Exelon Generation Company, LLC), "Dresden Nuclear Power Station, Unit 3 – Request for Additional Information Related to Relief Request CR-28 (TAC No. MC7068)," dated February 22, 2006

In Reference 1, Exelon Generation Company, LLC (EGC) requested relief from American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," and the augmented examinations specified in 10 CFR 50.55a, "Codes and standards," paragraph (g)(6)(ii)(A)(2). Specifically, relief was requested for Unit 3 reactor pressure vessel longitudinal shell weld examinations where the inspection coverage achieved during the third 10-year inservice inspection interval was less than or equal to 90 percent.

In Reference 2, the NRC requested additional information to complete review of the Reference 1 relief request. In response to this request, EGC is providing the attached information.

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There are no regulatory commitments contained in this letter. Should you have any questions related to this letter, please contact Mr. Kenneth M. Nicely at (630) 657-2803.

Respectfully,

A handwritten signature in black ink that reads "Patrick R. Simpson". The signature is written in a cursive, slightly slanted style.

Patrick R. Simpson  
Manager – Licensing

Attachment: Response to Request for Additional Information

**ATTACHMENT**  
**Response to Request for Additional Information**

**NRC Request**

By letter dated March 23, 2005, the NRC approved an alternative Reactor Pressure Vessel (RPV) weld examination pursuant to Title 10 of the Code of Federal Regulations (10 CFR), Section 50.55a(a)(3)(I) and 10 CFR 50.55a(g)(6)(ii)(A)(5) for Dresden Nuclear Power Station, Units 2 and 3 (Dresden 2 and 3) that allows permanent deferral of the requirements to perform a volumetric examination of the RPV circumferential welds for the extended operating license terms for Dresden 2 and 3. This alternative requires examinations of essentially 100 percent of all longitudinal welds and examinations of approximately 2 to 3 percent of the circumferential welds at their points of intersection with the longitudinal welds.

In proposed Relief Request CR-28, Exelon did not indicate the extent to which the reduced examination volumes for the RPV longitudinal welds, as specified in the attachment to their May 6, 2005, letter, included the points of intersection with the circumferential welds. Please provide supplemental information indicating whether the reduced examination volumes for the specified Dresden 3 RPV longitudinal welds included all of the points of intersection with the circumferential welds. In addition, please indicate whether 2 to 3 percent volumetric coverage of the circumferential welds in the vicinity of the points of intersection with the longitudinal welds was achieved.

**Response**

The reduced examination volumes for the specified RPV longitudinal welds did not include all the points of intersection with the circumferential welds. The examinations were completed to the extent practical and no unacceptable flaws were identified.

The Unit 3 RPV has 14 longitudinal welds and five circumferential welds (i.e., four RPV circumferential shell welds and one RPV shell-to-flange weld). There are 28 intersections with the five circumferential welds. The determination of which intersections could be inspected was based on a review of outage reports for RPV examinations performed in the two most recent Unit 3 refueling outages, in conjunction with individuals who were involved with the inspections. Of the 28 intersections, 21 were examined, and the 2-3 percent coverage requirement was met for all circumferential welds except the 3-LHD-SC1 weld. Due to jet pump diffuser interferences, coverage was limited to 0.92 percent for the 3-LHD-SC1 weld. Additional coverage limitation details are provided in Table CR-28.1 of proposed Relief Request CR-28.

The extent to which the reduced examination volumes for the RPV longitudinal welds included points of intersection with the circumferential welds is summarized in the following table. This table also identifies the percent volumetric coverage of the circumferential welds in the vicinity of the points of intersection with the longitudinal welds.

<b>Circumferential Weld</b>	<b>Total Intersections</b>	<b>Intersections Inspected</b>	<b>Percent Coverage</b>
3-LHD-SC1	3	1	0.92%
3-SC1-SC2	6	5	4.6%
3-SC2-SC3	7	4	3.6%
3-SC3-SC4	8	8	7.3%
3-SC4-FLG (RPV shell-to-flange weld)	4	3	2.7%