November 9, 2004

Mrs. Mary G. Korsnick Vice President R. E. Ginna Nuclear Power Plant R.E. Ginna Nuclear Power Plant, LLC 1503 Lake Road Ontario, NY 14519

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING R. E. GINNA NUCLEAR POWER PLANT LICENSE AMENDMENT REQUEST RELATING TO THE CONTROL ROOM EMERGENCY AIR TREATMENT SYSTEM MODIFICATION (TAC NO. MB9123)

Dear Mrs. Korsnick:

By letter dated May 21, 2003, as supplemented on December 1, 2003, (two letters), February 16, March 1, March 8, April 22, May 21, July 8 and 14, August 6 and 18, September 10, October 14, and October 18, 2004, you submitted a request to revise the Ginna Technical Specifications to reflect design modifications to the Control Room Emergency Air Treatment System, and elimination of the requirements for the Containment Post Accident Charcoal Filters. The proposed design modifications are based on the use of the alternate source term.

The Nuclear Regulatory Commission (NRC) staff has reviewed the information and based on our review, we have determined that additional information is required in order for the staff to complete its review. Enclosed is the NRC staff's request for additional information (RAI). This RAI was discussed with your staff on November 2, 2004, and it was agreed that your response would be provided 30 days from the date of this letter.

Sincerely,

/**RA**/

Robert Clark, Project Manager, Section 1 Project Directorate 1 Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket No. 50-244

Enclosure: RAI

cc w/encl: See next page

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R.E. Ginna Nuclear Power Plant

CC:

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Mr. Paul Eddy New York State Department of Public Service 3 Empire State Plaza, 10th Floor Albany, NY 12223

REQUEST FOR ADDITIONAL INFORMATION (RAI)

R. E. GINNA NUCLEAR POWER PLANT

CONTROL ROOM EMERGENCY AIR TREATMENT SYSTEM

R. E. Ginna Nuclear Power Plant, LLC proposed design modifications to the Control Room Emergency Air Treatment System (CREATS), the Control Room Emergency Cooling System (CRECS), and the Containment Post Accident Charcoal Filters are based on the full scope implementation of the alternate source term (AST). The Nuclear Regulatory Commission (NRC) staff has reviewed the license amendment request and has determined that the following additional information is needed.

1. Dose Analysis

Section 2.2 of Attachment 1 to Constellation Energy's July 14, 2004, letter states that discharges from the atmospheric relief valve (ARV) pathway were used to model a steam line break accident with the steam generator intact. However, a description of the radiological analysis for this accident has not been provided in Attachment 1. Please provide description of the radiological analysis for the steam line break accident.

Section 2.6 of Attachment 1 to Constellation Energy's July 14, 2004, letter states that the tornado condition atmospheric dispersion factors at the Exclusion Area Boundary (EAB) were calculated using a distance-to-receptor value of 503 m. Please justify why the shortest EAB distance listed in the Ginna Updated Final Safety Analysis Report, Table 2.3-20 (450 m for the south-southeast, south, and south-southwest sectors) was not used.

In your response, dated July 14, 2004, you assumed no fuel melt for the rod ejection accident analysis. However, the Ginna Updated Final Safety Analysis Report, Table 15.4-3, "Parameters used in the Analysis of the Rod Cluster Control Assembly Ejection Accident," assumes that the fuel melt is less than 10%. Using an appropriate fuel melt assumption for this design bases event, please provide a sensitivity analysis of the radiological consequences.

In your response, dated July 14, 2004, you included the Gas Decay Tank Rupture as a design bases event. Since there is no change in the source term for the Gas Decay Tank Rupture Analysis, the staff believes that this event need not be re-analyze using the AST. In addition, the NRC staff does not consider this accident to be a design-basis event. It is not listed or addressed in Regulatory Guide 1.183, "Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors," or Standard Review Plan 15 and should, therefore, not be included in the license amendment request. Based on the above reasons, the staff recommends that this event be excluded from the license amendment request.

2. <u>CREATS Equipment Qualification</u>

In your response, dated July 8, 2004, to RAI, No. 1, you stated that (a) Dampers and Duct Work in the Relay Room Annex, (b) Dampers and Duct Work in Stairwell, and (c) the Filter Units in the Relay Room Annex were seismically qualified in accordance with IEEE 344-1987,

"IEEE Recommended Practices for Seismic Qualification of Class 1E Equipment for Nuclear Power Plants." Please provide a brief description of the method of analysis and the acceptance criteria used.

In your response to RAI No. 5, you stated that Ginna Design Specification ME-326 is used only for components located inside the Control Room and Relay Room Annex. Please provide criteria for the design of the air conditioning units mounted on the roof of the Relay Room Annex including seismic and design basis tornado wind loads.

In addition, please provide the status of the qualification effort including the appropriate 10 CFR Part 50, Appendix B documentation for all equipment affected by the modified CREATS and CRECS systems.

3. <u>Cable Separation</u>

The following questions are with regards to your letter dated March 8, 2004, concerning cable separation and fault protection.

Are all Train A and B cables for the CREATS modification routed in separate cable trays or conduits? If the same cable tray is designated for both trains, please clarify how physical separation will be maintained in accordance with your licensing bases.

Please confirm that the installation of the new power/control cables (480 VAC,120 VAC, and 125 VDC) associated with the CREATS modification are designed such that:

(a) no single fault on any of the new cables can cause failure of both redundant trains of the CREATS or any other safety-related systems.

Please confirm that all pre-existing 120 VAC and 125 VDC control and power cables routed in the same cable trays containing CREATS cables have protective devices and are capable of clearing the most limiting fault such that no CREATS cables will be damaged. Discuss the results of the analyses (energy released and cable heat up) that supports this conclusion.

4. Control Room Radiation Monitor Analytical Limit

In accordance with your letter dated September 10, 2004, you stated in Attachment 1, Design Analysis DA-EE-2001-013, that the limiting analytical limit (AL) for the control room radiation monitor is 0.91 mr/hr. The previous AL for these instruments was 0.96 mr/hr. Since the new AL is less conservative then the previous value, Design Analysis DA-EE-2000-009 for the control room radiation monitor setpoints should be revised to indicate the correct Limiting Safety System Setting (LSSS). Technical Specifications Table 3.3.6-1, "CREATS Actuation Instrumentation," should also be revised to reflect the new LSSS and the performance based operability requirements for the Channel Operational Test.