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

April 5, 1994
IPN-94-042

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

SUBJECT: Indian Point 3 Nuclear Power Plant
Docket No. 50-286
Information Regarding 480 Volt Safety
Injection Pump Circuit Breaker Design

Dear Sir:

The purpose of this letter is to advise the NRC of a design feature at Indian Point 3 that is related to NRC Information Notice 93-17, "Safety Systems Response To Loss of Coolant and Loss of Offsite Power."

The Authority has identified a design feature in the control circuit of the 480 volt load breakers (Westinghouse Type DS-416) to the safety injection (SI) pumps that could prevent their automatic re-sequencing. The SI pump 480 volt breaker closing circuit is designed so that the closing spring begins re-charging only after the breaker is tripped. The SI pump 480 volt breakers also have an anti-pump feature to prevent breaker closing if a trip signal is also present. In a scenario where the SI pumps start on a safety injection signal and a loss of offsite power occurs some time afterward, the closing spring would not begin to re-charge until the breaker is tripped by the loss of offsite power. The closing spring takes approximately 5 to 6 seconds to re-charge. Since the automatic diesel load sequencing logic is designed to give the SI pump breakers a close signal in 3 seconds after reenergizing the 480 volt bus with a diesel generator, a "maintain close" signal can be applied before the spring is charged. The design of the anti-pump circuit can therefore result in lockout of the breaker.

The Authority made a four hour report in accordance with the requirements of 10 CFR 50.72 when this design feature was identified. No Licensee Event Report was submitted because it was determined that the Indian Point 3 design basis is a loss of coolant accident (LOCA) concurrent with a loss of offsite

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power (LOOP). This conclusion was not altered by Information Notice 93-17 which postulates a LOCA with subsequent loss of offsite power based on General Design Criteria (GDC) 17. Indian Point 3 was designed to an earlier version of the GDC dated July 11, 1967. An evaluation of compliance with GDC 17 found in FSAR Section 1.3 confirms that the design was for a LOCA concurrent with a LOOP .

The Authority has requested Westinghouse to evaluate the design for generic industry applicability and for 10 CFR Part 21 reportability. The Westinghouse Owners Group Regulatory Review Group is reviewing the Indian Point 3 design and will consider what action to take.

There are no commitments made in this letter. If you have any questions pertaining to this matter, please call Mr. Robert Sergi at (914) 681-6527.

Very truly yours,

L. M. Hill
Resident Manager
Indian Point 3 Nuclear Power Plant

LMH/vjm

cc: Mr. Thomas T. Martin
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