

**Constellation  
Nuclear**

**Nine Mile Point  
Nuclear Station**

*A Member of the  
Constellation Energy Group*

June 7, 2002  
NMP2L 2061

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

Re: Nine Mile Point Unit 2  
Docket No. 50-410  
NPF-69

***Subject: Application for Technical Specification Improvement to Eliminate the  
Requirements for the Post Accident Sampling System Using the  
Consolidated Line Item Improvement Process (TAC No. MB5276)***

Gentlemen:

In accordance with the provisions of 10 CFR 50.90, Nine Mile Point Nuclear Station, LLC, (NMPNS) is submitting a request for an amendment to the Technical Specifications (TSs) for Nine Mile Point Unit 2 (NMP2) as set forth in Appendix A of Operating License NPF-69.

The proposed license amendment would delete TS 5.5.3, "Post Accident Sampling," and thereby eliminate the requirements to have and maintain the Post Accident Sampling System (PASS) at NMP2. The changes are consistent with the NRC approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-413, "Elimination of Requirements for a Post Accident Sampling System [or Station] (PASS)." The availability of this TS improvement was announced in the Federal Register on March 20, 2002 as part of the Consolidated Line Item Improvement Process (CLIP). As discussed in the model safety evaluation regarding collateral changes to the TSs, this proposed license amendment would also revise TSs 3.6.1.3, "Primary Containment Isolation Valves (PCIVs)," and 5.5.2, "Primary Coolant Sources Outside Containment," to reflect the elimination of the PASS.

Attachment A provides a description of the proposed changes, the requested confirmation of applicability, and plant-specific verifications. Attachment B provides the existing TS pages marked-up to show the proposed changes. Attachment C provides the clean TS pages.

A001

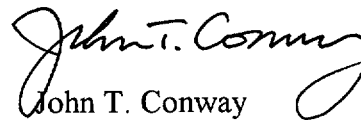
Page 2  
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NMPNS requests approval of the proposed license amendment by August 30, 2002, with the amendment being fully implemented within 180 days after approval.

In accordance with 10 CFR 50.91, a copy of this application, with attachments, is being provided to the appropriate state representative.

I declare under penalty of perjury that the foregoing is true and correct. Executed on June 7, 2002.

Very truly yours,

  
John T. Conway  
Site Vice President

JTC/CDM/jm  
Attachments

cc: Mr. H. J. Miller, NRC Regional Administrator, Region I  
Mr. G. K. Hunegs, NRC Senior Resident Inspector  
Mr. P. S. Tam, Senior Project Manager, NRR (2 copies)  
Mr. John P. Spath  
NYSERDA  
286 Washington Avenue Ext.  
Albany, NY 12203-6399  
Records Management

**ATTACHMENT A**  
**NINE MILE POINT NUCLEAR STATION, LLC**  
**LICENSE NO. NPF-69**  
**DOCKET NO. 50-410**

**Description and Assessment**

**1.0     DESCRIPTION**

The proposed license amendment deletes the program requirements of Technical Specification (TS) 5.5.3, "Post Accident Sampling." In addition, the proposed amendment also revises TSs 3.6.1.3, "Primary Containment Isolation Valves (PCIVs)," and 5.5.2, "Primary Coolant Sources Outside Containment," to reflect the elimination of the Post Accident Sampling System.

The changes are consistent with NRC approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Traveler, TSTF-413, "Elimination of Requirements for a Post Accident Sampling System [or Station] (PASS)." The availability of this TS improvement was announced in the Federal Register, Vol. 67, p. 13027 (67 FR 13027), on March 20, 2002, as part of the Consolidated Line Item Improvement Process (CLIIP).

**2.0     ASSESSMENT**

**2.1     Background**

The results of BWR Owners' Group (BWROG) Topical Report, NEDO-32991-A, "Regulatory Relaxation for BWR Post-Accident Sampling Stations (PASS)," dated August 2001, confirmed that the BWR PASS does not provide the benefits expected by the NRC when the requirements were promulgated following the Three Mile Island Unit 2 accident. All BWR emergency and severe accident response strategies can be implemented using in-plant instrumentation, without reliance on the PASS. Moreover, operating experience has demonstrated that in-plant instrumentation and the associated analysis methods will provide the timely information required to assess core damage and mitigate severe accidents. This information is available from in-plant instrumentation early in the accident scenario and the derived information is as good as or better than information currently provided by the PASS several hours after initiation of the event. The BWROG has, therefore, concluded that the PASS can be removed without significantly affecting plant safety and recommended that all PASS regulatory requirements be eliminated. The Westinghouse and Combustion Engineering (Pressurized Water Reactor) Owners Groups have documented similar findings and conclusions.

## **2.2 Applicability of Published Safety Evaluation**

Nine Mile Point Nuclear Station, LLC, (NMPNS) has reviewed the safety evaluation published on December 27, 2001 (66 FR 66949) as part of the CLIIP. This verification included a review of the NRC staff's evaluation (as modified slightly by the notice of availability) as well as the supporting information provided to support TSTF-413 (i.e., NEDO-32991, submitted November 30, 2001, and the associated NRC safety evaluation, dated June 12, 2001). NMPNS has concluded that the justifications presented in the TSTF proposal and the safety evaluation prepared by the NRC staff are applicable to Nine Mile Point Unit 2 (NMP2) and justify this amendment for the incorporation of the changes to the NMP2 TSs.

## **2.3 Optional Changes and Variations**

NMPNS is not proposing any variations or deviations from the applicable TS changes described in TSTF-413 or the NRC staff's model safety evaluation published on December 27, 2001. However, additional optional changes are necessary as discussed below:

1. As described in the model safety evaluation published on December 27, 2001, the elimination of the TSs and other regulatory requirements for the PASS may result in additional changes to the TSs. The NMP2 TSs currently include Table 3.6.1.3-1, "Secondary Containment Bypass Leakage Paths Leakage Rate Limits," which specifically lists the eight PASS containment atmosphere sample and return isolation valves (2CMS\*SOV74A/B, 75A/B, 76A/B, and 77A/B) and the associated per valve bypass leakage rate limit of 0.2344 scfh. Table 3.6.1.3-1 is included in the TSs because the NMP2 radiological analyses assume a secondary containment bypass leakage rate through each individual leakage path rather than a total combined leakage rate. Explicitly listing the PASS containment atmosphere sample and return valves in the TSs is a plant-specific deviation from the model Standard TSs for BWR/4 and BWR/6 plants (NUREG-1433 and NUREG-1434). Thus, the model safety evaluation published on December 27, 2001 did not specifically identify these valves for elimination from the TSs as part of the elimination of the PASS.

NMPNS is proposing to implement a modification such that the PASS containment atmosphere sample and return isolation valves would not be potential secondary containment bypass leakage paths. However, the modification may not be completed during the implementation period for this amendment. Therefore, TS Table 3.6.1.3-1 is being revised to add a footnote (d) and appropriately annotate the PASS valves to assure that "The LCO requirements and leakage rate limit shall apply until such time as a modification eliminates the potential secondary containment bypass leakage path." This change provides clarification of the intent that the TS Limiting Condition for Operation (LCO) and leakage rate limit will apply to the PASS valves as long as they remain possible leakage paths and accommodates the scheduling of the actual modification of the piping system

such that it may extend beyond the implementation period for this amendment. This change does not revise the technical requirements beyond those addressed by the NRC staff in the model safety evaluation published on December 27, 2001.

2. The NMP2 TSs currently include an administrative requirement for a program to minimize the leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident. The PASS falls under the scope of this requirement. As described in the staff's model safety evaluation published on December 27, 2001, a modification might be implemented such that the PASS would not be a potential leakage path outside containment. Since the modification, if implemented, may not be completed during the implementation period for this amendment, TS 5.5.2 is being revised to add a parenthetical phrase following the associated listing for the "process sampling" system to assure that "(the program requirements shall apply to the Post Accident Sampling System until such time as administrative controls provide for continuous isolation of the associated penetration(s) or a modification eliminates the potential leakage path(s))." This change provides clarification of the intent that the programmatic requirements of TS 5.5.2 will remain applicable to the PASS as long as it is a possible leakage path. Furthermore, the change reflects the fact that the programmatic controls will no longer be applicable if: (1) appropriate administrative controls are put in place to provide for continuous isolation of the associated primary containment penetration(s) or (2) a modification of the piping system eliminates the associated leakage path(s). In addition, the change accommodates the scheduling of the actual modification such that it may extend beyond the implementation period for this amendment.

### **3.0 REGULATORY ANALYSIS**

#### **3.1 No Significant Hazards Determination**

NMPNS has reviewed the proposed no significant hazards consideration determination published on December 27, 2001 (66 FR 66949) as part of the CLIIP. Based on the review, NMPNS has concluded that the proposed determination presented in the notice is applicable to NMP2 and the determination is hereby incorporated by reference to satisfy the requirements of 10 CFR 50.91(a).

#### **3.2 Verification**

As discussed in the model safety evaluation published in the Federal Register on December 27, 2001 for this TS improvement, plant-specific verifications were performed and the results are as follows:

1. NMPNS will develop contingency plans for obtaining and analyzing highly radioactive samples from the reactor coolant system, suppression pool, and containment atmosphere. The contingency plans will be contained in plant procedures and implementation will be completed within 180 days after the

implementation of the license amendment. Establishment and maintenance of the contingency plans are considered a regulatory commitment.

2. The capability for classifying fuel damage events at the Alert level threshold will be established for NMP2 at radioactivity levels of 300  $\mu\text{Ci/gm}$  dose equivalent I-131. This capability will be described in plant procedures and implementation will be completed within 180 days after the implementation of the license amendment. The capability for classifying fuel damage events is considered a regulatory commitment.
3. NMPNS has established an I-131 site survey detection capability, including an ability to assess radioactive iodines released to offsite environs, by using effluent monitoring systems or portable sampling equipment. The capability for monitoring iodines is maintained within plant procedures. The capability to monitor radioactive iodines is considered a regulatory commitment.

### **3.3 Commitments**

The following table identifies those actions committed to by the NMPNS in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

| <b>REGULATORY COMMITMENTS</b>                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Due Date/Event</b>                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| NMPNS will develop contingency plans for obtaining and analyzing highly radioactive samples from the reactor coolant system, suppression pool, and containment atmosphere. The contingency plans will be contained in plant procedures and implementation will be completed within 180 days after the implementation of the license amendment. Establishment and maintenance of the contingency plans are considered a regulatory commitment. | To be implemented within 180 days of implementation of amendment |
| The capability for classifying fuel damage events at the Alert level threshold will be established for NMP2 at radioactivity levels of 300 $\mu\text{Ci/gm}$ dose equivalent I-131. This capability will be described in plant procedures and implementation will be completed within 180 days after the implementation of the license amendment. The capability for classifying fuel damage events is considered a regulatory commitment.    | To be implemented within 180 days of implementation of amendment |
| NMPNS has established an I-131 site survey detection capability, including an ability to assess radioactive iodines released to offsite environs, by using effluent monitoring systems or portable sampling equipment. The capability for monitoring iodines is maintained within plant procedures. The capability to monitor radioactive iodines is considered a regulatory commitment.                                                      | Complete                                                         |

#### **4.0     ENVIRONMENTAL EVALUATION**

NMPNS has reviewed the environmental evaluation included in the model safety evaluation published on December 27, 2001 as part of the CLIP. Based on the review, NMPNS has concluded that the staff's findings presented in that evaluation are applicable to NMP2 and the evaluation is hereby incorporated by reference to satisfy the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9).

**ATTACHMENT B**  
**NINE MILE POINT NUCLEAR STATION, LLC**  
**LICENSE NO. NPF-69**  
**DOCKET NO. 50-410**

**“Marked-Up” Copy of Proposed Changes to Current Technical Specifications**

The current versions of Technical Specification pages 3.6.1.3-14, 3.6.1.3-15, and 5.5-2 have been marked-up by hand to reflect the proposed changes.

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

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

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

| VALVE NUMBER                                             | PER VALVE LEAK RATE<br>(SCFH) |
|----------------------------------------------------------|-------------------------------|
| 2CPS*AOV105<br>2CPS*AOV107                               | 3.75                          |
| 2CPS*SOV119<br>2CPS*SOV120<br>2CPS*SOV121<br>2CPS*SOV122 | 0.625                         |
| 2IAS*SOV164<br>2IAS*V448                                 | 0.9375                        |
| 2IAS*SOV165<br>2IAS*V449                                 | 0.9375                        |
| 2GSN*SOV166<br>2GSN*V170                                 | (c)                           |
| 2IAS*SOV166<br>2IAS*SOV184                               | (c)                           |
| 2IAS*SOV167<br>2IAS*SOV185                               | (c)                           |
| 2IAS*SOV168<br>2IAS*SOV180                               | (c)                           |
| 2CPS*SOV132<br>2CPS*V50                                  | (c)                           |
| 2CPS*SOV133<br>2CPS*V51                                  | (c)                           |

- (c) The combined leak rate for these penetrations shall be  $\leq 3.6$  SCFH. The assigned leakage rate through a penetration shall be that of the valve with the highest leakage rate in that penetration. However, if a penetration is isolated by one closed and de-activated automatic valve, closed manual valve, or blind flange, the leakage through the penetration shall be the actual pathway leakage.

INSERT  
T3.6.1.3-1

**INSERT T3.6.1.3-1**

- (d) The LCO requirements and leakage rate limit shall apply until such time as a modification eliminates the potential secondary containment bypass leakage path. |

## 5.5 Programs and Manuals

### 5.5.1 Offsite Dose Calculation Manual (ODCM) (continued)

Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

### 5.5.2 Primary Coolant Sources Outside Containment

INSERT  
5.5.2

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include the Low Pressure Core Spray, High Pressure Core Spray, Residual Heat Removal, Reactor Core Isolation Cooling, hydrogen recombiner, process sampling, containment monitoring and Standby Gas Treatment. The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at 24 month intervals.

The provisions of SR 3.0.2 are applicable to the 24 month Frequency for performing integrated system leak test activities.

### 5.5.3

#### Post Accident Sampling

Deleted

This program provides controls that ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the following:

- a. Training of personnel;
- b. Procedures for sampling and analysis; and
- c. Provisions for maintenance of sampling and analysis equipment.

(continued)

#### **INSERT 5.5.2**

(the program requirements shall apply to the Post Accident Sampling System until such time as administrative controls provide for continuous isolation of the associated penetration(s) or a modification eliminates the potential leakage path(s))

**ATTACHMENT C**

**NINE MILE POINT NUCLEAR STATION, LLC**

**LICENSE NO. NPF-69**

**DOCKET NO. 50-410**

**Proposed Changes to Technical Specifications**

Replace the existing Technical Specification (TS) pages listed below with the attached revised pages. These retyped pages have marginal markings (revision bars) to indicate the changes to the text.

Note: Due to a change in word processing software, the format of the revised pages have been modified slightly from the currently approved pages. The modifications do not affect the content of the page. Additionally, information for valves 2CPS\*AOV105 and 2CPS\*AOV107 have been moved within Table 3.6.1.3-1 from TS page 3.6.1.3-15 to page 3.6.1.3-14.

**Remove**

3.6.1.3-14  
3.6.1.3-15  
5.5-2

**Insert**

3.6.1.3-14  
3.6.1.3-15  
5.5-2

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

| VALVE NUMBER                                                                         | PER VALVE LEAK RATE<br>(SCFH) |
|--------------------------------------------------------------------------------------|-------------------------------|
| 2MSS*MOV111<br>2MSS*MOV112                                                           | 1.875                         |
| 2MSS*MOV208                                                                          | 0.625                         |
| 2CMS*SOV74A, B (d)<br>2CMS*SOV75A, B (d)<br>2CMS*SOV76A, B (d)<br>2CMS*SOV77A, B (d) | 0.2344                        |
| 2DER*MOV119<br>2DER*RV344                                                            | (a)                           |
| 2DER*MOV120                                                                          | 1.25                          |
| 2DER*MOV130<br>2DER*MOV131                                                           | 0.625                         |
| 2DFR*MOV120                                                                          | 1.875                         |
| 2DFR*MOV121<br>2DFR*RV228                                                            | (b)                           |
| 2DFR*MOV139<br>2DFR*MOV140                                                           | 0.9375                        |
| 2WCS*MOV102<br>2WCS*MOV112                                                           | 2.5                           |
| 2FWS*V23A, B<br>2FWS*V12A, B                                                         | 12.0                          |
| 2CPS*AOV104<br>2CPS*AOV106                                                           | 4.38                          |
| 2CPS*AOV105<br>2CPS*AOV107                                                           | 3.75                          |
| (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.

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

| VALVE NUMBER                                             | PER VALVE LEAK RATE<br>(SCFH) |
|----------------------------------------------------------|-------------------------------|
| 2CPS*SOV119<br>2CPS*SOV120<br>2CPS*SOV121<br>2CPS*SOV122 | 0.625                         |
| 2IAS*SOV164<br>2IAS*V448                                 | 0.9375                        |
| 2IAS*SOV165<br>2IAS*V449                                 | 0.9375                        |
| 2GSN*SOV166<br>2GSN*V170                                 | (c)                           |
| 2IAS*SOV166<br>2IAS*SOV184                               | (c)                           |
| 2IAS*SOV167<br>2IAS*SOV185                               | (c)                           |
| 2IAS*SOV168<br>2IAS*SOV180                               | (c)                           |
| 2CPS*SOV132<br>2CPS*V50                                  | (c)                           |
| 2CPS*SOV133<br>2CPS*V51                                  | (c)                           |

- (c) The combined leak rate for these penetrations shall be  $\leq 3.6$  SCFH. The assigned leakage rate through a penetration shall be that of the valve with the highest leakage rate in that penetration. However, if a penetration is isolated by one closed and de-activated automatic valve, closed manual valve, or blind flange, the leakage through the penetration shall be the actual pathway leakage.
- (d) The LCO requirements and leakage rate limit shall apply until such time as a modification eliminates the potential secondary containment bypass leakage path.

## 5.5 Programs and Manuals

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### 5.5.1 Offsite Dose Calculation Manual (ODCM) (continued)

Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

### 5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include the Low Pressure Core Spray, High Pressure Core Spray, Residual Heat Removal, Reactor Core Isolation Cooling, hydrogen recombiner, process sampling (the program requirements shall apply to the Post Accident Sampling System until such time as administrative controls provide for continuous isolation of the associated penetration(s) or a modification eliminates the potential leakage path(s)), containment monitoring and Standby Gas Treatment. The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at 24 month intervals.

The provisions of SR 3.0.2 are applicable to the 24 month Frequency for performing integrated system leak test activities.

### 5.5.3 Deleted

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(continued)