



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, D. C. 20555

April 9, 1984

Honorable Nunzio J. Palladino  
Chairman  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Dr. Palladino:

SUBJECT: ACRS REPORT ON FULL-TERM OPERATING LICENSE FOR THE R. E. GINNA  
NUCLEAR POWER PLANT

During its 288th meeting, April 5-7, 1984, the Advisory Committee on Reactor Safeguards completed its review of the application by the Rochester Gas and Electric Corporation (Licensee) for conversion of the provisional operating license (POL) for its R. E. Ginna Nuclear Power Plant to a full-term operating license (FTOL). This application was considered also during a Subcommittee meeting in Washington, D.C. on November 16, 1983 and during the 283rd ACRS meeting, November 17-19, 1983. Issues related to flood, severe wind, and earthquake hazards were reviewed in depth during meetings of the Subcommittee on Extreme External Phenomena on October 21-22, 1982 and April 4, 1984. During our review, we had the benefit of discussions with representatives of the Licensee and the NRC Staff. We also had the benefit of the documents referenced. The Committee most recently discussed and reported on this plant in a letter dated August 18, 1982 relating to the Systematic Evaluation Program (SEP) review of the Ginna Plant.

The Ginna Plant received a POL in September 1969 and began commercial operation in December of the same year. The Licensee applied for an FTOL in a timely fashion in August 1972, but review of this application was deferred by the NRC Staff in 1975, along with several other FTOL reviews. In 1978, the Ginna Plant was included in Phase II of the SEP because much of the review needed for the FTOL was similar in scope to that for the SEP.

In the Committee's letter reporting on the results of the SEP as applied to the Ginna Plant, the ACRS indicated that its review of the FTOL would be deferred until the NRC Staff had completed its actions on the SEP issues that were still pending and on the Unresolved Safety Issue (USI) and TMI Action Plan items. The SEP issues have been resolved to the satisfaction of the NRC Staff in the manner reported in Supplement No. 1 to the Integrated Plant Safety Assessment Report for the Ginna Plant. The status of the USI and TMI Action Plan items for the Ginna Plant has been discussed by the NRC Staff in its Safety Evaluation Report related to the FTOL for the Ginna Plant.

Although all of the actions proposed or committed to as a result of the SEP review have not yet been completed, we believe that the procedures and schedules that have been agreed to are satisfactory. A large proportion of the TMI Action Plan items have been completed and those remaining are in a status acceptable to the NRC Staff, and to us. A similar situation exists with regard to those USI items for which a resolution has been reached by the NRC Staff.

The Licensee has proposed to modify the plant to decrease its vulnerability to tornado winds and missiles. These modifications will be based on a tornado having a design wind velocity of 132 mph. Modifications to the steel structures will be based on criteria that will ensure no significant yielding at wind speeds up to 132 mph, and no instability or collapse that might affect components or systems needed for safe shutdown at wind speeds up to about 200 mph. It appears from the Licensee's analyses that the cost of plant modifications would increase sharply if design basis tornadoes significantly higher than 132 mph were used. The NRC Staff believes that these planned modifications will upgrade the plant design such that tornadoes will not be a dominant contributor to the risk of core melt. We believe that this is an adequate approach, but recommend that the NRC Staff consider further the measures proposed or needed to assure operability of the diesel generator during the reduced pressure transient accompanying a tornado.

We concur with the process used by the NRC Staff and the Licensee to assure that the plant is adequately protected from the effects of external floods. The procedures used by the NRC Staff to evaluate the seismic adequacy of the plant are reasonable and are similar to procedures used in seismic reevaluation of other SEP plants.

We do not believe that any of the pending actions related to the SEP, USI, or TMI Action Plan items would be accelerated by withholding an FTOL at this time.


In connection with our review of the SEP, we have considered the operating experience at the Ginna Plant and have found nothing that would preclude granting an FTOL at this time. We have also reviewed the most recent Systematic Assessment of Licensee Performance (SALP) Report for the Ginna Plant, for the period June 1, 1982 through May 31, 1983, and note that all activities reviewed were classed in either Category 1 or 2. We find this encouraging.

The Committee believes that there is reasonable assurance that the R. E. Ginna Nuclear Power Plant can continue to be operated at power levels

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up to 1520 MWt under a full-term operating license without undue risk to the health and safety of the public.

Sincerely,



Jesse C. Ebersole  
Chairman

References:

1. Rochester Gas and Electric Corporation, "Final Safety Analysis Report, R. E. Ginna Nuclear Power Plant," Volumes 1-3 and Supplements 1-12
2. U. S. Nuclear Regulatory Commission, "Integrated Plant Safety Assessment, Systematic Evaluation Program, R. E. Ginna Nuclear Power Plant," USNRC Report NUREG-0821, dated December 1982 and Supplement 1 dated August 1983
3. Letter from H. Denton, Director, Office of Nuclear Reactor Regulation to P. Shewmon, Chairman, ACRS, dated September 17, 1982, Subject: Staff Response to the ACRS Report on the Systematic Evaluation Program Review of the R. E. Ginna Nuclear Power Plant
4. U.S. Nuclear Regulatory Commission, "Safety Evaluation Report Related to the Full-Term Operating License for R. E. Ginna Nuclear Power Plant," USNRC Report NUREG-0944, dated October 1983
5. U.S. Nuclear Regulatory Commission, "NRC Report on the January 25, 1982 Steam Generator Tube Rupture at R. E. Ginna Nuclear Power Plant," USNRC Report NUREG-0909, dated April 1982
6. Letter dated September 26, 1983 from T. Murley, NRC Regional Administrator, to John E. Maier, Rochester Gas & Electric Corp., Subject: Systematic Assessment of Licensee Performance (SALP) Report
7. Institute for Disaster Research, Texas Tech University, "A Methodology for Tornado Hazard Probability Assessment," prepared for USNRC by J. R. McDonald, NUREG/CR-3058, dated October 1983