Indian Point 3 Nuclear Power Plant P.O. Box 215 Buchanan, New York 10511 914 739.8200



April 26, 1991 IP3-91-026

Docket No. 50-286 License No. DPR-64

Document Control Desk
Mail Station PI-137
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Sir:

The attached Licensee Event Report LER 91-006-00 is hereby submitted in accordance with the requirements of 10CFR50.73. This event is of the type defined in the requirements for 'Other' per 10CFR50.73 and is submitted as a Voluntary LER.

Very truly yours,

Jøseph Russell Resident Manager

Indian Point Three Nuclear Power Plant

vc/rj Attachment

cc: Mr. Thomas T. Martin
Regional Administrator
Region 1
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, Pennsylvania 19406

INPO Records Center Suite 1500 1100 Circle 75 Parkway Atlanta, Georgia 30339

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This LER is a voluntary submittal detailing the New York Power Authority's response to Generic Letter 89-10. On November 20, 1990, with the reactor in cold shutdown, the plant engineers conducted a design basis review on various safety-related valves. The engineers determined that eleven valves did not meet new criteria established in Generic Letter 89-10. Problems identified included inadequate spring packs, gear ratios, torque settings, and motors. All eleven valves were modified to meet Generic Letter 89-10 criteria.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104 EXPIRES: 8/31/88

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DESCRIPTION OF THE EVENT

On November 20,1990, with the reactor in cold shutdown and the core being cooled by the residual heat removal system, plant engineers conducted a design basis review on a selected number of MOVs. It was determined that eleven valves did not meet the design basis criteria for misposition events as established in Generic Letter 89-10 criteria. The deficiencies identified in the review were:

- o Inadequate spring packs
- o Inadequate gear ratios
- o Inadequate torque settings
- o Inadequate motors

INVESTIGATION OF THE EVENT

The 11 valves did not conform to GL 89-10 criteria as follows:

- 1. Motor-operated valves MOV-746, 747, 899A and 899B are the residual heat exchanger branch isolation valves. These valves may not have developed adequate torque with their original motors if reduced voltage occurred while the valves were repositioned during design basis events (DBE).
- 2. Motor-operated valves MOV-888A, 888B are valves from the residual heat removal system to the high head safety injection system. Motor-operated valve MOV-1810 is the refueling water storage tank (RWST) isolation valve to the suction of the safety injection pumps (SI pumps). The original spring packs in these valves were found to be undersized.
- Motor-operated valve MOV-744 is the residual heat removal pumps' common discharge isolation valve. Motor-operated valves MOV-1869A and 1869B are the residual heat exchanger outlet isolation valves to the high head pumps. The original motors in these valves were found to be insufficient in providing adequate torque during a worst case valve misposition DBE.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

4. Motor-operated valve MOV-1802A is the discharge isolation valve for 31 containment recirculation pump. The originally established gear ratio was found to be too low.

CAUSE OF THE EVENT

The original selection of gear ratios, motors and spring packs was accomplished under the engineering practice and motor-operated valve technology available at the time of initial plant design.

New engineering technology and performance equipment available today for testing MOVs has resulted in more precise evaluation of operating characteristics for MOVs.

CORRECTIVE ACTIONS

All deficient motor-operated valves were upgraded to satisfy the Generic Letter 89-10 requirements.

ANALYSIS OF THE EVENT

This report is being submitted as a voluntary LER. Prior to the issuance and implementation of Generic Letter 89-10, all 11 valves met the acceptance criteria established in the plant's FSAR and Technical Specifications. There are no safety concerns as the result of this event.

SECURING FROM THE EVENT

All valves retested satisfactory in November 1990. The plant went above cold shutdown on December 13, 1990.