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,	)	
Unit No. 1)	)	

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 Provisional Operating License No. DPR-18, hereby requests that the Technical Specifications set forth in Appendix A to that license be amended to change reactor overpressure protection system requirements.

The proposed technical specification change is set forth in Attachment A to this Application. A safety evaluation is set forth in Attachment B. This evaluation also demonstrates that the proposed change does not involve a significant change in the types or a significant increase in the amounts of effluents or any change in the authorized power level of the facility. Justification for classification of the amendment pursuant to 10 C.F.R. Section 170.22 is included as Attachment C. A check for the appropriate fee accompanies this Application.

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

Rochester Gas and Electric Corporation

By L.D. White, Jr.

L.D. White, Jr.
Vice President,
Electric and Steam Production

Subscribed and sworn to before me
on this 17 day of July, 1979.

Stephen Kowba

STEPHEN KOWBA
NOTARY PUBLIC, State of N.Y., Monroe County
My Commission Expires March 30, 1980

BEFORE THE UNITED STATES

NUCLEAR REGULATORY COMMISSION

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ROCHESTER GAS AND ELECTRIC CORPORATION	)	
(R. E. Ginna Nuclear Power Station, Unit No. 1)	)	Docket No. 50-244
	)	

CERTIFICATE OF SERVICE

I hereby certify that I have served a document entitled "Application for Amendment to Operating License" with three (3) documents, Attachments A, B and C, attached thereto, by mailing copies thereof first class, postage pre-paid, to each of the following persons this 19th day of July 1979:

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3.15 Overpressure Protection System

Applicability

Applies whenever the temperature of one or more of the RCS cold legs is $\leq$ 330°F.

Objective

To prevent overpressurization of the reactor coolant system.

Specification

3.15.1 Except during secondary side hydrostatic tests, at least one of the following overpressure protection systems shall be operable:

a. Two pressurizer power operated relief valves (PORVs) with a lift setting of $\leq$ 435 psig, or

b. A reactor coolant system vent of $\geq$ 1.1 square inches.

3.15.1.1 With one PORV inoperable, either restore the inoperable PORV to operable status within 7 days or depressurize and vent the RCS through a 1.1 square inch vent(s) within the next 8 hours; maintain the RCS in a vented condition until both PORVs have been restored to operable status.

3.15.1.2 With both PORVs inoperable, depressurize and vent the RCS through a 1.1 square inch vent(s) within 8 hours; maintain the RCS in a vented condition until both PORVs have been restored to operable status.

3.15.1.3 Use of the overpressure protection system to mitigate a RCS pressure transient shall be reported in accordance with 6.9.3.

Basis

The operability of two pressurizer PORVs or an RCS vent opening of greater than 1.1 square inches ensures that the RCS will be protected from pressure transients which could exceed the limits of Appendix G to 10 CFR Part 50 when one or more of the RCS cold legs are $\leq$ 330°F. Either PORV has adequate relieving capability to protect the RCS from overpressurization when the transient is limited to either (1) the start of an idle RCP with the secondary water temperature of the steam generator $\leq$ 50°F above the RCS cold leg temperature or (2) the start of a safety injection pump and its injection into a water solid RCS.(1)

References:

(1) L. D. White, Jr. letter to A. Schwencer, NRC, dated July 29, 1977

Proposed

Attachment B

A reactor coolant system Overpressure Protection System (OPS) has been installed at R. E. Ginna to mitigate pressure transients that might otherwise exceed those limits which are based upon Appendix G to 10 CFR Part 50. The system is designed to mitigate transients which may result from personnel error, equipment malfunction or procedural deficiencies. A description of this system was provided in letters from Mr. L. D. White, Jr., Rochester Gas and Electric Corporation, to Mr. A. Schwencer, U. S. Nuclear Regulatory Commission, dated February 24, 1977, March 31, 1977, and July 29, 1977. The OPS will prevent a water solid reactor coolant system from exceeding a pressure of 535 psig for a safety injection pump discharging to the reactor coolant system, a reactor coolant pump start discharging to the reactor coolant system, a reactor coolant pump start with a 50°F temperature differential between the primary and secondary systems or less severe mass input or heat input transients.

Specification 3.15 requires that an overpressure protection system be operable when one or more of the RCS cold leg temperatures is less than or equal to 330°F. For temperatures greater than 330°F the allowable RCS pressure is greater than the normal relief pressure of the two pressurizer power operated relief valves so that no other overpressure protection is required. Below 330°F each of the PORVs, using a low pressure setpoint of 435 psig, will mitigate the limiting mass input and heat input pressure transients in a water-solid RCS.

The single setpoint was established to prevent exceeding the allowable RCS pressure at 100°F and does not provide for pressure increases which would normally be acceptable with increasing temperature.

Ginna Station has administratively limited the pressure differential from the secondary side to the primary side of the steam generators to 800 psid. This limit has been imposed to limit stresses placed on the steam generator which may cause cladding in the primary channel head to separate from the base metal. Although Ginna has never experienced cladding separation, several other plants of the same vintage did in their early operating history. The 800 psid pressure limitation is considered a wise and prudent precaution to limit the potential for difficult repairs in a high radiation area.

During secondary side hydrostatic testing the requirements for high secondary side pressure, limited RCS pressure due to OPS operation and a maximum 800 psi differential pressure are mutually exclusive. The OPS is needed only in the unlikely event of a pressure transient. During infrequent secondary side hydrostatic tests extra precautions can be implemented to prevent pressure transients with the OPS deactivated and to allow compliance with the other constraints placed upon the steam generators.

During normal operation when the OPS is required to be operable, a maximum of one safety injection pump is allowed to be operable to assure that a mass addition pressure transient can be relieved by a single PORV. During the secondary side hydrostatic test no safety injection pumps will be allowed to operate.

The OPS will mitigate the effects of a reactor coolant pump start with the secondary side of the steam generators at least 50°F warmer than the reactor coolant system. Prior to the secondary side hydrostatic test the temperature differential will be minimized both to aid in the performance of the test and to prevent a pressure transient in the event of an inadvertent reactor coolant pump start.

The existing limitations on the operation of the charging pumps when the RCS is being cooled by the RHR system without the OPS operable will be followed. These limitations will prevent inadvertent overpressurization of the RHR system should letdown be terminated.

The OPS has not been challenged at Ginna Station. It will be operable before and after the secondary side hydrostatic test as required by the RCS temperature.

During the hydrostatic test when the OPS is not operable the normal operations shift will be supplemented by an additional licensed operator. This operator will be charged with the responsibility of assuring that all the administrative controls and precautions necessary to prevent overpressure transients will be observed.

Thus, there is adequate assurance that a pressure transient will not occur during a secondary side hydrostatic test and that the test can be safely performed without the OPS operable.

Attachment C

The proposed Amendment to the Provisional Operating License has been evaluated and determined to fall within the definition of Class III of 10 C.F.R. Section 170.22 thereby requiring a fee of $4,000.

The proposed amendment deals with a single safety issue, over-pressure protection of the reactor vessel. The issue has been clearly identified by an NRC position.