NIAGARA MOHAWK

NIAGARA MOHAWK POWER CORPORATION/300 ERIE BOULEVARD WEST, SYRACUSE, N.Y. 13202/TELEPHONE (315) 474-1511

July 24, 1986
(NMP2L 0792)

Ms. Elinor G. Adensam, Director
BWR Project Directorate No. 3
U.S. Nuclear Regulatory Commission
7920 Norfolk Avenue
Washington, DC 20555

Dear Ms. Adensam:

Re: Nine Mile Point Unit 2
Docket No. 50-410

Niagara Mohawk is requesting a change to Technical Specification definition 1.42 entitled, "SOURCE CHECK." The proposed change, as well as the justification, is attached.

Very truly yours,

C. V. Mangan
Senior Vice President

KWK:ja
1820G

Attachment

xc: William Cook, NRC Resident Inspector
Project File (2)

8608010058 4pp.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)

Niagara Mohawk Power Corporation) Docket No. 50-410

(Nine Mile Point Unit 2))

AFFIDAVIT

C. V. Mangan, being duly sworn, states that he is Senior Vice President of Niagara Mohawk Power Corporation; that he is authorized on the part of said Corporation to sign and file with the Nuclear Regulatory Commission the documents attached hereto; and that all such documents are true and correct to the best of his knowledge, information and belief.

C V Mangan

Subscribed and sworn to before me, a Notary Public in and for the State of New York and County of Onondaga, this 24th day of July, 1986.

Christine Austin
Notary Public in and for
Onondaga County, New York

My Commission expires:
CHRISTINE AUSTIN
Notary Public in the State of New York
Qualified in Onondaga Co. No. 4787687
My Commission Expires March 30, 1987

Subject: Justification for change to definition 1.42 entitled, "SOURCE CHECK" to delete "to verify alarm and/or trip functions and channel failure trips."

Niagara Mohawk is requesting the change to definition 1.42 based on the following reasons:

1. The present version of the Technical Specification definition is inconsistent with NUREG-0472, Revision 3, Draft 7, double prime.

2. The present version of the Technical Specification definition is inconsistent with the following plants' Technical Specification definitions:

   a. River Bend Station
   b. Susquehanna Steam Electric Station, Unit No. 2
   c. WPPSS Nuclear Project No. 2
   d. LaSalle County Station, Unit No. 2
   e. Limerick Generating Station, Unit No. 1
   f. Fermi-2

SHUTDOWN MARGIN

1.39 (Continued)

assumed to be fully withdrawn and the reactor is in the shutdown condition, cold (i.e., 68°F), and xenon free.

SITE BOUNDARY

1.40 The SITE BOUNDARY shall be that line around the Nine Mile Point Nuclear Station beyond which the land is not owned, leased, or otherwise controlled by the Niagara Mohawk Power Corporation or the New York State Power Authority.

SOLIDIFICATION

1.41 SOLIDIFICATION shall be the conversion of wet wastes into a form that meets shipping and burial ground requirements.

SOURCE CHECK

1.42 A SOURCE CHECK shall be the qualitative assessment of channel response ~~to verify alarm and/or trip functions and channel failure trips~~ when the channel sensor is exposed to a source of increased activity.

STAGGERED TEST BASIS

1.43 A STAGGERED TEST BASIS shall consist of:

a. A test schedule for n systems, subsystems, trains, or other designated components obtained by dividing the specified test interval into n equal subintervals.

b. The testing of one system, subsystem, train, or other designated component at the beginning of each subinterval.

THERMAL POWER

1.44 THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.

TURBINE BYPASS SYSTEM RESPONSE TIME

1.45 The TURBINE BYPASS SYSTEM RESPONSE TIME consists of two time intervals:

a. Time from initial movement of the main turbine stop valve or control valve until 80% of turbine bypass capacity is established, and

b. the time from initial movement of the main turbine stop valve or control valve until initial movement of the turbine bypass valve.

Either response time may be measured by any series of sequential, overlapping, or total steps, so that both entire response time components are measured.

Change to Technical Definition 1.38

"Secondary Containment Integrity"

Subject: Justification for change to Technical Definition 1.38, "Secondary Containment Integrity"

The requested change is enclosed. The change reflects the Nine Mile Point Unit 2 design. This change is made in order to make definition 1.38 consistent with 4.6.5.1.b.2 on page 3/4 6-37.

CHANGE REQUESTED FOR CERTIFICATION

REACTOR PROTECTION SYSTEM RESPONSE TIME

1.35 (Continued)

until deenergization of the scram pilot valve solenoids. The response time may be measured by any series of sequential, overlapping, or total steps so that the entire response time is measured.

REPORTABLE EVENT

1.36 A REPORTABLE EVENT shall be any of those conditions specified in 10 CFR 50.73.

ROD DENSITY

1.37 ROD DENSITY shall be the number of control rod notches inserted as a fraction of the total number of control rod notches. All rods fully inserted is equivalent to 100% ROD DENSITY.

SECONDARY CONTAINMENT INTEGRITY

1.38 SECONDARY CONTAINMENT INTEGRITY shall exist when:

a. All reactor building and auxiliary bay penetrations required to be closed during accident conditions are either:

   1. Capable of being closed by an OPERABLE reactor building automatic isolation system, or

   2. Closed by at least one manual valve, blind flange, or deactivated automatic damper secured in its closed position, except as provided in Table 3.6.5.2-1 of Specification 3.6.5.2.

b. All auxiliary bay hatches are closed and sealed.

c. The standby gas treatment system is in compliance with the requirements of Specification 3.6.5.3.

d. At least one door in each access to the reactor building and auxiliary bays is closed ~~except~~ during normal entry and exit.

e. The sealing mechanism associated with each reactor building and auxiliary bay penetration (e.g., welds, bellows, or O-rings) is OPERABLE.

f. The pressure within the reactor building and auxiliary bays is less than or equal to the value required by Specification 4.6.5.1.a.

SHUTDOWN MARGIN

1.39 SHUTDOWN MARGIN shall be the amount of reactivity by which the reactor is subcritical or would be subcritical assuming all control rods are fully inserted except for the single control rod of highest reactivity worth which is

Change to Technical Specification in the Area of Main Steam Isolation Valve Leak Rate

Subject: Justification for Technical Specification Change to Main Steam Isolation Valve Leak Rate

The current Nine Mile Point Unit 2 Technical Specification Table 3.6.1.2-1 allows six standard cubic foot per hour (scfh) of leak rate per Main Steam Isolation Valve (MSIV). This leak rate is based on potential bypass analytical limit of 6 scfh of leakage through the valve under Loss-of-Coolant-Accident (LOCA) condition. To ensure that the MSIV leak rate is within the Technical Specification limit, the MSIV ball valve is leak tested through a test connection such that the volume between the valve's two seats is pressurized to test condition. The flow resistance under this test condition (two seats in parallel) is less than the flow resistance that would be encountered under the LOCA condition (two seats in series). Thus, the leak rate when testing the valves between the seats could exceed 6 scfh but still satisfy the LOCA potential bypass analytical limit for leakage through the valve. Calculations show that a leak rate under field test condition of 14.86 scfh (valve seats in parallel) is equivalent to the LOCA bypass analytical limit of 6 scfh with the valve seats in series. Niagara Mohawk, therefore, requests changes to the Technical Specification allowable leakage rate for the MSIVs to reflect the actual test configuration. The requested change to the Technical Specifiction Table 3.6.1.2-1 is attached.

CHANGE REQUESTED TO SUPPORT OPERATIONAL FLEXIBILITY

3/4.6 CONTAINMENT SYSTEMS

3/4.6.1 PRIMARY CONTAINMENT

PRIMARY CONTAINMENT INTEGRITY

LIMITING CONDITIONS FOR OPERATION

3.6.1.1 PRIMARY CONTAINMENT INTEGRITY shall be maintained.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2*, and 3.

ACTION:

Without PRIMARY CONTAINMENT INTEGRITY, restore PRIMARY CONTAINMENT INTEGRITY within 1 hour or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.1 PRIMARY CONTAINMENT INTEGRITY shall be demonstrated:

a. After each closing of each penetration subject to Type B testing, except the primary containment air locks, if opened following Type A or B test, by leak rate testing the seals with gas at Pa, 39.75 psig, and verifying that when the measured leakage rate for these seals is added to the leakage rates determined pursuant to Surveillance Requirement 4.6.1.2.d for all other Type B and C penetrations, the combined leakage rate is less than or equal to 0.60 La.

b. At least once per 31 days by verifying that all primary containment penetrations** not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in position, except as provided in Table 3.6.3-1 of Specification 3.6.3.

c. By verifying each primary containment air lock is in compliance with the requirements of Specification 3.6.1.3.

d. By verifying the suppression chamber is in compliance with the requirements of Specification 3.6.2.1.

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* See Special Test Exception 3.10.1

** Except valves, blind flanges, and deactivated automatic valves which are located inside the containment, and are locked, sealed, or otherwise secured in the closed position. These penetrations shall be verified closed during each COLD SHUTDOWN except such verification need not be performed when the primary containment has not been de-inerted since the last verification or more often than once every 92 days.

CONTAINMENT SYSTEMS

PRIMARY CONTAINMENT

PRIMARY CONTAINMENT LEAKAGE

LIMITING CONDITIONS FOR OPERATION

3.6.1.2 Primary containment leakage rates shall be limited to:

a. An overall integrated leakage rate of less than or equal to:

   1. La, 1.1% by weight of the containment air every 24 hours at Pa, 39.75 psig, or

   2. Lt, 0.72% by weight of the containment air every 24 hours at a reduced pressure of Pt, 20.0 psig.

b. A combined leakage rate of less than or equal to 0.60 La for all penetrations and all valves listed in Table 3.6.3-1, except for main steam line isolation valves* (and valves which are hydrostatically leak tested per Table 3.6.3-1), subject to Type B and C tests when pressurized to Pa, 39.75 psig.

c. A combined leakage rate of less than or equal to 1 gpm times the total number of containment isolation valves in hydrostatically tested lines which penetrate the primary containment, when tested at 1.10 Pa, 43.73 psig.

d. Less than or equal to that specified in Table 3.6.1.2-1 through valves in lines that are potential bypass leakage pathways when tested at 40.0 psig.

APPLICABILITY: When PRIMARY CONTAINMENT INTEGRITY is required per Specification 3.6.1.1.

ACTION:

With:

a. The measured overall integrated primary containment leakage rate exceeding 0.75 La or 0.75 Lt, as applicable, or

* Exemption to Appendix J of 10 CFR 50.

LIMITING CONDITIONS FOR OPERATION

3.6.1.2 (Continued)

ACTION:

b. The measured combined leakage rate for all penetrations and all valves listed in Table 3.6.3-1, except for main steam line isolation valves* and valves which are hydrostatically leak tested per Table 3.6.3-1, subject to Type B and C tests exceeding 0.60 La, or

c. The measured combined leakage rate for all containment isolation valves in hydrostatically tested lines which penetrate the primary containment exceeding 1 gpm times the total number of such valves, or

d. The measured leakage rate through any valve that is part of a potential bypass leakage pathway exceeding the limit specified in Table 3.6.1.2-1

Restore:

a. The overall integrated leakage rate(s) to less than or equal to 0.75 La or 0.75 Lt, as applicable, and

b. The combined leakage rate for all penetrations and all valves listed in Table 3.6.3-1, except for main steamline isolation valves* and valves which are hydrostatically leak tested per Table 3.6.3-1, subject to Type B and C tests to less than or equal to 0.60 La, and

c. The combined leakage rate for all containment isolation valves in hydrostatically tested lines which pentrate the primary containment to less than or equal to 1 gpm times the total number of such valves, and

d. The leakage rate to less than or equal to that specified in Table 3.6.1.2-1 for any valve that is part of a potential bypass leakage path.

prior to increasing reactor coolant system temperature above 200°F.

* Exemption to Appendix J to 10 CFR 50.

SURVEILLANCE REQUIREMENTS

4.6.1.2 The primary containment leakage rates shall be demonstrated at the following test schedule and shall be determined in conformance with the criteria specified in Appendix J of 10 CFR 50 using the methods and provisions of ANSI N45.4-1972:

a. Three Type A overall integrated containment leakage rate tests shall be conducted at 40 ± 10-month intervals during shutdown at Pa, 39.75 psig or at Pt, 20.0 psig, during each 10-year service period. The third test of each set shall be conducted during the shutdown for the 10-year plant inservice inspection.

b. If any periodic Type A test fails to meet 0.75 La or 0.75 Lt, as applicable, the test schedule for subsequent Type A tests shall be reviewed and approved by the Commission. If two consecutive Type A tests fail to meet 0.75 La or 0.75 Lt, as applicable, a Type A test shall be performed at least every 18 months until two consecutive Type A tests meet 0.75 La or 0.75 Lt, as applicable, at which time the above test schedule may be resumed.

c. The accuracy of each Type A test shall be verified by a supplemental test which:

   1. Confirms the accuracy of the test by verifying that the difference between the supplemental data and the Type A test data is within 0.25 La or 0.25 Lt, as applicable.

   2. Has duration sufficient to establish accurately the change in leakage rate between the Type A test and the supplemental test.

   3. Requires the quantity of gas injected into the containment or bled from the containment during the supplemental test to be equivalent to at least 25% of the total measured leakage at Pa, 39.75 psig, or Pt, 20.0 psig, as applicable.

d. Type B and C tests shall be conducted with gas at Pa, 39.75 psig,* at intervals no greater than 24 months except for tests involving:

   1. Air locks,

   2. Main steam line isolation valves and the remainder of the valves specified in Table 3.6.1.2-1.

   3. Containment isolation valves in hydrostatically tested lines which penetrate the primary containment, and

   4. Purge supply and exhaust isolation valves with resilient seals.

* Unless a hydrostatic test is required per Table 3.6.3-1.

SURVEILLANCE REQUIREMENTS

4.6.1.2 (Continued)

e. Air locks shall be tested and demonstrated OPERABLE per Surveillance Requirement 4.6.1.3.

f. Main steam line isolation valves and the remainder of the valves specified in Table 3.6.1.2-1 shall be leak tested at least once per 18 months.

g. Type B tests for penetrations employing a continuous leakage monitoring system shall be conducted at Pa, 39.75 psig, at intervals no greater than once per 3 years.

h. Leakage from isolation valves that are sealed with fluid from a seal system may be excluded, subject to the provisions of Appendix J. Section III.C.3, when determining the combined leakage rate provided the seal system and valves are pressurized to at least 1.10 Pa, 43.73 psig, and the seal system capacity is adequate to maintain system pressure for at least 30 days.

i. Containment isolation valves in hydrostatically tested lines which penetrate the primary containment shall be leak tested at least once per 18 months.

j. Purge supply and exhaust isolation valves with resilient material seals shall be tested and demonstrated OPERABLE per Surveillance Requirements 4.6.1.7.2.

k. The provisions of Specification 4.0.2 are not applicable to Surveillance Requirements 4.6.1.2.a and 4.6.1.2.d.

FINAL DRAFT

TABLE 3.6.1.2-1

ALLOWABLE LEAK RATES THROUGH VALVES IN

POTENTIAL BYPASS LEAKAGE PATHS

LINE DESCRIPTION	VALVE MARK NO	TERMINATION REGION	PER VALVE* LEAK RATE, SCFH
4 Main Steam Lines	2MSS*HYV6A, B, C, D 2MSS*HYV7A, B, C, D	Turbine Bldg.	6.0**
Main Steam Drain Line (Inboard)	2MSS*MOV111, 112	Turbine Bldg.	1.875
Main Steam Drain Line (Outboard)	2MSS*MOV208	Turbine Bldg.	0.625
4 Postaccident Sampling Lines	2CMS*SOV77A, B 2CMS*SOV74A, B 2CMS*SOV75A, B 2CMS*SOV76A, B	Radwaste Tunnel	0.2344
Drywell Equipment Drain Line	2DER*MOV119 2DER*MOV120	Radwaste Tunnel	1.25
Drywell Equipment Vent Line	2DER*MOV130 2DER*MOV131	Radwaste Tunnel	0.625
Drywell Floor Drain Line	2DFR*MOV120 2DFR*MOV121	Radwaste Tunnel	1.875
Drywell Floor Vent Line	2DFR*MOV139 2DFR*MOV140	Radwaste Tunnel	0.9375
RWCU Line	2WCS*MOV102 2WCS*MOV112	Turbine Bldg.	2.5
Feedwater Line	2FWS*AOV23A 2FWS*V12A 2FWS*AOV23B 2FWS*V12B	Turbine Bldg.	12.0
CPS Supply Line to Drywell	2CPS*AOV104 2CPS*AOV106	Standby Gas Trtmt. Area	4.38
CPS Supply Line to Drywell	2CPS*SOV120 2CPS*SOV122	Standby Gas Trtmt. Area	0.625
CPS Supply Line to Supp. Chamber	2CPS*AOV105 2CPS*AOV107	Standby Gas Trtmt. Area	3.75
CPS Supply Line to Supp. Chamber	2CPS*SOV119 2CPS*SOV121	Standby Gas Trtmt. Area	0.625

* Test conditions: air medium, 40 psig.

** This leak rate is applicable if the MSIV's are tested by pressurizing the line on the upstream side of the valve. If the valves are pressurized in between the valve seats during testing, the equivalent allowable total leak rate past both seats per valve is 14.86 SCFH.

JUN 25 1986

Subject: Changes to Technical Specifications in the area of fire protection program

The requested changes and justification for these changes were submitted to you in a letter dated July 3, 1986. Enclosed is a copy of that letter for your information.

CHANGE REQUESTED TO SUPPORT OPERATIONAL FLEXIBILITY

Changes to Technical Specifications
in the Area of Fire Protection Program