



December 28, 1984
IPN-84-65

Director of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

ATTENTION: Mr. Steven A. Varga, Chief
Operating Reactors Branch No.1
Division of Licensing

SUBJECT: Indian Point 3 Nuclear Power Plant
Docket No. 50-286
Reactor Trip Breakers-Periodic
Maintenance and Trending Programs;
GL 83-28, Items 4.2.1 and 4.2.2

REFERENCES: 1. NYPA letter to NRC, dated
11/7/83 (IPN-83-91), regarding
GL 83-28 "Salem ATWS Events".
2. NRC letter dated 11/16/84
request for additional information
on GL 83-28, Items 4.2.1 and 4.2.2.

Dear Sir:

Reference 1 served to transmit the Indian Point 3 (IP-3) preventative maintenance and surveillance program for the reactor trip breakers as requested by GL 83-28, Item 4.2 (Reactor Trip System Reliability). In order to complete the NRC review of the subject item, you requested via Reference 2 additional detailed information.

The IP-3 Reactor Trip System utilizes Westinghouse DB-50 circuit breakers. An acceptable maintenance program for this type of breaker is contained in the NRC approved Westinghouse Maintenance Program for DB-50 Reactor Trip Switchgear, Rev.0, dated October 14, 1983. The IP-3 maintenance program and procedures comply with the recommendations outlined in the above Westinghouse program.

The following items are performed in accordance with provisions of the Westinghouse program on a twelve month basis:

1. Verification of trip bar freedom;

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2. Verification of operating mechanism alignment and freedom, using the procedure identified in the Westinghouse program;
3. Retaining ring verification, 33 places;
4. Verification of nut and bolt tightness;
5. Verification of pole bases physical condition;
6. Verification of arcing and main contacts physical condition, using the procedure identified in the Westinghouse program;
7. Verification of insulating link's physical condition;
8. Verification of wiring insulation and termination physical condition;
9. Verification of arc chute physical condition;
10. Verification of breaker cleanliness;
11. Undervoltage Trip Attachment (UVTA) dropout voltage test and lubrication, using the procedure identified in the Westinghouse program; (to be included by 2/1/85)
12. Shunt Trip Attachment (STA) operation verification;
13. Verification of operation of auxiliary switches;
14. Inspection of positioning lever condition, using the procedure identified in Westinghouse program;
15. Functional test of the breaker prior to returning it to service, using the procedure identified in the Westinghouse program;
16. Verification of cell interlock operation;
17. Examination and cleaning of breaker enclosure; (to be included by 2/1/85)
18. Functional test of the breaker prior to returning to service.

The breaker response time for the undervoltage trip is performed on a refueling interval basis.

In addition, the measurement of the trip force required using Westinghouse's procedures is presently being reevaluated by several utilities (including IP-3) and Westinghouse. Recent results of this test, performed by various utilities, appear to be inconclusive.

However, this item will be considered for inclusion in the IP-3 periodic maintenance program at such time when an appropriate testing procedure is developed.

Regarding the Reactor Trip Breaker forecast for degradation of operability the following parameters are being trended:

1. Breaker response time; (I&C Department)
2. Dropout voltage for undervoltage trip;
(Maintenance Department)
3. Breaker insulation; (Maintenance Department).

The trip force is not being trended at this time due to reasons discussed above.

Should you or your staff have any questions regarding this matter, please contact Mr. P. Kokolakis of my staff.

Very truly yours,



Corbin A. McNeill, Jr.
Senior Vice President
Nuclear Generation

cc: Resident Inspector's Office
Indian Point Unit 3
U.S. Nuclear Regulatory Commission
P.O. Box 66
Buchanan, New York 10511