50-237

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

February 23, 1996

Mr. D. L. Farrar
Manager, Nuclear Regulatory Services
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 500
Downers Grove, IL 60515

SUBJECT: DRESDEN NUCLEAR POWER STATION, UNIT 2 - EVALUATION OF CORE SPRAY PIPING INDICATIONS (TAC NO. M93590)

Dear Mr. Farrar:

By letter dated September 12, 1995, Commonwealth Edison Company (ComEd) submitted an evaluation of three indications in the core spray internal piping components identified through in-vessel inspection activities performed during the current refueling outage at Dresden, Unit 2. Additional information was provided by your letter dated September 25, 1995. Based on your evaluation, you concluded that the structural integrity of the core spray internal piping will maintain adequate structural integrity for the next operating cycle without the need to repair the indications.

The inspection of the subject piping was preformed in accordance with the requested actions of NRC IE Bulletin 80-13, "Cracking in Core Spray Spargers," dated May 12, 1980. This Bulletin requires all licensees of operating boiling water reactors to perform a visual inspection of the core spray sparger and the segment of piping between the inlet nozzle and the vessel shroud every refueling outage. Ultrasonic examinations were used to size the length of the flaw indications.

During the visual inspection, crack like indications were visually observed at three components of the core spray downcomer piping. The three flawed components are a lower sparger inlet elbow and an upper and lower sparger inlet thermal sleeve collars. The length of these indications as measured by ultrasonic examinations varied from 2 inches to 5.5 inches. The indications were reported to be very tight and showed characteristics of jagging and branching, which are typical of intergranular stress corrosion cracking.

The staff's Safety Evaluation (SE) concerning the subject flaw indications is enclosed. Based on the SE, the staff concludes that the structural integrity of the subject flawed core spray components will be maintained during the next fuel cycle on the basis that the final flaw sizes at the end of the next fuel cycle will not exceed the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (Code) allowable values. Therefore, Dresden, Unit 2, can be operated safely for the next fuel cycle without repairing the subject flawed core spray piping components. Continued plant operation beyond

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the next fuel cycle should be supported by the results of re-inspection and reevaluation of the subject flaw indications. In addition, to ensure safe plant operation in the long-term, please provide an evaluation to address the plant capabilities in the detection of loose parts during power operation and the program for removing loose parts from the reactor vessel. This evaluation should be provided for staff review prior to restart of the unit from the next scheduled refueling outage.

This completes the NRC staff review of the subject evaluation and closes TAC No. M93590. If you have any questions regarding this issue, please contact me at (301) 415-1345.

Sincerely,

John F. Stang, Senior Project Manager
Project Directorate III-2
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-237

Enclosure: Safety Evaluation

cc w/encl: see next page

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