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MEMORANDUM FOR: Thomas A. Ippolito, Chief
Operating Reactors Branch #2
Division of Licensing

FROM: Robert J. Bosnak, Chief
Mechanical Engineering Branch
Division of Engineering

SUBJECT: NINE MILE POINT INSERVICE TESTING PROGRAM

Plant Name: Nine Mile Point Nuclear Station
Docket No.: 50-220
Responsible Branch & Project Manager: Phil Polk, ORB#2
Review Branchs Involved: Mechanical Engineering Branch
Description of Task: Review and Evaluate Nine Mile Point Inservice
Testing Program
Review Status: Requesting Additional Information

The Mechanical Engineering Branch, Division of Engineering, has reviewed the Nine Mile Point Inservice Testing Program. Additional information in response to the attached questions is essential to the completion of our review. Please request the licensee to have the information available for a meeting. From past experience we have found it necessary to arrange a meeting with the licensee at the plant to review in detail their response and to seek answers to additional questions that inevitably develop from our evaluation of their responses. To expedite our review, we request a meeting with Nine Mile Point on October 7 and 8, 1980 at the Nine Mile Point Nuclear Station.

Robert J. Bosnak, Chief
Mechanical Engineering Branch
Division of Engineering

Enclosure:
As stated

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DATE	9/16/80	9/17/80	9/17/80		

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**QUESTIONS AND COMMENTS CONCERNING
THE NIAGARA MOHAWK POWER COMPANY IN-SERVICE
TESTING PROGRAM FOR NINE MILE POINT UNIT 1**

(Ref: Docket Number 50-220)



1. Valve Testing Program

A. General Questions and Comments

1. Provide the P&ID that shows the Control Rod Drive Hydraulic System.
2. Provide the P&ID that shows the Drywell Cooling System.
3. Does the Fire Protection System provide a back-up for any safety related system.
4. Provide the P&ID that shows the Reactor Sampling System.
5. All excess flow check valves in instrument lines penetrating the drywell or torus must be included in the IST program and categorized A/C.

B. Main Steam

1. Provide more specific technical information why valves 01-01, 01-02, 01-03, and 01-04 cannot be exercised during power operation or cold shutdown.
2. Review the safety related functions of valves NR-108A through F to determine if they should be categorized B/C.
3. Review the safety related function of valves 34-01 and 34-02 to determine if they should be categorized A and A/C respectively. Provide the specific technical basis why these valves cannot be exercised during power operation or cold shutdown.
4. Review the safety related function of valve 01-07 through 12 to determine if they should be included in the IST program and categorized E.



C. Feedwater

1. Review the safety related function of valves 31-03 and 31-04 to determine if they should be categorized A. Provide more specific information why these valves cannot be exercised during power operation and cold shutdown.
2. What is the safety related function of check valves 31-01 and 02?

D. Reactor Cleanup

1. Review the safety related function of valves 33-01, 02, and 04 to determine if they should be categorized A.
2. What is the safety related function of check valve 33-03?

E. Shutdown Cooling

1. Review the safety related function of valves 38-01, 02, and 13 and 38-12 to determine if they should be categorized A and A/C respectively. Provide more specific technical information why these valves cannot be exercised during power operation or cold shutdown.

F. Emergency Condenser

1. Review the safety related function of valves 39-07, 08, 09, and 10 to determine if they should be categorized A.
2. Provide more specific technical information why valves 39-05 and 06 cannot be exercised during power operation or cold shutdown. Review the safety related functions of these valves to determine if they should be categorized A.



3. What is the specific technical basis for not stroke timing category B valves 60-17 and 18?
4. Review the safety related functions of valves 39-03 and 04 to determine if they should be categorized A/C. Provide the specific technical basis why these valves cannot be exercised during power operation or cold shutdown.
5. What is the safety related function of valves 39-11 through 14?
6. Review the safety related function of the following valves to determine if they should be included in the IST program and categorized as indicated.

Category B

05-01, 02, 03, and 04
60-13
BV60-03 and 04

Category E

39-01 and 02
60.1-14, 15, 16, and 17
100-68 and 69

6. Core Spray

1. Review the safety related functions of valves 81-01, 02, 21, and 22 to determine if they should be categorized A.
2. Are check valves 81-07, 08, 27, and 28 full stroke exercised quarterly?
3. Provide the specific technical basis why valves 40-03 and 13 cannot be exercised during power operation or cold shutdown.
4. Review the safety related function of valves 40-05 and 06 to determine if they should be categorized A.



5. Provide the specific technical basis why category B valves 93-51 and 52 are not stroke timed.
6. Review the safety related function of valves 40-01, 02, 09, 10, 11, and 12 to determine if they should be categorized A.
7. Review the safety related functions of valves 81-31 and 11 to determine if they should be categorized A/C. Do these valves perform as a containment leak limiting barrier?
8. Review the safety related function of valve 58.1-01 to determine if it should be included in the IST program and categorized A.

H. Containment Spray and Raw Water

1. Review the safety related functions of valves 80-01, 02, 21, and 22 to determine if they should be categorized A.
2. Provide the specific technical basis why valves 93-25, 26, 27, 28, 49, and 50 are not stroke timed.
3. Provide more specific technical information why check valves 80-05, 06, 25, and 26 cannot be full stroke exercised during power operation or cold shutdown.
4. Provide more specific technical information why check valves 80-17, 18, 37, 38, 19, 39, 66, 68, 65, and 67 cannot be full stroke exercised during power operation or cold shutdown.
5. Provide more specific technical information why check valves 93-09, 10, 11, and 12 cannot be full stroke exercised during power operation.
6. Review the safety related functions of valves 80-15, 16, 35, and 36 to determine if they should be categorized A.



7. Review the safety related function of the following valves to determine if they should be included in the IST program and categorized as indicated.

Category A/C

CS-C-4

Category A/E

80-43

Category E

80-11, 12, 31, and 32
80-40, 41, 44, and 45
93-21, 22, 23, and 24

I. Liquid Poison

1. Review the safety related functions of check valves 42.1-02 and 03 to determine if they should be categorized A/C. Provide the specific technical basis why these valves cannot be exercised during power operation or cold shutdown.
2. Provide the specific technical basis why check valves 42-19 and 20 cannot be full stroke exercised during power operation.
3. Review the safety related function of valves 42-01 and 02, and 41-06, 18, 12, and 13 to determine if they should be included in the IST program and categorized E.



J. Diesel Raw Water

1. Provide a P&ID that shows the diesel raw water system.
2. Provide the specific technical basis why check valves DG-CW-1, 2, 3, and 4 cannot be full stroke exercised during power operation.

K. Drywell and Torus Isolations

1. Review the safety related function of the following valves to determine if they should be included in the IST program and categorized as indicated.

Category A

70-92
70-94
201.2-25
201.2-26
201.2-27
201.2-28
201.2-29
201.2-30
83.1-09
83.1-10
83.1-11
83.1-12
201-09
201-10
201-31
201-32
201.2-03
201.2-32
201-05

Category A/C

70-93
70-96
201.2-67
201.2-68
201.2-39
201.2-40
301-113
201.2-70
201.2-71
63.1-01
63.1-02

Category C

68-01, 02, 03, and 04



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Category A (continued)

- 201-07
- 201-16
- 201-17
- 201.2-06
- 201.2-33
- 201.2-23
- 201.2-24

II. Pump Testing Program

1. Provide the specific technical basis that justifies quarterly pump testing instead of monthly pump testing as required by Section XI.
2. Are the Core Spray and Containment Spray Pumps submerged pumps as indicated by Note 6?
3. Core Spray Topping Pump suction pressure (Pi) must be measured; using reference water level as indicated by Note 2 does not apply.
4. What alternate test methods have been considered to measure vibration amplitude (V) on the Containment Spray Raw Water and Diesel Raw Water Pumps?
5. How are inlet pressure (Pi) and flow (Q) measured for the Liquid Poison Pumps?
6. Where do the CRD pumps take a suction from?
7. How is inlet pressure (Pi) measured for the Diesel Raw Water Pumps?
8. Do the Spent Fuel Pool Cooling Pumps have an emergency power supply?



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