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ComEd

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U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

Subject: Dresden Nuclear Power Station, Unit 2
Core Spray Flaw Evaluation Report
NRC Docket No. 50-237

References: a) J. M. Heffley (ComEd) letter to USNRC transmitting "Submittal of Core Spray Inspection Plan for Dresden Unit 2," dated January 8, 1998.

b) J. F. Stang (NRC) letter to D.L. Farrar transmitting "Dresden Nuclear Power Station, Unit 2 - Evaluation of Core Spray Piping Indications (TAC No. M93590)," dated February 23, 1996

Reference (a) submitted Dresden Station's Core Spray Inspection Plan for Unit 2. Reference (b) requested that an evaluation to address plant capabilities in the detection of loose parts during power operation and the program for removing loose parts from the reactor vessel be submitted for staff review prior to restart of the unit from the next scheduled refueling outage. The purpose of this letter is to submit the results of the core spray inspection for Dresden Unit 2. During the recent refuel outage for Dresden Unit 2 (D2R15), inspections were performed of the reactor internal core spray system consisting of an ultrasonic examination of the piping welds from the reactor vessel nozzles down to the shroud and visual examinations of the sparger piping inside the shroud. All supports and brackets inside and outside the shroud were visually examined. Indications were observed at three previously unidentified locations on the core spray downcomers in the vessel annulus.

The enclosure provides a summary of the evaluation criteria, design inputs and the results of the evaluations performed to assess the extent, causes and impact of the indications on the safe operation of Dresden Unit 3. The indications are typical of Intergranular Stress Corrosion Cracking in stainless steel.

The combined assessment of the system structural margin as well as core spray system functional capacity confirm the conclusion that sufficient margin exists to operate for two cycles with the identified flaws. Dresden will continue to monitor the condition of the

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degraded core spray welds during subsequent refueling outages, per the recommendations of the Boiling Water Reactor Vessel and Internals Project (BWRVIP) guidelines "BWR Core Spray Internal Inspection and Flaw Evaluation Guidelines (BWRVIP-18)."

The Flaw Evaluation also addresses measures to detect loose parts. The BWRVIP initiative is in the process of developing other Inspection and Evaluation (I&E) Guidelines that will recommend inspections of components in the regions of the reactor vessel that are likely to collect loose parts or debris (i.e.: BWRVIP-47, CRD Guide and Stub Tubes and BWRVIP-41, Jet Pump Assembly I&E Guidelines). As these I&E Guidelines are implemented, any loose parts found will be identified and retrieved.

If there are any questions concerning the report please contact Mr. Frank Spangenberg, Regulatory Assurance Manager, at (815) 942-2920, extension 3800.

Sincerely,

J. M. Heffley
Site Vice President
Dresden Station

Enclosure - Dresden Unit 2 Core Spray Flaw Evaluation Report, SL-5197, Rev. 0

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