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October 17, 1997

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U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attn: Document Control Desk

Subject: Dresden Nuclear Power Station Unit 3
Submittal of Core Shroud Reinspection Plan for Dresden Unit 3
NRC Docket No. 50-249

References:
(1) J. S. Perry (ComEd) to USNRC letter, dated May 22, 1996, Submitting Core Shroud Inspection Plan for Dresden Unit 3, D3R14 Refuel Outage.

(2) BWRVIP Document BWRVIP-07, Guidelines for Reinspection of BWR Core Shrouds, Dated February, 1996.

(3) BWRVIP Document BWRVIP-03, Reactor Vessel and Internals Examination Guidelines, dated October, 1995.

A comprehensive core shroud repair was installed at Dresden Unit 3 during the D3R14 refuel outage. In Reference (1) ComEd provided the core shroud inspection plan that was to be implemented along with the repair installation to ensure integrity of the core shroud over the next operating cycle. Reference (1) also included a commitment to provide the NRC staff with ComEd's plans for future inservice inspection of the core shroud and repair hardware at Dresden Unit 3 within 6 months after restart from the D3R14 refuel outage. The purpose of this letter is to provide the current ComEd reinspection plans for the Dresden Unit 3 core shroud and repair assemblies to the NRC staff per the Reference (1) commitment.

The core shroud reinspection plan for Unit 3 has been developed in accordance with Section 4 of the BWRVIP "Guidelines for Reinspection of BWR Core Shrouds" [Reference (2)], which addresses the reinspection (and pre-repair inspection) of BWRs with repaired core shrouds. This reinspection plan was also developed to interface with the core shroud repair design to assure that structural integrity of the core shroud is maintained. Section 4 of Reference (2) provides specific reinspection recommendations for repair components (repair assemblies and other components added as part of the repair), repair anchorages, horizontal and vertical core

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shroud welds not structurally replaced by the repair, and ring segment welds not structurally replaced by the repair. The Dresden Unit 3 reinspection plans and schedules for each of these items is provided below.

Repair Component Inspections

During the D3R15 refuel outage, which is the first refueling outage following installation of the core shroud repair hardware, ComEd will perform a VT-3 visual examination of accessible locking devices, critical gap or contact areas, bolting, bolt tightness (where critical), and the overall repair component for 100% of the assemblies (4 assemblies). This plan exceeds the requirements of Section 4.2 of Reference (2), which requires examination of only 25% of the repair assemblies. Thereafter, each assembly will be inspected in the same manner at least once every 10 years.

Repair Anchorage Inspections

The Dresden Unit 3 shroud hardware is anchored to the shroud support plate, which contains no load bearing welds (note that inspection recommendations for the H8 and H9 welds are currently being addressed by the BWRVIP). Per Section 4.3 of Reference (2), inspection of anchorages with no load bearing welds is encompassed within the requirements for inspection of repair components. Consequently, a VT-3 visual inspection of the anchorage of the shroud repair hardware to the shroud support plate will be performed in conjunction with the repair component inspections described above.

Horizontal and Vertical Core Shroud Welds

The shroud repair hardware at Dresden Unit 3 structurally replaces the horizontal welds H1 through H7. Therefore, no future inspection of these welds will be performed. Vertical core shroud welds will be examined per Section 4.4.1 of Reference (2), Option B. Specifically, during the D3R16 refuel outage, ComEd will inspect 25% of the equivalent length of all vertical welds from either the ID or OD surfaces using enhanced VT-1 or qualified ultrasonic methods per the guidelines in Reference (3). If cracking is detected during the examinations, expansion will be performed in accordance with the Reference (2), Section 4.4.1, Option B recommendations.

Following completion of the initial inspection, every second refuel outage ComEd will inspect 25% of the equivalent length of all vertical welds from either the ID or OD surfaces using enhanced VT-1 or qualified ultrasonic methods per the guidelines in Reference (3). Inspections shall be performed on a different 25% sample of vertical welds at each designated inspection period, such that 100% of the vertical welds are inspected every 8 operating cycles. If cracking is detected during the examinations, expansion will be performed in accordance with the Reference (2), Section 4.4.1, Option B recommendations.

Alternatively, ComEd may elect to perform examinations of the vertical welds per Section 4.4.1 of Reference (2), Option A.

Performance of the first reinspection at the D3R16 refuel outage is warranted based upon the comprehensive vertical weld inspections performed prior to installation of the repair and is consistent with the recommendations of Reference (2).

Ring Segment Welds

Core shroud ring segment welds will be examined per Section 4.4.2 of Reference (2), Option B. Specifically, during the D3R16 refuel outage, ComEd will inspect 25% of the core shroud ring segment welds using either enhanced VT-1 or qualified ultrasonic methods per the guidelines in Reference (3). If enhanced VT-1 is the method employed, inspection shall be performed of all accessible areas of the welds. If cracking is detected during the examinations, expansion will be performed in accordance with the Reference (2), Section 4.4.2, Option B recommendations.

Following completion of the initial inspection, every second refuel outage ComEd will inspect 25% of Core shroud ring segment welds using either enhanced VT-1 or qualified ultrasonic methods per the guidelines in Reference (3). If enhanced VT-1 is the method employed, inspection shall be performed of all accessible areas of the welds. Inspections shall be performed on a different 25% sample of ring segment welds at each designated inspection period, such that 100% of the ring segment welds are inspected every 8 operating cycles. If cracking is detected during the examinations, expansion will be performed in accordance with the Reference (2), Section 4.4.2, Option B recommendations.

Alternatively, ComEd may elect to perform examinations of the ring segment welds per Section 4.4.2 of Reference (2), Option A.

Performance of the first reinspection at the D3R16 refuel outage is warranted based upon the comprehensive ring segment weld inspections performed prior to installation of the repair and is consistent with the recommendations of Reference (2).

The reinspection plan for the Dresden Unit 3 core shroud and repair assemblies described above complies with all recommendations contained in the BWRVIP "Guidelines for Reinspection of BWR Core Shrouds" [Reference (2)]. Implementation of this reinspection plan will provide continued confirmation of the integrity of the repaired shroud at Dresden Unit 3.

If there are any questions concerning this matter, or need for further clarification, please contact this office.

Sincerely,

J. Stephen Perry
Site Vice President
Dresden Station

Subscribed and Sworn to before me
on this 17 day of
October, 1997.

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LISA ANN DELIMATA
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES:04/07/01

Notary Public

JSP/ts

cc: A. Bill Beach, Regional Administrator - RIII
John F. Stang, Project Manager - NRR
Ken R. Riemer, Senior Resident Inspector - Dresden
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