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November 27, 2000
NMP2L 2000

United States Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

RE: Docket No. 50-410
Licensee Event Report 00-16

Gentlemen:

In accordance with 10 CFR 50.73(a)(2)(v), we are submitting Licensee Event Report 00-16,
"Primary Containment Purge Supply Isolation Valves Failed their Leak Rate Test."

Very truly yours,



John T. Conway
Vice President Nuclear Generation

JTC/CES/cld
Attachment

xc: Mr. H. J. Miller, NRC Regional Administrator, Region I
Mr. G. K. Hunegs, NRC Senior Resident Inspector
Records Management

JE22

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 90.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503

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Primary Containment Purge Supply Isolation Valves Failed their Leak Rate Test

OTHER FACILITIES INVOLVED (8)

DOCKET NUMBER(S)

N/A

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

LICENSEE CONTACT FOR THIS LER (12)

TELEPHONE NUMBER

(315) 349-7035

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

YEAR

☐ NO

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single space typewritten lines) (16)

On October 28, 2000, a mass flow leakage test performed on Primary Containment Purge Supply Valve 2CPS-V1, revealed that leakage past the valve exceeded the measurement capability of the test instrumentation. Based on the leak rate exceeding the capability of the test instrumentation, Niagara Mohawk Power Corporation concluded that the leakage past Valve 2CPS-V1 exceeded the primary containment leakage limits in Technical Specifications. Previously, the normal primary containment isolation valves, 2CPS*AOV105 and 2CPS*AOV107, were inoperable and Valve 2CPS-V1 was being used as primary containment boundary.

The complete cause and corrective actions for this condition will be provided in a supplement to this licensee event report by December 20, 2000.

**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)				PAGE (3)
		YEAR		SEQUENTIAL NUMBER		
					REVISION NUMBER	
Nine Mile Point Unit 2	05000410	00	-	16	- 00	02 OF 04

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

I. DESCRIPTION OF EVENT

On May 4, 2000, the inboard Primary Containment Purge Supply Isolation Valve 2CPS*AOV107 failed to meet its Technical Specification Table 3.6.1.2-1 leakage requirement and was declared inoperable. Due to the system configuration, Valve 2CPS*AOV105 was not able to be periodically tested with Valve 2CPS*AOV107 leaking. On May 10, 2000 Valve 2CPS-V1, a manual resilient seal butterfly valve, was closed and satisfactorily tested, which provided the isolation boundary for primary containment and met the requirements of Technical Specification 3.6.1.2 and 3.6.1.7.

In July 2000, Valve 2CPS-V1 was again satisfactorily tested. On September 20, 2000, Valve 2CPS-V1 was manipulated to support the purging of the Suppression Chamber for the planned and forced outages. Upon securing the purge system, Valve 2CPS-V1 was locked closed, but a leak rate test was not immediately performed.

During the October 20, 2000 leak rate test for Valve 2CPS-V1, the test had to be aborted due to high leakage past Valve 2CPS*AOV105. On October 27, 2000, the actuator for Valve 2CPS*AOV105 was removed and the valve was manually closed. After manually closing Valve 2CPS*AOV105, the piping between Valves 2CPS-V1 and 2CPS*AOV105 was pressurized. When a vent path was established, the indicated leakage went off scale high. As allowed by Technical Specification Tables 3.6.1.2-1 and 3.6.1.7, a testable blank flange was installed establishing primary containment integrity. On October 28, 2000, a mass flow leakage test was performed on Valve 2CPS-V1, and again the leakage past the valve exceeded the measurement capability of the test instrumentation. Based on the leak rate exceeding the capability of the test instrumentation, Niagara Mohawk Power Corporation concluded that the leakage past Valve 2CPS-V1 exceeded the primary containment leakage limits in Technical Specifications.

During corrective maintenance on Valve 2CPS-V1, the valve seal was found extruded. The valve seal was replaced, and the valve was satisfactorily tested.

Troubleshooting of Valve 2CPS*AOV107 revealed that the manual override stem was engaged within the spring assembly in the partially open position, which maintained the spring in a compressed state. The spring being in a compressed state did not allow the spring to drive the disc fully closed. Subsequently, the manual override stem was disengaged from the spring assembly, and the valve was satisfactorily leak rate tested.

Troubleshooting of Valve 2CPS*AOV105 revealed foreign material (dirt and dust) on the seal which prevented the disc and seal from forming a satisfactory boundary. The seal was replaced, and the valve was satisfactorily leak rate tested.

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

II. CAUSE OF EVENT

The cause will be provided in a supplement to this licensee event report by December 20, 2000.

III. ANALYSIS OF EVENT

This event is reportable in accordance with 10 CFR 50.73(a)(2)(v). 10 CFR 50.73(a)(2)(v) requires a report for any event or condition that alone could have prevented the fulfillment of the safety function of structures or systems that are needed to control the release of radioactive material. During the mass flow test, the leak rate exceeding the capability of the test instrumentation indicating that the leakage past Valve 2CPS-V1 exceeded the primary containment leakage limits in Technical Specifications.

Further analysis of this event will be provided in a supplement to this licensee event report by December 20, 2000.

IV. CORRECTIVE ACTIONS

1. A testable blank flange was installed establishing primary containment until the valves could be repaired.
2. Valves 2CPS-V1, 2CPS*AOV105, and 2CPS*AOV107 were repaired and tested satisfactorily during a plant outage in November 2000.
3. Additional corrective actions will be provided in a supplement to this licensee event report by December 20, 2000, if appropriate.

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V. ADDITIONAL INFORMATION**A. Failed components:**

Component	Manufacturer	Model Number
Valves 2CPS*AOV107 and 2CPS*AOV105	Posi-Seal	VVF015-R-2RQ
Valve 2CPS-V1	Fisher Controls	VVI015-F-4Q (Type 9280)

B. Previous similar events:

Previous similar events will be provided, if appropriate, in a supplement to this licensee event report by December 20, 2000.

C. Identification of components referred to in this licensee event report:

Components	IEEE 803A Function	IEEE 805 System ID
Primary Containment Purge Supply Isolation Valves	ISV	LK
Blank Flange	N/A	LK
Seal	SEAL	LK
Piping	N/A	LK
Manual Override Stem	N/A	LK
Spring	N/A	LK
Disc	N/A	LK
Valve	ISV	LK