

Keith J. Polson
Vice President-Nine Mile Point

P.O. Box 63
Lycoming, New York 13093
315.349.5200
315.349.1321 Fax



Constellation Energy

• Nine Mile Point Nuclear Station

July 30, 2007

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

SUBJECT: Nine Mile Point Nuclear Station
Unit No. 2; Docket No. 50-410

Application for Technical Specification Change TSTF-477, Revision 3,
“Add Action for Two Inoperable Control Room AC Subsystems” to the
Technical Specifications Using Consolidated Line Item Improvement Process

Pursuant to 10 CFR 50.90, Nine Mile Point Nuclear Station, LLC, (NMPNS) hereby requests an amendment to Nine Mile Point Unit 2 (NMP2) Renewed Operating License NPF-69. The proposed amendment would modify the Technical Specifications (TS) by adding an action statement for two inoperable control room air conditioning (AC) subsystems to the plant specific TS.

Attachment (1) provides a description of the proposed change, the requested confirmation of applicability, and plant-specific verifications. Attachment (2) provides the existing TS pages marked up to show the proposed change. Attachment (3) provides the existing TS Bases pages marked up to show the proposed change in accordance with 10 CFR 50.36(a). TS Bases changes are provided for information only and will be processed in accordance with TS 5.5.10, “Technical Specifications (TS) Bases Control Program.”

NMPNS requests approval of the proposed license amendment by January 30, 2008 with the amendment being implemented within 60 days of receipt of the approved amendment.

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

ADD
NRR

Should you have any questions regarding the information in this submittal, please contact T. F. Syrell, Licensing Director, at (315) 349-5219.

Very truly yours,



STATE OF NEW YORK :
: TO WIT:
COUNTY OF OSWEGO :

I, Keith J. Polson, being duly sworn, state that I am Vice President-Nine Mile Point, and that I am duly authorized to execute and file this request on behalf of Nine Mile Point Nuclear Station, LLC. To the best of my knowledge and belief, the statements contained in this document are true and correct. To the extent that these statements are not based on my personal knowledge, they are based upon information provided by other Nine Mile Point employees and/or consultants. Such information has been reviewed in accordance with company practice and I believe it to be reliable.



Subscribed and sworn before me, a Notary Public in and for the State of New York and County of Oswego, this 30th day of July, 2007.

WITNESS my Hand and Notarial Seal:


Notary Public

My Commission Expires:

10/25/09
Date

SANDRA A. OSWALD
Notary Public, State of New York
No. 01OS6032276
Qualified in Oswego County
Commission Expires 10-25-09

KJP/GB

- Attachments: (1) Description and Assessment of the Proposed Changes
(2) Proposed Technical Specification (TS) Changes (Marked Up Pages)
(3) Proposed Technical Specification (TS) Bases Changes (Marked Up Pages)

Document Control Desk

July 30, 2007

Page 3

cc: S. J. Collins, NRC Region I Administrator
E. C. Knutson, Senior NRC Resident Inspector
M. J. David, NRC Project Manager
J. P. Spath, NYSERDA

ATTACHMENT (1)

DESCRIPTION AND ASSESSMENT OF THE PROPOSED CHANGES

TABLE OF CONTENTS

1. DESCRIPTION
2. ASSESSMENT
3. REGULATORY ANALYSIS
4. ENVIRONMENTAL EVALUATION
5. REFERENCES

ATTACHMENT (1)

DESCRIPTION AND ASSESSMENT OF PROPOSED CHANGES

1.0 DESCRIPTION

This letter is a request to amend Operating License 50-410 for Nine Mile Point Unit 2 (NMP2).

The proposed amendment would modify Technical Specifications (TS) 3.7.3, "Control Room Envelope Air Conditioning (AC) System," by adding an Action Statement to the Limiting Condition for Operation (LCO). The new Action Statement allows a finite time to restore one control room envelope AC subsystem to operable status and requires verification that the control room temperature remains < 90° F every 4 hours.

The changes are consistent with Nuclear Regulatory Commission (NRC) approved Industry/Technical Specification Task Force (TSTF) TSTF-477, Revision 3 (Reference 1). The availability of this TS improvement was published in the *Federal Register* on March 26, 2007 (72 FR 14143) (Reference 2) as part of the consolidated line item improvement process (CLIIP).

2.0 ASSESSMENT

2.1 **Applicability of TSTF-477, and Published Safety Evaluation**

Nine Mile Point Nuclear Station, LLC (NMPNS) has reviewed TSTF-477, Revision 3, and the NRC model safety evaluation (SE) (Reference 3) as part of the CLIIP. NMPNS has concluded that the information in TSTF-477, as well as the SE prepared by the NRC staff are applicable to NMP2 and justify this amendment for the incorporation of the changes to the NMP2 TS.

2.2 **Optional Changes and Variations**

NMPNS is not proposing any significant variations or deviations from the TS changes described in TSTF-477 or the NRC staff's model safety evaluation dated December 18, 2006. The NMP2 TS 3.7.3 does contain one minor deviation from the TS changes provided in the TSTF for the BWR 4 model. Specifically, NMP2 TS 3.7.3 Condition A contains two applicable conditions which stipulate that if the condition of "One control room envelope AC subsystem inoperable" OR "Two control room envelope AC subsystems inoperable with safety function maintained," take required Action A.1. The Control Room Envelope AC System consists of two 100% capacity air conditioning subsystems. During normal operation, at least one subsystem operates. The ability of the Control Room Envelope AC System to maintain control room envelope temperature within limits is an implicit assumption of the safety analysis evaluated in the Updated Safety Analysis Report (USAR) Chapter 6, Engineering Safety Features, and Chapter 15, Accident Analysis. Due to the design of the system, when both subsystems are inoperable, the capability for the Control Room Envelope AC System to perform its design function may still exist by having sufficient components operable from both subsystems to meet its safety function. This TS deviation was part of the NMP2 conversion to the Standard Technical Specifications (STS) and does not impact or alter the application of the SE.

Since Condition A includes two inoperable subsystems with the safety function maintained, new Condition B is modified to specify that the condition is for two inoperable subsystems without the safety function being maintained.

ATTACHMENT (1)

DESCRIPTION AND ASSESSMENT OF PROPOSED CHANGES

3.0 REGULATORY ANALYSIS

3.1 No Significant Hazards Consideration Determination

NMPNS has reviewed the proposed no significant hazards consideration determination (NSHC) published in the *Federal Register* as part of the CLIIP. NMPNS has concluded that the proposed NSHC presented in the *Federal Register* notice is applicable to NMP2 and is hereby incorporated by reference to satisfy the requirements of 10 CFR 50.91(a).

3.2 Verification and Commitments

As discussed in the notice of availability published in the *Federal Register* on March 26, 2007 for this TS improvement, plant-specific verifications were performed as follows:

NMPNS has reviewed References 1 and 2, and the model Safety Evaluation published on December 18, 2006 (71 FR 75774) as part of the CLIIP Notice for Comment. NMPNS has utilized References 1 and 2 to develop the proposed TS changes. NMPNS has also concluded that the justification presented in TSTF-477, Revision 3 and the model Safety Evaluation prepared by the NRC staff is applicable to NMP2, and justify this amendment for the incorporation of the changes to the NMP2 TS.

In addition, NMPNS has proposed TS Bases consistent with TSTF-477 which provide guidance and details on how to implement the new requirements. Finally, NMPNS has a Bases Control Program consistent with Section 5.5 of the Standard Technical Specifications (STS).

4.0 ENVIRONMENTAL EVALUATION

The amendment changes requirements with respect to the 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 adopting TSTF-477, Revision 3, involves no significant increase in the amounts or 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 TSTF-477, Revision 3, involves no significant hazards considerations, and there has been no public comment on the finding in *Federal Register* Notice 71 FR 75774, December 18, 2006. 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 REFERENCES

1. TSTF-477, Revision 3, "Adding Action Statement for Two Inoperable Control Room AC Subsystems."
2. *Federal Register* Notice: "Notice of Availability Concerning Technical Specification Improvement to Add an Action Statement for Two Inoperable Control Room Air Conditioning Subsystems to the Technical Specifications Using the Consolidated Line Item Improvement Process," published on March 26, 2007 (72 FR 14143).

ATTACHMENT (1)

DESCRIPTION AND ASSESSMENT OF PROPOSED CHANGES

3. ***Federal Register*** Notice: “Notice of Opportunity To Comment on Model Safety Evaluation and Model License Amendment Request on Technical Specification Improvement Regarding Adding an Action Statement for Two Inoperable Control Room Air Conditioning Subsystems,” published on December 18, 2006 (71 FR 75774).

ATTACHMENT (2)

**PROPOSED TECHNICAL SPECIFICATION (TS) CHANGES
(MARKED UP PAGES)**

TS Page 3.7.3-1

TS Page 3.7.3-2

TS Page 3.7.3-3

3.7 PLANT SYSTEMS

3.7.3 Control Room Envelope Air Conditioning (AC) System

LCO 3.7.3 Two control room envelope AC subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3,
During movement of irradiated fuel assemblies in the
secondary containment,
During CORE ALTERATIONS,
During operations with a potential for draining the reactor
vessel (OPDRVs).

ACTIONS

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|--|-----------------|
| <p>A. One control room envelope AC subsystem inoperable.</p> <p><u>OR</u></p> <p>Two control room envelope AC subsystems inoperable with safety function maintained.</p> | <p>A.1 Restore control room envelope AC subsystem(s) to OPERABLE status.</p> | <p>30 days</p> |
| <p>B Required Action and Associated Completion Time of Condition A OR B not met in MODE 1, 2, or 3.</p> | <p>B1 Be in MODE 3.</p> | <p>12 hours</p> |
| | <p><u>AND</u></p> <p>B2 Be in MODE 4.</p> | <p>36 hours</p> |

(continued)

INSERT "1"

INSERT "1"

| | | |
|--|--|------------------|
| B. Two control room envelope AC subsystems inoperable with safety function not maintained in MODES 1, 2, or 3. | B.1 Verify control room envelope area temperature < 90°F. | Once per 4 hours |
| | AND B.2 Restore one control room envelop AC subsystem to OPERABLE status. | |

ACTIONS (continued)

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|---|---|---|
| <p>D. Required Action and associated Completion Time of Condition A not met during movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs.</p> | <p>-----NOTE----- LCO 3.0.3 is not applicable. -----</p> <p>D. Q.1 Place OPERABLE components of control room envelope AC subsystem(s) equivalent to a single control room envelope AC subsystem in operation.</p> <p>OR</p> <p>D. Q.2.1 Suspend movement of irradiated fuel assemblies in the secondary containment.</p> <p>AND</p> <p>D. Q.2.2 Suspend CORE ALTERATIONS.</p> <p>AND</p> <p>D. Q.2.3 Initiate action to suspend OPDRVs.</p> | <p>Immediately</p> <p>Immediately</p> <p>Immediately</p> <p>Immediately</p> |
| <p>D. Two control room envelope AC subsystems inoperable with safety function not maintained in MODE 1, 2, or 3.</p> | <p>D.1 Enter LCO 3.0.3.</p> <p style="text-align: center;"><u>Delete</u></p> | <p>Immediately</p> |

(continued)

ACTIONS (continued)

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|--|---|--|
| <p>E. Two control room envelope AC subsystems inoperable with safety function not maintained during movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs.</p> <p><i>Required Action AND Associated Completion Time of Condition B NOT Met</i></p> | <p>-----NOTE----- LCO 3.0.3 is not applicable. -----</p> <p>E.1 Suspend movement of irradiated fuel assemblies in the secondary containment.</p> <p><u>AND</u></p> <p>E.2 Suspend CORE ALTERATIONS.</p> <p><u>AND</u></p> <p>E.3 Initiate action to suspend OPDRVs.</p> | <p>Immediately</p> <p>Immediately</p> <p>Immediately</p> |

SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | FREQUENCY |
|--|------------------|
| <p>SR 3.7.3.1 Verify each control room envelope AC subsystem has the capability to remove the assumed heat load.</p> | <p>24 months</p> |

ATTACHMENT (3)

**PROPOSED TECHNICAL SPECIFICATION (TS) BASES CHANGES
(MARKED UP PAGES)**

TS Bases Page B 3.7.3-3

TS Bases Page B 3.7.3-4

TS Bases Page B 3.7.3-5

BASES

APPLICABILITY
(continued)

temperature limitations in these MODES. Therefore, maintaining the Control Room Envelope AC System OPERABLE is not required in MODE 4 or 5, except for the following situations under which significant radioactive releases can be postulated:

- a. During movement of irradiated fuel assemblies in the secondary containment;
 - b. During CORE ALTERATIONS; and
 - c. During operations with a potential for draining the reactor vessel (OPDRVs).
-

ACTIONS

A.1

With one control room envelope AC subsystem inoperable, or with both control room envelope AC subsystems inoperable but the Control Room Envelope AC System safety function maintained, the inoperable control room envelope AC subsystem(s) must be restored to OPERABLE status within 30 days. The Control Room Envelope AC System safety function is maintained when the Control Room Envelope AC System components equivalent to one control room envelope AC subsystem are OPERABLE. With the unit in this condition, the remaining OPERABLE control room envelope AC subsystem (or OPERABLE components in both subsystems) is adequate to perform the control room envelope air conditioning function. However, the overall reliability is reduced because a single failure in the OPERABLE subsystem (or remaining OPERABLE portions of the subsystems, as applicable) could result in loss of the control room envelope air conditioning function. The 30 day Completion Time is based on the low probability of an event occurring requiring control room envelope isolation, the consideration that the remaining subsystem (or components in both subsystems) can provide the required protection, and the availability of alternate cooling methods.

INSERT "B1"



C. C.
~~B1 and B2~~

In MODE 1, 2, or 3, if the inoperable control room envelope AC subsystem(s) cannot be restored to OPERABLE status within the associated Completion Time, the unit must be placed in a MODE that minimizes risk. To achieve this status the unit

(continued)

INSERT “B1”

B.1 and B.2

If both control room envelope AC subsystems are inoperable, and the safety function can not be maintained, the Control Room Envelope AC System may not be capable of performing its intended function. Therefore, the control room envelope area temperature is required to be monitored to ensure that temperature is being maintained low enough that equipment in the control room envelope is not adversely affected. With the control room envelope temperature being maintained within the temperature limit of $< 90^{\circ}$ F (Reference 2), 72 hours is allowed to restore a control room envelope AC subsystem to OPERABLE status. This completion time is reasonable considering that the control room envelope temperature is being maintained within limits and the low probability of an event occurring requiring control room isolation.

BASES

| | |
|---------|--|
| ACTIONS | <p style="text-align: center;">^C ^C</p> <p>B.1 and B.2 (continued)</p> <p>must be placed in at least MODE 3 within 12 hours and in MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.</p> <p style="text-align: center;">^D ^D ^D ^D</p> <p>e.1, e.2.1, e.2.2, and e.2.3</p> <p>LCO 3.0.3 is not applicable while in MODE 4 or 5. However, since irradiated fuel assembly movement can occur in MODE 1, 2, or 3, the Required Actions of Condition e^b are modified by a Note indicating that LCO 3.0.3 does not apply. If moving irradiated fuel assemblies while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations. Entering LCO 3.0.3 while in MODE 1, 2, or 3 would require the unit to be shutdown, but would not require immediate suspension of movement of irradiated fuel assemblies. The Note to the ACTIONS, "LCO 3.0.3 is not applicable," ensures that the actions for immediate suspension of irradiated fuel assembly movement are not postponed due to entry into LCO 3.0.3.</p> <p>During movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs, if Required Action A.1 cannot be completed within the required Completion Time, the OPERABLE components of the control room envelope AC subsystem(s) equivalent to a single control room envelope AC subsystem (e.g., the control building chilled water subsystem and air conditioning units do not have to be powered from the same electrical division) may be placed immediately in operation. This action ensures that the remaining subsystem (or components in both subsystems equivalent to a single control room envelope AC subsystem) is OPERABLE, that no failures that would prevent actuation will occur, and that any active failure will be readily detected.</p> <p>An alternative to Required Action e^D.1 is to immediately suspend activities that present a potential for releasing radioactivity that might require isolation of the control room envelope. This places the unit in a condition that minimizes risk.</p> |
|---------|--|

(continued)

BASES

ACTIONS

~~D. 1, D. 2.1, D. 2.2, and D. 2.3~~ (continued)

If applicable, CORE ALTERATIONS and movement of irradiated fuel assemblies in the secondary containment must be suspended immediately. Suspension of these activities shall not preclude completion of movement of a component to a safe position. Also, if applicable, action must be initiated immediately to suspend OPDRVs to minimize the probability of a vessel draindown and subsequent potential for fission product release. Action must continue until the OPDRVs are suspended.

D.1
DELETED
~~If both control room envelope AC subsystems are inoperable with the Control Room Envelope AC System safety function not maintained in MODE 1, 2, or 3, the Control Room Envelope AC System may not be capable of performing the intended function. Therefore, LCO 3.0.3 must be entered immediately.~~

E.1, E.2, and E.3

LCO 3.0.3 is not applicable while in MODE 4 or 5. However, since irradiated fuel assembly movement can occur in MODE 1, 2, or 3, the Required Actions of Condition E are modified by a Note indicating that LCO 3.0.3 does not apply. If moving irradiated fuel assemblies while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations. Entering LCO 3.0.3 while in MODE 1, 2, or 3 would require the unit to be shutdown, but would not require immediate suspension of movement of irradiated fuel assemblies. The Note to the ACTIONS, "LCO 3.0.3 is not applicable," ensures that the actions for immediate suspension of irradiated fuel assembly movement are not postponed due to entry into LCO 3.0.3.

INSERT "B2"

During movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs ~~with two control room envelope AC subsystems inoperable with the Control Room Envelope AC System safety function not maintained~~, action must be taken to immediately suspend activities that present a potential for releasing radioactivity that might require isolation of the control room envelope. This places the unit in a condition that minimizes risk.

(continued)

INSERT “B2”

if Required Actions B.1 and B.2 cannot be met within the required Completion Times,