Constellation Energy
Nine Mile Point Nuclear Station

P.O. Box 63
Lycoming, New York 13093

October 22, 2004
NMP1L 1875

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

SUBJECT: Nine Mile Point Unit 1
Docket No. 50-220
Facility Operating License No. DPR-63

License Amendment Request: Revision to Technical Specification Section 5.0, Design Features

Gentlemen:

Pursuant to 10 CFR 50.90, Nine Mile Point Nuclear Station, LLC (NMPNS) hereby requests an amendment to Nine Mile Point Unit 1 (NMP1) Operating License DPR-63. The proposed changes revise NMP1 Technical Specification (TS) Section 5.0, "Design Features." Specifically, the proposed changes relocate design details contained in the following TS sections to the Updated Final Safety Analysis Report (UFSAR), where the information already exists: TS 5.3, "Reactor Vessel;" TS 5.4, "Containment;" and TS 5.6, "Seismic Design." This change supports the License Renewal Application (LRA) that NMPNS submitted to the NRC in a letter dated May 26, 2004, by relocating the reactor vessel design lifetime (currently stated as 40 years) from TS 5.3 to the UFSAR. The proposed TS changes are consistent with the content of the Design Features section (Section 4.0) of the BWR Standard Technical Specifications (NUREG-1433 and NUREG-1434).

NMPNS requests approval of the proposed amendment by September 30, 2005, to support issuance of the safety evaluation report for the LRA with implementation within 90 days of approval. This letter contains no new regulatory commitments.

Pursuant to 10 CFR 50.91(b)(1), NMPNS has provided a copy of this license amendment request and the associated analyses regarding no significant hazards consideration to the appropriate state representative.

Very truly yours,

James A. Spina
Vice President Nine Mile Point

JAS/DEV/jm

A001

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

I, James A. Spina, 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 22 day of October, 2004.

WITNESS my Hand and Notarial Seal:

Sandra A. Oswald
Notary Public

My Commission Expires:

SANDRA A. OSWALD
Notary Public, State of New York
No. 01OS6032276
Qualified In Oswego County
Commission Expires 10-25-05

10/22/04
Date

Attachments:
1. Evaluation of Proposed Changes
2. Proposed Technical Specification Changes (Mark-up)

cc: Mr. S. J. Collins, NRC Regional Administrator, Region I
Mr. G. K. Hunegs, NRC Senior Resident Inspector
Mr. P. S. Tam, Senior Project Manager, NRR (2 copies)
Mr. N. B. Le, License Renewal Project Manager, NRR
Mr. J. P. Spath, NYSERDA

ATTACHMENT 1

EVALUATION OF PROPOSED CHANGES

Subject: *License Amendment Request: Revision to Technical Specification Section 5.0, Design Features*

1.0 DESCRIPTION

2.0 PROPOSED CHANGE

3.0 BACKGROUND

4.0 TECHNICAL ANALYSIS

5.0 REGULATORY SAFETY ANALYSIS

6.0 ENVIRONMENTAL CONSIDERATION

1.0 DESCRIPTION

This letter is a request to amend Nine Mile Point Unit 1 (NMP1) Operating License DPR-63. The proposed changes revise NMP1 Technical Specification (TS) Section 5.0, "Design Features." Specifically, the proposed changes relocate design details contained in the following TS sections to the Updated Final Safety Analysis Report (UFSAR), where the information already exists: TS 5.3, "Reactor Vessel;" TS 5.4, "Containment;" and TS 5.6, "Seismic Design." This change supports the License Renewal Application that Nine Mile Point Nuclear Station, LLC (NMPNS) submitted to the NRC in a letter dated May 26, 2004, by relocating the reactor vessel design lifetime (currently stated as 40 years) from TS 5.3 to the UFSAR.

2.0 PROPOSED CHANGE

TS 5.3, "Reactor Vessel," lists certain design features of the reactor vessel, including the internal height, internal diameter, design lifetime, and materials of construction. The proposed changes relocate this information to UFSAR Section V-B.2.0, "Reactor Vessel," where the information already exists.

TS 5.4, "Containment," describes certain design features and parameters of the containment system, including primary containment volumes, design pressures, design temperature, and material of construction. The proposed changes relocate this information to UFSAR Section VI-B, "Primary Containment – Pressure Suppression System," where the information already exists. TS 5.4 also describes certain design information for the reactor building, including maximum in-leakage rate and design internal and external loading conditions. The proposed changes relocate this information to UFSAR Section VI-C, "Secondary Containment – Reactor Building," where the information already exists.

TS 5.6, "Seismic Design," describes details regarding the seismic design of the reactor building and engineered safeguards contained therein. The proposed changes relocate this information to UFSAR Sections III, "Buildings and Structures," VI-C, "Secondary Containment – Reactor Building," and XVI-D, "Design of Structures, Components, Equipment, and Systems," where the information already exists.

3.0 BACKGROUND

TS 5.3, 5.4, and 5.6 currently describe design features and parameters that duplicate information that already exists in the UFSAR. In particular, TS 5.3 states that the reactor vessel design lifetime is 40 years, which is consistent with the current operating license expiration date of August 22, 2009. On May 26, 2004, NMPNS submitted a License Renewal Application (LRA) for NMP1 which seeks to extend the current term of the license by 20 years beyond the current expiration date. Assuming a favorable NRC decision on the LRA, the NMP1 operating license expiration date would be extended to August 22, 2029. Rather than revise the reactor vessel design lifetime value in TS 5.3 to reflect license renewal, the proposed changes relocate the reactor vessel design lifetime, as well as the other identified design details, from TS Section 5.0

to the UFSAR. Changes to the UFSAR descriptions may then be processed in accordance with the requirements of 10 CFR 50.59. These proposed TS changes are consistent with the content of the Design Features section (Section 4.0) of the BWR Standard Technical Specifications (NUREG-1433, Revision 3 and NUREG-1434, Revision 3).

4.0 TECHNICAL ANALYSIS

The reactor vessel design features and parameters in TS 5.3, the containment system design features and parameters in TS 5.4, and the seismic design details in TS 5.6 are proposed to be relocated to UFSAR Sections III, V-B.2.0, VI-B, VI-C, and XVI-D, where the information already exists. Any changes to these design features and parameters described in the UFSAR must conform to the requirements of 10 CFR 50.59. Furthermore, sufficient detail relating to these design features exists in current TS safety limits, limiting safety system settings, and limiting conditions for operation (LCOs) (e.g., TS 2.2.1, 2.2.2, 3.2.0, 3.3.0, and 3.4.0) to ensure any changes that may affect safety would require prior NRC review and approval. Since the design features with a potential to affect safety are sufficiently addressed by existing TSs, and other design features, if altered or modified in accordance with 10 CFR 50.59, would not result in a significant effect on safety, the criteria of 10 CFR 50.36(c)(4) for inclusion as a Design Feature are not met. Therefore, removing these details from the TS, while maintaining the detail in the UFSAR, will not impact safe operation of the facility. These details are not required to be in the TS to provide adequate protection of the public health and safety.

5.0 REGULATORY SAFETY ANALYSIS

5.1 No Significant Hazards Consideration

Nine Mile Point Nuclear Station, LLC (NMPNS) is proposing to revise the Design Features section of the Nine Mile Point Unit 1 Technical Specifications (TS) by relocating descriptions of certain design details to the Updated Final Safety Analysis Report (UFSAR). The affected TS descriptions pertain to the reactor vessel, containment, and seismic design.

NMPNS has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

   Response: No.

   The proposed change relocates certain design details from the TS to the UFSAR, where the information already exists. The UFSAR is maintained in accordance with 10 CFR 50.71(e). Any future change to these design details as described in

the UFSAR will be evaluated per the requirements of 10 CFR 50.59 to assure that the change does not result in more than a minimal increase in the probability or consequences of an accident previously evaluated.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or a change in the methods governing normal plant operation. The proposed change will not impose or eliminate any requirements, and adequate control of the information will be maintained in accordance with applicable regulatory requirements.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The proposed change has no impact on any safety analysis assumptions. The design details that are being removed from the TS already exist in the UFSAR. Any future change to these design details as described in the UFSAR will be evaluated per the requirements of 10 CFR 50.59 to assure that the change does not result in a design basis limit for a fission product barrier being exceeded or altered.

Therefore, the proposed change does not involve a significant reduction in the margin of safety.

Based on the above evaluation, NMPNS concludes that the proposed amendment involves no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements/Criteria

Based on the considerations discussed above evaluating the proposed change per the requirements of 10 CFR 50.36 and 10 CFR 50.92, (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 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed relocation of design details from the Nine Mile Point Unit 1 Technical Specifications to the Updated Final Safety Analysis Report would not change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, and would not change an inspection or surveillance requirement. The proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

ATTACHMENT 2

PROPOSED TECHNICAL SPECIFICATION CHANGES (MARK-UP)

The current versions of Technical Specifications pages v, 342, 345, and 346 have been marked-up by hand to reflect the proposed changes.

SECTION	DESCRIPTION	PAGE
5.0	Design Features	342
5.1	Site	342
5.2	Reactor	342
5.3	~~Reactor Vessel~~ (Deleted)	342
5.4	~~Containment~~ (Deleted)	345
5.5	Storage of Unirradiated and Spent Fuels	346
5.6	~~Seismic Design~~ (Deleted)	346
6.0	Administrative Controls	347
6.1	Responsibility	347
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6.7	High Radiation Area	359

5.0 DESIGN FEATURES

5.1 Site

The Nine Mile Point Nuclear Station and James A. Fitzpatrick Nuclear Power Plant site comprising approximately 1500 acres, is located on the shores of Lake Ontario, about seven miles northeast of Oswego, New York. An exclusion distance of nearly 4000 feet is provided between the Station and the nearest site boundary to the west, a mile to the boundary on the east, and a mile and a half to the southern site boundary (as described in the Sixth Supplement of the FSAR).

Figure 5.1-1 is a Site Boundary Map of Nine Mile Point which allows the identification of gaseous and liquid waste release points. Figure 5.1-1 also defines the unrestricted area within the site boundary that is accessible (except for fenced areas) to member of the public.

5.2 Reactor

The reactor core consists of no more than 532 fuel assemblies containing enriched uranium dioxide pellets clad in Zircaloy-2. The core excess reactivity will be controlled by movable control rods and burnable poisons. The core will be cooled by circulation of water internally and external to the pressure vessel through recirculation loops.

5.3 ~~Reactor Vessel~~ (Deleted)

~~The pertinent features of the reactor vessel other than those referred to in the technical specifications are as follows:~~

~~Internal Height~~	~~63'-10"~~
~~Internal Diameter~~	~~17'-9"~~
~~Vessel Design Lifetime~~	~~40 years~~
~~Materials of Construction~~	
~~Base Metal~~	~~SA302B~~
~~Clad~~	~~Weld Deposited 308L Electrode~~

5.4 ~~CONTAINMENT~~ (Deleted)

The containment system consists of a drywell, suppression chamber and a reactor building. The pressure suppression system consists of a drywell with a volume of approximately 243,000 cubic feet and an interconnected suppression chamber with a volume of 209,000 cubic feet. Of this total volume some 180,000 and 120,000 cubic feet of free space are available in the drywell and suppression chamber, respectively.

The pertinent design features not discussed elsewhere in the technical specifications are as follows:

	Drywell & Vents	Pressure Suppression Chamber
Internal Design Pressure	62 psig	35 psig
Internal Design Temperature	310°F	205°F
External Design Pressure	2 psig	1 psig
Material of Construction	A-201 and A-212 Grade "B" Firebox Steel made to A-300 requirements.	

For long-term post-accident recovery, the pressure suppression system is designed to permit flooding to a level at least six feet above the core.

The reactor building is designed for a maximum in-leakage rate of 100 percent per day at 0.25 inch of water internal vacuum and zero wind speed. Exterior loadings for wind, snow and ice meet all applicable codes. The roof and supporting structures are designed to withstand a loading of 40 psf of snow or ice. The walls and building structure are designed to withstand an external or internal loading of 40 psf which is approximately equivalent to that caused by a wind velocity of 125 mph 30 feet above the ground level. Pressure relief is provided to prevent damage to the superstructure due to the break of any primary system line in the reactor building. In this event, blowout panels will fail, relieving pressure in the event of a major line rupture.

5.5 Storage of Unirradiated and Spent Fuel

Unirradiated fuel assemblies will normally be stored in critically safe new fuel storage racks in the reactor building storage vault. Even when flooded with water, the resultant k_{eff} is less than 0.95. Fresh fuel may also be stored in shipping containers. The unirradiated fuel storage vault is designed and shall be maintained with a storage capacity limited to no more than 200 fuel assemblies.

1066 spent fuel assemblies with up to 15.6 grams (3.0 weight percent) of Uranium-235 per axial centimeters of assembly can be stored in non-poison flux trap racks in the north half of the spent fuel pool. 1710 spent fuel assemblies with up to 18.13 grams (3.75 weight percent) of Uranium-235 per axial centimeters of assembly can be stored in Boraflex racks in the south half of the pool. These racks have been designed to maintain a k_{eff} less than 0.95 under conditions of optimum water moderation. The north and south half of the pool are analyzed to store 1840 and 2246 fuel assemblies, respectively, using racks containing the neutron absorber material Boral. The Boral racks will maintain a k_{eff} of less than 0.95 under abnormal and accident conditions. The spent fuel stored in the Boral racks must have a peak lattice enrichment of 4.6 % or less and the k-inf in the standard cold core geometry must be less than or equal to 1.31.

5.6 ~~Seismic Design~~ (Deleted)

~~The reactor building and all contained engineered safeguards are designed for the maximum credible earthquake ground motion with an acceleration of 11 percent of gravity. Dynamic analysis was used to determine the earthquake acceleration, applicable to the various elevations in the reactor building.~~