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Constellation Energy
Nine Mile Point Nuclear Station

September 19, 2007

U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

ATTENTION: Document Control Desk

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

License Amendment Request for Adoption of TSTF-484, Revision 0,
"Use of TS 3.10.1 for Scram Time Testing Activities"

In accordance with the provisions of Section 50.90 of Title 10 of the Code of Federal Regulations (10 CFR 50.90), Nine Mile Point Nuclear Station, LLC (NMPNS) is submitting a request for an amendment to the technical specifications (TS) for Nine Mile Point Unit 2 (NMP2), Renewed Operating License No. NPF-69.

The proposed amendment would revise Limiting Condition for Operation (LCO) 3.10.1 to expand its scope to include provisions for temperature excursions greater than 200°F as a consequence of inservice leak and hydrostatic testing, and as a consequence of scram time testing initiated in conjunction with an inservice leak or hydrostatic test, while considering operational conditions to be in Mode 4. This change is consistent with NRC approved Revision 0 to Technical Specification Task Force (TSTF) Improved Standard Technical Specification Change Traveler, TSTF-484, "Use of TS 3.10.1 for Scram Time Testing Activities." The availability of the TS 3.10.1 revision was announced in the Federal Register on October 27, 2006 (71 FR 63050) as part of the consolidated line item improvement process (CLIIP).

Attachment (1) provides an evaluation of the proposed change. Attachment (2) provides the existing TS pages marked up to show the proposed changes. Attachment (3) provides the existing TS Bases pages marked up to show the changes associated with the proposed amendment (for information only). The TS Bases changes will be processed in accordance with the NMP2 TS Bases Control Program (TS 5.5.10).

NMPNS requests approval of the proposed license amendment by February 29, 2008, with the amendment being implemented within the subsequent 60 days.

In accordance with 10 CFR 50.91, a copy of this application, with attachments, is being provided to the designated New York state official.

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,

Keith J. Polson

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.

Keith J. Polson

Subscribed and sworn before me, a Notary Public in and for the State of New York and County of Oswego, this 19th day of September, 2007.

WITNESS my Hand and Notarial Seal:

Sandra A Oswald
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/DEV

Attachments: (1) Evaluation of Proposed Change
(2) Proposed Technical Specification Changes (Mark-up)
(3) Proposed Technical Specification Bases Changes (Mark-up)

cc: M. J. David, NRC
S. J. Collins, NRC
Resident Inspector, NRC
J. P. Spath, NYSERDA

ATTACHMENT (1)

EVALUATION OF PROPOSED CHANGE

TABLE OF CONTENTS

1.0 DESCRIPTION

2.0 PROPOSED CHANGE

3.0 BACKGROUND

4.0 TECHNICAL ANALYSIS

5.0 REGULATORY SAFETY ANALYSIS

- 5.1 NO SIGNIFICANT HAZARDS DETERMINATION
- 5.2 APPLICABLE REGULATORY REQUIREMENTS / CRITERIA

6.0 ENVIRONMENTAL CONSIDERATION

7.0 REFERENCES

8.0 REGULATORY COMMITMENTS

1.0 DESCRIPTION

The proposed amendment would revise Nine Mile Point Unit 2 (NMP2) Limiting Condition for Operation (LCO) 3.10.1 to expand its scope to include provisions for temperature excursions greater than 200°F as a consequence of inservice leak and hydrostatic testing, and as a consequence of scram time testing initiated in conjunction with an inservice leak or hydrostatic test, while considering operational conditions to be in Mode 4. This change is consistent with NRC approved Revision 0 to Technical Specification Task Force (TSTF) Improved Standard Technical Specification Change Traveler, TSTF-484, "Use of TS 3.10.1 for Scram Time Testing Activities." The availability of the TS 3.10.1 revision was announced in the Federal Register on October 27, 2006 (71 FR 63050) as part of the consolidated line item improvement process (CLIIP).

2.0 PROPOSED CHANGE

Consistent with the NRC approved Revision 0 of TSTF-484, the proposed TS changes include a revised TS 3.10.1, "System Leakage and Hydrostatic Testing Operation." Proposed revisions to the TS Bases are also included in this application. Adoption of the TS Bases associated with TSTF-484, Revision 0 is an integral part of implementing this TS amendment. The changes to the affected TS Bases pages will be incorporated in accordance with the TS Bases Control Program (TS 5.5.10).

This application is being made in accordance with the CLIIP. Nine Mile Point Nuclear Station, LLC (NMPNS) is not proposing variations or deviations from the NRC staff's model safety evaluation (SE) published on October 27, 2006 (71 FR 63050) as part of the CLIIP Notice of Availability. NMPNS is proposing the following variation from the TS changes described in TSTF-484, Revision 0:

- The TS and TS Bases changes described in TSTF-484, Revision 0, are modified by replacing the term "inservice leak" with "system leakage," consistent with the terminology used in current NMP2 TS 3.10.1.

3.0 BACKGROUND

The background for this application is adequately addressed by the NRC Notice of Availability published on October 27, 2006 (71 FR 63050).

4.0 TECHNICAL ANALYSIS

NMPNS has reviewed the SE published on October 27, 2006 (71 FR 63050) as part of the CLIIP Notice of Availability. NMPNS has concluded that the technical justifications presented in the SE prepared by the NRC staff are applicable to NMP2 and therefore justify this amendment for the incorporation of the proposed changes to the NMP2 TS.

5.0 REGULATORY SAFETY ANALYSIS

5.1 NO SIGNIFICANT HAZARDS DETERMINATION

NMPNS has reviewed the no significant hazards determination published on August 21, 2006 (71 FR 48561) as part of the CLIIP Notice for Comment. The no significant hazards determination was made available on October 27, 2006 (71 FR 63050) as part of the CLIIP Notice of Availability. NMPNS has concluded that the 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).

5.2 APPLICABLE REGULATORY REQUIREMENTS / CRITERIA

A description of the proposed TS change and its relationship to applicable regulatory requirements was provided in the NRC Notice of Availability published on October 27, 2006 (71 FR 63050).

6.0 ENVIRONMENTAL CONSIDERATION

NMPNS has reviewed the environmental evaluation included in the SE published on October 27, 2006 (71 FR 63050) as part of the CLIIP Notice of Availability. NMPNS has concluded that the staff's findings presented in that evaluation are applicable to NMP2 and the evaluation is hereby incorporated by reference for this application.

7.0 REFERENCES

1. Federal Register Notice, Notice of Availability published on October 27, 2006 (71 FR 63050)
2. Federal Register Notice, Notice for Comment published on August 21, 2006 (71 FR 48561)
3. TSTF-484 Revision 0, "Use of TS 3.10.1 for Scram Times Testing Activities"

8.0 REGULATORY COMMITMENTS

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

REGULATORY COMMITMENTS	DUE DATE
None	None

ATTACHMENT (2)

PROPOSED TECHNICAL SPECIFICATION CHANGES (MARK-UP)

TS Page

3.10.1-1

3.10 SPECIAL OPERATIONS

3.10.1 System Leakage and Hydrostatic Testing Operation

reactor coolant temperature >200°F:

LCO 3.10.1 The average reactor coolant temperature specified in Table 1.1-1 for MODE 4 may be changed to "NA," and operation considered not to be in MODE 3; and the requirements of LCO 3.4.10, "Residual Heat Removal (RHR) Shutdown Cooling System—Cold Shutdown," may be suspended, to allow ~~performance of a system leakage or hydrostatic test provided the following MODE 3 LCOs are met:~~

Insert 1

a. LCO 3.3.6.2, "Secondary Containment Isolation Instrumentation," Functions 1, 3, and 4 of Table 3.3.6.2-1;

b. LCO 3.3.8.2, "Reactor Protection System (RPS) Electric Power Monitoring—Logic";

c. LCO 3.6.4.1, "Secondary Containment";

d. LCO 3.6.4.2, "Secondary Containment Isolation Valves (SCIVs)"; and

e. LCO 3.6.4.3, "Standby Gas Treatment (SGT) System."

APPLICABILITY: MODE 4 with average reactor coolant temperature > 200°F.

INSERT 1 (for TS page 3.10.1-1)

- For performance of a system leakage or hydrostatic test,
- As a consequence of maintaining adequate pressure for a system leakage or hydrostatic test, or
- As a consequence of maintaining adequate pressure for control rod scram time testing initiated in conjunction with a system leakage or hydrostatic test,

provided the following MODE 3 LCOs are met:

ATTACHMENT (3)

PROPOSED TECHNICAL SPECIFICATION BASES CHANGES

(MARK-UP)

The current versions of the following Technical Specification Bases pages have been marked-up by hand to reflect the proposed changes. These Bases pages are provided for information only and do not require NRC approval.

TS Bases Pages

B 3.10.1-1
B 3.10.1-3

B 3.10 SPECIAL OPERATIONS

B 3.10.1 System Leakage and Hydrostatic Testing Operation

BASES

BACKGROUND

The purpose of this Special Operations LCO is to allow certain reactor coolant pressure tests to be performed in MODE 4 when the metallurgical characteristics of the reactor pressure vessel (RPV) require the pressure testing at temperatures > 200°F (normally corresponding to MODE 3).

Insert A

Hydrostatic testing and system leakage pressure tests required by Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (Ref. 1) are performed prior to the reactor going critical after a refueling outage. Recirculation pump operation, decay heat, and a water solid RPV (except for a gas bubble for pressure control) are used to achieve the necessary temperatures and pressures required for these tests. The minimum temperatures (at the required pressures) allowed for these tests are determined from the RPV pressure and temperature (P/T) limits required by LCO 3.4.11, "Reactor Coolant System (RCS) Pressure and Temperature (P/T) Limits." These limits are conservatively based on the fracture toughness of the reactor vessel, taking into account anticipated vessel neutron fluence.

With increased reactor vessel fluence over time, the minimum allowable vessel temperature increases for a given pressure. Periodic updates to the RCS P/T limit curves are performed as necessary, based on the results of analyses of irradiated reactor vessel material data. Hydrostatic and system leakage testing ~~will~~ may eventually be required with minimum reactor coolant temperatures > 200°F.

Insert B

APPLICABLE SAFETY ANALYSES

Allowing the reactor to be considered in MODE 4 ~~during hydrostatic or system leakage testing~~ when the reactor coolant temperature is > 200°F, effectively provides an exception to MODE 3 requirements, including OPERABILITY of primary containment and the full complement of redundant Emergency Core Cooling Systems (ECCS). Since the ~~hydrostatic or system leakage~~ tests are performed nearly water solid (except for a gas bubble for pressure control), at low decay heat values, and near MODE 4 conditions, the stored energy in the reactor core will be very low. Under

Insert C

(continued)

INSERT A (for TS Bases page B 3.10.1-1)

or to allow completing these reactor coolant pressure tests when the initial conditions do not require temperatures > 200°F. Furthermore, the purpose is to allow continued performance of control rod scram time testing required by SR 3.1.4.1 or SR 3.1.4.4 if reactor coolant temperatures exceed 200°F when the control rod scram time testing is initiated in conjunction with a system leakage or hydrostatic test. These control rod scram time tests would be performed in accordance with LCO 3.10.4, "Single Control Rod Withdrawal – Cold Shutdown," during MODE 4 operation.

INSERT B (for TS Bases page B 3.10.1-1)

However, even with required minimum reactor coolant temperatures < 200°F, maintaining RCS temperatures within a small band during the test can be impractical. Removal of heat addition from recirculation pump operation and reactor core decay heat is coarsely controlled by control rod drive hydraulic system flow and reactor water cleanup system non-regenerative heat exchanger operation. Test conditions are focused on maintaining a steady state pressure, and tightly limited temperature control poses an unnecessary burden on the operator and may not be achievable in certain instances.

The hydrostatic and/or RCS system leakage tests require increasing pressure to approximately 1025 psig. Scram time testing required by SR 3.1.4.1 and SR 3.1.4.4 requires reactor pressures ≥ 800 psig.

Other testing (e.g., excess flow check valve testing) may be performed in conjunction with the allowances for system leakage or hydrostatic tests and control rod scram time tests.

INSERT C (for TS Bases page B 3.10.1-1)

during, or as a consequence of, hydrostatic or system leakage testing, or as a consequence of control rod scram time testing initiated in conjunction with a system leakage or hydrostatic test,

BASES

LCO (continued)

> 200°F, while performance of system leakage and hydrostatic testing results in inoperability of subsystems required when > 200°F (i.e., MODE 3). Insert D

If it is desired to perform these tests while complying with this Special Operations LCO, then the MODE 4 applicable LCOs and specified MODE 3 LCOs must be met. This Special Operations LCO allows changing Table 1.1-1 temperature limits for MODE 4 to "NA" and suspending the requirements of LCO 3.4.10, "Residual Heat Removal (RHR) Shutdown Cooling System—Cold Shutdown." The additional requirements for secondary containment LCOs to be met will provide sufficient protection for operations at reactor coolant temperatures > 200°F for the purposes of performing ~~either~~ a system leakage or hydrostatic test, Insert E

This LCO allows primary containment to be open for frequent unobstructed access to perform inspections, and for outage activities on various systems to continue consistent with the MODE 4 applicable requirements ~~that are in effect immediately prior to and immediately after this operation~~.

APPLICABILITY

The MODE 4 requirements may only be modified for the performance of, or as a consequence of, system leakage or hydrostatic tests so that these operations can be considered as in MODE 4, even though the reactor coolant temperature is > 200°F. The additional requirement for secondary containment OPERABILITY according to the imposed MODE 3 requirements provides conservatism in the response of the unit to any event that may occur. Operations in all other MODES are unaffected by this LCO. Insert F

ACTIONS

A Note has been provided to modify the ACTIONS related to system leakage and hydrostatic testing operation. Section 1.3, Completion Times, specifies once a Condition has been entered, subsequent divisions, subsystems, components, or variables expressed in the Condition discovered to be inoperable or not within limits, will not result in separate entry into the Condition. Section 1.3 also specifies Required Actions of the Condition continue to apply for each additional failure, with Completion Times based on initial entry into the Condition. However, the Required Actions for each requirement of the LCO not met provide appropriate compensatory measures for separate requirements that are not met. As such, a Note has been provided that allows separate Condition entry for each requirement of the LCO.

(continued)

INSERT D (for TS Bases page 3.10.1-3)

Additionally, even with required minimum reactor coolant temperatures < 200°F, RCS temperatures may drift above 200°F during the performance of system leakage and hydrostatic testing or during subsequent control rod scram time testing, which is typically performed in conjunction with system leakage and hydrostatic testing. While this Special Operations LCO is provided for system leakage and hydrostatic testing, and for scram time testing initiated in conjunction with a system leakage or hydrostatic test, parallel performance of other tests and inspections is not precluded.

INSERT E (for TS Bases page 3.10.1-3)

and for control rod scram time testing initiated in conjunction with a system leakage or hydrostatic test.

INSERT F (for TS Bases page 3.10.1-3)

, or as a consequence of control rod scram time testing initiated in conjunction with a system leakage or hydrostatic test,