

March 8, 2002

Mr. John T. Conway  
Site Vice President  
Nine Mile Point Nuclear Station, LLC  
P.O. Box 63  
Lycoming, NY 13093

SUBJECT: NINE MILE POINT NUCLEAR STATION, UNIT NO. 2 - ISSUANCE OF  
AMENDMENT RE: MODIFICATION OF PRIMARY CONTAINMENT  
ISOLATION VALVE FOR FEEDWATER PIPING (TAC NO. MB3545)

Dear Mr. Conway:

The Commission has issued the enclosed Amendment No. 104 to Facility Operating License No. NPF-69 for Nine Mile Point Nuclear Station, Unit 2 (NMP-2). The amendment consists of changes to the Technical Specifications (TSS) in response to your application transmitted by letter dated December 26, 2001.

The amendment revises Table 3.6.1.3-1, "Secondary Containment Bypass Leakage Paths Leakage Rate Limits," to reflect the NRC staff's approval of your proposed modification of two primary containment isolation valves on feedwater piping from air-operated to become simple check valves.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular biweekly Federal Register notice.

Sincerely,

**/RA/**

Peter S. Tam, Senior Project Manager, Section I  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-410

Enclosures: 1. Amendment No. 104 to NPF-69  
2. Safety Evaluation

cc w/encls: See next page

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ACCESSION NUMBER: **ML020170154**

OFFICE	PDI-1\PM	PDI-1\LA	EMEB/SC	SPLB/SC	EEIB/SC	OGC	PDI-1/SC(A)
NAME	PTam	SLittle	DTerao	RHagar	EMarinos	RHoefling	JMunday
DATE	1/29/02	2/12/02	01/29/02	2/4/02	1/30/02	2/11/02	2/14/02

**OFFICIAL RECORD COPY**

DATED: March 8, 2002

AMENDMENT NO. 104 TO FACILITY OPERATING LICENSE NO. NPF-69, NINE MILE  
POINT, UNIT NO. 2

PUBLIC  
PDI R/F  
JZwolinski\TMarsh  
SLittle  
PTam  
JMunday  
OGC  
GHill (2)  
WBeckner  
ACRS  
PD plant-specific file  
BPlatchek, RI  
GBedi  
JLehning  
BMarcus

cc: Plant Service list

NINE MILE POINT NUCLEAR STATION, LLC

DOCKET NO. 50-410

NINE MILE POINT NUCLEAR STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 104  
License No. NPF-69

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Nine Mile Point Nuclear Station, LLC (the licensee) dated December 26, 2001, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter 1;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-69 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, as revised through Amendment No. 104 are hereby incorporated into this license. Nine Mile Point Nuclear Station, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented prior to startup from Refueling Outage 8.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

Joel Munday, Acting Chief, Section I  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: March 8, 2002

ATTACHMENT TO LICENSE AMENDMENT NO. 104

TO FACILITY OPERATING LICENSE NO. NPF-69

DOCKET NO. 50-410

Replace the following page of Appendix A, Technical Specifications, with the attached revised page. The revised page is identified by amendment number and contains a marginal line indicating the area of change.

Remove Pages

3.6.1.3-14

Insert Pages

3.6.1.3-14

Table 3.6.1.3-1 (page 1 of 2)  
Secondary Containment Bypass Leakage Paths Leakage Rate Limits

VALVE NUMBER	PER VALVE LEAK RATE (SCFH)
2MSS*MOV111 2MSS*MOV112	1.875
2MSS*MOV208	0.625
2CMS*SOV74A, B 2CMS*SOV75A, B 2CMS*SOV76A, B 2CMS*SOV77A, B	0.2344
2DER*MOV119 2DER*RV344	(a)
2DER*MOV120	1.25
2DER*MOV130 2DER*MOV131	0.625
2DFR*MOV120	1.875
2DFR*MOV121 2DFR*RV228	(b)
2DFR*MOV139 2DFR*MOV140	0.9375
2WCS*MOV102 2WCS*MOV112	2.5
2FWS*V23A, B 2FWS*V12A, B	12.0
2CPS*AOV104 2CPS*AOV106	4.38
(continued)	

(a) The combined leakage rate for these two valves shall be  $\leq 1.25$  SCFH.

(b) The combined leakage rate for these two valves shall be  $\leq 1.875$  SCFH.





SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 104 TO FACILITY OPERATING LICENSE NO. NPF-69  
NINE MILE POINT NUCLEAR STATION, LLC  
NINE MILE POINT NUCLEAR STATION, UNIT NO. 2  
DOCKET NO. 50-410

## 1.0 INTRODUCTION

By letter dated December 26, 2001, Nine Mile Point Nuclear Station, LLC (the licensee) proposed a license amendment to change the Technical Specifications (TSs) for Nine Mile Point Nuclear Station, Unit No. 2 (NMP2). The amendment would revise Table 3.6.1.3-1, "Secondary Containment Bypass Leakage Paths Leakage Rate Limits," to reflect the licensee's proposed conversion of two primary containment isolation valves on feedwater piping from air-operated valves to function as simple check valves.

## 2.0 EVALUATION

### 2.1 Current Design and Proposed Modification

During normal plant operation the feedwater system provides coolant flow to the reactor through two 24-inch lines connected to the reactor pressure vessel. These two lines are provided with safety-related motor-operated containment isolation valves (not the subject of this amendment) and containment isolation testable air-operated check valves, designated as 2FWS\*AOV23A and 2FWS\*AOV23B. These air-operated check valves were credited in the NMP2 Updated Safety Analysis Report (USAR) for mitigating the consequences of a postulated feedwater line-break accident and a loss-of-coolant accident. They have no flow control functions because feedwater flow is controlled by flow control valves, which are not affected by the proposed amendment.

NMP2 uses Anchor Darling testable check valves in various systems as containment isolation and high-pressure/low-pressure interface valves. This type of check valve is unique in that it is remotely testable and has disc position indication. The licensee stated that, based on its plant-specific root cause analyses and industry experience, the remote testing and position indication design features of these valves have a history of reliability problems which have resulted in multiple occurrences of the valves failing to completely close. Accordingly, the licensee proposed to modify these valves to function as simple check valves by removing the nonsafety-related remote air-operated testing capability and local and remote disc position indication. The licensee stated that this modification will reduce the torsional loads that resist valve closure and is thus expected to improve feedwater check valve reliability and overall performance.

## 2.2 NRC Staff Evaluation

The NRC staff evaluated the licensee's proposal against the information regarding these valves in the NMP2 USAR. The NRC staff agrees with the licensee that the proposed design modification would not affect the safety-related function (i.e., to stop back flow in the subject feedwater lines under accident conditions) of these valves, and that the modification only affects the nonsafety-related remote testing function and associated design features such as position indication.

The NRC staff reviewed the description of Section 6.2.4.3.2 of the USAR, in particular the information regarding the ability of these valves to withstand rapid closure following a postulated pipe break outside the containment. Because the modification does not replace or change the valve structural design that was analyzed to ensure its capability to withstand the dynamic effects associated with a postulated feedwater pipe break outside containment, the staff finds that the proposed modification does not adversely impact the design safety functions of these valves, and the description of Section 6.2.4.3.2 will continue to be valid. The NRC staff also reviewed the proposed modification against Regulatory Guide (RG) 1.97, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant Environs Conditions During and Following an Accident," and verified that RG 1.97 exempts primary containment isolation check valves from the requirements for remote position indication.

Based on this review, the NRC staff concludes that the licensee's proposed modification of the subject containment isolation air-operated check valves to function as simple check valves acceptable.

## 2.3 Revision of TS Table 3.6.1.3-1

The licensee proposed to re-designate the subject valves in TS Table 3.6.1.3-1 from air-operated to simple check valves. Specifically, this changes 2FWS\*AOV23A and 2FWS\*AOV23B to 2FWS\*V23A and 2FWS\*V23B, respectively. Since the NRC staff already found the proposed design modification acceptable, it also finds the proposed changes to TS Table 3.6.1.3-1 acceptable.

## 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New York State official was notified of the proposed issuance of the amendment. The State official had no comments.

## 4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (67 FR 5329). Accordingly, the amendment meets the eligibility criteria for categorical

exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

## 5.0 CONCLUSION

The NRC staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

## 6.0 REFERENCES

- (1) Letter, J. Conway, Nine Mile Point Nuclear Station, LLC, to NRC, "Application for Amendment to Technical Specification 3.6.1.3, Primary Containment Isolation Valves (PCIVs)," December 26, 2001.
- (2) Nine Mile Point Nuclear Station, Unit No. 2, Updated Safety Analysis Report, as revised.

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B. Marcus  
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Date: March 8, 2002

Nine Mile Point Nuclear Station  
Unit No. 2

cc:

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