UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
Rochester Gas and Electric Corporation	)	Docket No. 50-244
(R.E. Ginna Nuclear Power Plant)	)	

APPLICATION FOR AMENDMENT
TO OPERATING LICENSE

Pursuant to Section 50.90 of the regulations of the U.S. Nuclear Regulatory Commission (the "Commission"), Rochester Gas and Electric Corporation ("RG&E"), holder of Facility Operating License No. DPR-18, hereby requests that the Improved Technical Specifications set forth in Appendix A to that license be amended. This request for change in Improved Technical Specifications is to revise the date within the footnote to Design Features Fuel Storage Specification 4.3.1.1.b which applies to the temporary measures associated with boraflex degradation.

A description of the amendment request, necessary background information, justification of the requested change, and environmental impact considerations determination are provided in Attachment I. The no significant hazards consideration evaluation is provided as Attachment II. A marked up copy of the current Ginna Station Improved Technical Specification which shows the requested change is set forth in Attachment III. The proposed revised Improved Technical Specification is provided in Attachment IV.

The evaluation set forth in Attachment I demonstrates that the proposed change does not involve a significant change in the types or a significant increase in the amounts of effluent or any change in the authorized power level of the facility. The proposed change also does not involve a significant hazards consideration, as documented in Attachment II.

WHEREFORE, Applicant respectfully requests that Appendix A to Facility Operating License No. DPR-18 be amended in the form attached hereto as Attachment IV.

Rochester Gas and Electric Corporation

By _____
Robert C. Mecredy
Vice President
Nuclear Operations Group

Subscribed and sworn to before me
on this 20th day of October, 1999.

_____
Notary Public

SHARON P. SORTINO
Notary Public, State of New York
Registration No. 01SO6017755
Monroe County
Commission Expires December 21, 2000

Attachment I
R.E. Ginna Nuclear Power Plant

LICENSE AMENDMENT REQUEST
DATE CHANGE FOR BORAFLEX DEGRADATION TEMPORARY MEASURES

This attachment provides a description of the amendment request and necessary justification for the proposed changes. The attachment is divided into five sections as follows. Section A identifies all changes to the current Ginna Station Improved Technical Specifications (ITS) while Section B provides the background and history associated with the changes being requested. Section C provides detailed justification for the proposed changes. An environmental impact consideration of the requested changes is provided in Section D. Section E lists all references used in Attachments I and II.

A. DESCRIPTION OF AMENDMENT REQUEST

This License Amendment Request (LAR) proposes to revise Ginna Station ITS to reflect the new date by which the Spent Fuel Pool (SFP) boraflex degradation issue will be resolved. The change is summarized below and shown in Attachments III and IV.

1. DESIGN FEATURES 4.3

   a. The note associated with Specification 4.3.1.1.b is revised to add a new date of June 30, 2001 as the date until which the SFP shall be maintained with a boron concentration ≥ 2300 ppm.

B. BACKGROUND

In 1998, RG&E identified boraflex degradation in Region 2 as a result of testing (Reference 1). To compensate for this degradation, RG&E proposed that the spent fuel pool boron concentration be maintained ≥ 2300 ppm at all times until a permanent resolution could be implemented. The NRC provided approval of this temporary measure within an SER (Reference 2) associated with changes to the SFP storage requirements. At that time RG&E had planned to have a permanent solution to the boraflex degradation concern implemented by December 31, 1999. The proposed date reflected the time needed to both evaluate, design, and implement necessary modifications to the SFP.

During the summer and fall of 1998, RG&E met with a number of vendors to evaluate the available options for modifying the spent fuel pool storage configuration. These options included SFP storage rack inserts and spent fuel assembly inserts. Early in 1999, RG&E was made aware of a potential analytical approach for resolving the issue which would eliminate the need for a permanent modification. A scoping study was contracted which evaluated a number of changes to the methodology and inputs to the current criticality analysis. This scoping study was completed in July of 1999 with a preliminary conclusion that new proposed storage requirements could be met by moving spent fuel assemblies to new locations within the existing storage racks and taking credit for a limited amount of soluble boron. This would allow resolution of this issue without requiring a modification to the storage racks.

As the result of this preliminary conclusion, RG&E is requesting a revision to the date specified in the Specification 4.3.1.1.b note associated with maintaining spent fuel pool boron concentration $\geq$2300 ppm at all times until a permanent resolution can be implemented. The status of this issue was discussed with NRC staff during a telephone conference call held August 11, 1999, at which time it was stated that the NRC review and approval of new proposed storage requirements could take approximately one year to complete. RG&E is currently expecting a final criticality analysis to be completed and the new proposed SFP storage requirements amendment request to be submitted to the NRC by March 10, 2000. Therefore, RG&E is requesting that the specified date in ITS be revised to June 30, 2001, which also accounts for any potential delays in the submittal or approval process.

C. JUSTIFICATION OF CHANGES

This section provides the justification for all changes described in Section A above and shown on Attachment IV. The justifications are organized based on whether the change is: more restrictive (M), less restrictive (L), administrative (A), or the requirement is relocated (R). The justifications listed below are also referenced in the Technical Specification(s) which are affected (see Attachment III).

C.1 Administrative

A.1 The date specified in the Specification 4.3.1.1.b note associated with maintaining spent fuel pool boron concentration $\geq$2300 ppm at all times until a permanent resolution can be implemented will be revised to June 30, 2001. The basis for the temporary compensatory measure was detailed in Reference 3 and received NRC approval by Reference 2. Extending the date is required to allow for an analytical resolution of the boraflex degradation issue without requiring a plant modification. The conclusion in Reference 3 that a boron dilution event is not credible remains valid and therefore the extension of the completion date is of an administrative nature.

There are no less restrictive (L), more restrictive (M), or relocated (R) changes associated with this LAR.

D. ENVIRONMENTAL IMPACT CONSIDERATION

RG&E has evaluated the proposed changes and determined that:

1. The changes do not involve a significant hazards consideration as documented in Attachment II; and

2. The changes do not involve a significant change in the types or significant increase in the amounts of any effluent that may be released offsite since the change is administrative in nature; and

3. The changes do not involve a significant increase in individual or cumulative occupational radiation exposure since no new or different type of equipment are required to be installed as a result of this LAR.

Accordingly, the proposed changes meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), an environmental assessment of the proposed changes is not required.

E. REFERENCES

1. Letter from Robert C. Mecredy (RG&E) to Guy S. Vissing (NRC), "Boraflex Degradation", dated March 30, 1998.

2. Letter from Guy S. Vissing (NRC) to Robert C. Mecredy (RG&E), "Issuance of Amendment No. 72 to Facility Operating License No. DPR-18, R. E. Ginna Nuclear Power Plant", dated July 30, 1998.

3. Letter from Robert C. Mecredy (RG&E) to Guy S. Vissing (NRC), "Application for Amendment to Facility Operating License, Revised Spent Fuel Pool Storage Requirements, Revision 1", dated April 27, 1998.

Attachment II
R.E. Ginna Nuclear Power Plant

SIGNIFICANT HAZARDS CONSIDERATION EVALUATION

The proposed change to the Ginna Station Improved Technical Specifications as identified in Attachment I Section A and justified by Section C has been evaluated with respect to 10 CFR 50.92(c) and shown not to involve a significant hazards consideration as described below.

Evaluation of Administrative Change

The administrative change associated with the revision of the date specified in the Specification 4.3.1.1.b note associated with maintaining spent fuel pool boron concentration ≥2300 ppm at all times until a permanent resolution can be implemented does not involve a significant hazards consideration as discussed below:

1) Operation of Ginna Station in accordance with the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated. The change revises the required completion date for resolution of a boraflex degradation issue. As described in the bases for LCO 3.7.12, increases in spent fuel pool temperature, with the corresponding decrease in water density and void formation from boiling, will generally result in an decrease in reactivity due to the decrease in moderation effects. The only exception are temperature bands where positive reactivity is added as a result of the high boron concentration. This effect is bounded by the reactivity added as a result of a misloaded fuel assembly. With respect to the more limiting dropped fuel assembly accidents, boraflex neutron absorber panels were originally assumed in the criticality analysis. Requiring a high concentration of soluble boron in place of boraflex panels ensures that the spent fuel pool remains subcritical with $k_{eff} \leq 0.95$ for these accidents. Fuel assembly movement will continue to be controlled in accordance with plant procedures and LCO 3.7.13 which specifies limits on fuel assembly storage locations. Periodic surveillances of boron concentration are required every 7 days with level verified every 7 days during fuel movement per LCO 3.7.11. Due to the large inventory within the spent fuel pool, dilution of the soluble boron within the pool is very unlikely without being detected by operations personnel during auxiliary operator rounds or available level detection systems. There is also a large margin between the analyzed boron concentration to maintain the pool subcritical $k_{eff} \leq 0.95$ and the current required value. The extension of the date does not invalidate this conclusion. Therefore, the probability or consequences of an accident previously evaluated is not significantly increased.

2) Operation of Ginna Station in accordance with the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated. Revising the date for requiring that 2300 ppm boron be maintained in the spent fuel pool, to address any potential dissolution of boraflex in neutron absorber panels, does not create the possibility of a new or

different kind of accident since the spent fuel pool is required to be maintained with a high boron concentration. Assuming a boron dilution event to the level required to reach k_{eff}>0.95 conditions within the spent fuel pool would require either overfill of the pool or a controlled feed and bleed process with unborated water. In both cases, more than 105,000 gallons of unborated water would be required to reach k_{eff}>0.95. There is no source of unborated water of this size available to reach the spent fuel pool under procedural control or via a pipe break other than a fire water system pipe break or SW leak through the spent fuel pool heat exchangers. However, there are numerous alarms available within the control room to indicate this condition including high spent fuel pool water level and sump pump actuations within the residual heat removal pump pit (lowest location in the Auxiliary Building). Auxiliary operators also perform regularly scheduled tours within the Auxiliary Building. This provides sufficient time to terminate the event such that there is no credible spent fuel pool dilution accident. Therefore, the possibility for a new or different kind of accident from any accident previously evaluated is not created.

3) Operation of Ginna Station in accordance with the proposed change does not involve a significant reduction in a margin of safety. High levels of soluble boron in the spent fuel pool provides a significant negative reactivity such that k_{eff} is maintained ≤0.95. The proposed surveillance frequency will ensure that the necessary boron concentration is maintained. A boron dilution event which would remove the soluble boron from the pool has been shown to not be credible. Therefore, this change does not involve a significant reduction in a margin of safety.

Based upon the preceding information, it has been determined that the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated, create the possibility of a new or different kind of accident from any accident previously evaluated, or involve a significant reduction in a margin of safety. Therefore, it is concluded that the proposed changes meet the requirements of 10 CFR 50.92(c) and do not involve a significant hazards consideration.