



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

ROCHESTER GAS AND ELECTRIC CORPORATION

DOCKET NO. 50-244

R. E. GINNA NUCLEAR POWER PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 4  
License No. DPR-18

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Rochester Gas and Electric Corporation (the licensee) dated March 30, 1984 complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public; and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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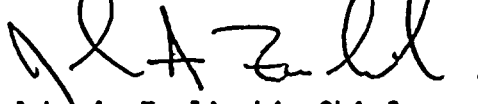
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C(2) of Facility Operating License No. DPR-18 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 4, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



John A. Zwolinski, Chief  
Operating Reactors Branch #5  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: June 7, 1985.

ATTACHMENT TO LICENSE AMENDMENT NO. 4

FACILITY OPERATING LICENSE NO. DPR-18

DOCKET NO. 50-244

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change.

REMOVE

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1.18

Dose Equivalent I-131.

The dose equivalent I-131 shall be that concentration of I-131 which alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134 and I-135 actually present. The dose conversion factors used for this calculation shall be those for the adult thyroid dose via inhalation, contained in NRC Regulatory Guide 1.109 Rev. 1 October 1977.

1.19

Reportable Event

A Reportable Event shall be any of those conditions specified in Section 50.73 to 10CFR Part 50.

3.4

Turbine Cycle

Applicability

Applies to the operating status of turbine cycle.

Objective

To define conditions of the turbine cycle steam-relieving capacity. Auxiliary Feedwater System and Service Water System operation is necessary to ensure the capability to remove decay heat from the core. The Standby Auxiliary Feedwater System provides additional assurance of capability to remove decay heat from the core should the Auxiliary Feedwater System be unavailable.

Specification

3.4.1

When the reactor coolant temperature is above 350°F, the following conditions shall be met:

- a. A minimum turbine cycle code approved steam-relieving capability of eight (8) main steam valves available (except for testing of the main steam safety valves).
- b. Three auxiliary feedwater pumps and their associated flow paths (including backup supply from the Service Water System) must be operable.
- c. A minimum of 22,500 gallons of water shall be available in the condensate storage tanks for the Auxiliary Feedwater System.
- d. Two Standby Auxiliary Feedwater pumps and associated flow path (including flow path from the Service Water System) must be operable.

3.4.2

Actions To Be Taken If Conditions Of 3.4.1 Are Not Met

- a. With one or more main steam code safety valves inoperable, restore the inoperable valve(s) to operable status within 4 hours or be in at least hot shutdown within the next 6 hours and in cold shutdown within the following 30 hours.
- b. With one auxiliary feedwater pump inoperable, restore the pump to operable status within 7 days. If the pump is not restored to operable status within 7 days, submit a Special Report within an additional 30 days in accordance with Specification 6.9.2 outlining the cause of the inoperability and plans for restoring the pump to operable status.

- a. Power operation may continue with the station service transformer out of service provided both diesel generators are operable.
- b. Power operation may continue if one diesel generator is out of service provided (a) the remaining diesel generator is run continuously, and (b) the station service transformer is in service and (c) such operation is not in excess of 7 days (total for both diesels) during any month.
- c. Power operation may continue if less than 150 amps of battery charging capacity is available to one d.c. system, as long as at least 150 amps of battery charger capacity is available to each d.c. system within two hours. If not available, the reactor shall be placed in the hot shutdown condition within the next six hours and in the cold shutdown condition within the following 30 hours.

Basis:

The electrical system equipment is arranged so that no single contingency can inactivate enough safeguards equipment to jeopardize the plant safety. The 480-volt equipment is arranged

3.14 Fire Suppression System

Applicability

Applies to the operating status of the Fire Suppression System.

Objective

Define those conditions of the Fire Suppression System which provide adequate fire protection.

Specification

- 3.14.1 The fire detection instruments for each fire detection zone shown in Table 3.14-1 shall be operable.
- 3.14.1.1 With the number of operable instruments less than that required by Specification 3.14.1,
- a. Except during emergency conditions which prohibit access, establish within an hour a fire watch patrol to inspect the zone with the inoperable instrument(s) at least once per hour, unless the instrument is located in containment, in which case inspect the containment once every 8 hours or monitor the containment air temperature at least once per hour at a minimum of 16 representative locations.
  - b. Comply with the requirements of Specification 3.14.1 within 14 days, or
  - c. Prepare and submit a Special Report within an additional 30 days in accordance with Specification 6.9.2 outlining the cause of the inoperability and the plans for restoring the instrument(s) to operable status.
- 3.14.2 The fire suppression water system shall be operable with:
- a. Two fire pumps each with a capacity of 2000 gpm with their discharge aligned to the fire suppression header.
  - b. Automatic initiation logic for each fire pump.
- 3.14.2.1 With an inoperable redundant component,
- a. In the operating mode, restore the component to operable status within 7 days. If the component is not restored to operable status within 7 days, run the remaining pump continuously and prepare and submit a Special Report within an additional 30 days in accordance with Specification 6.9.2 outlining the cause of the inoperability and



plans for restoring the component to operable status.

- b. In cold or refueling shutdown, restore the component to operable status within 7 days or prepare and submit a Special Report within an additional 30 days in accordance with Specification 6.9.2 outlining the cause of inoperability and the plans for restoring the component to operable status.

3.14.2.2 With the fire suppression water system inoperable,

- a. Establish within 24 hours a backup fire suppression water system, or
- b. Place the reactor in Hot Shutdown within the next six (6) hours and in Cold Shutdown within the following thirty (30) hours.

3.14.3 The spray and/or sprinkler systems located in the following areas shall be operable when equipment in the area is required to be operable:

- a. "A" Diesel Generator Room (S12)
- b. "B" Diesel Generator Room (S13)
- c. Turbine Driven Auxiliary Feedwater Pump and its Oil Reservoir (S14)
- d. Cable Tunnel (S05)
- e. Air Handling Room Cable Spray System (S06)
- f. Relay Room Spray System West (S10)
- g. Relay Room Spray System Northeast (S11)
- h. Relay Room Spray System Southeast (S09)
- i. Turbine Bldg./Control Room Wall Spray System (S29)
- j. Intermediate Bldg. Cable Trays Spray System (S15)
- k. Auxiliary Bldg. at Cable Tunnel Spray System (S03)
- l. Auxiliary Bldg. 253'-6" Cable Trays Spray System (S04)
- m. Auxiliary Bldg. Basement Cable Trays Spray System (S01)
- n. Screenhouse Basement Cable Trays Spray System (S17)

- o. Screenhouse Sprinkler System (S18)
  - p. 1 G Charcoal Filter System (original system #14)
- 3.14.3.1 If a spray/sprinkler system is inoperable, except during emergency conditions which prohibit access, or for testing, within one hour, establish a continuous fire watch with backup fire suppression equipment for those areas in which redundant systems or components necessary for safe-shutdown could be damaged; for other areas, establish a fire watch patrol to inspect the zone with the inoperable system at least once per hour and place backup fire suppression equipment in the unprotected area(s).
- a. Restore the system to operable status within 14 days or prepare and submit a Special Report within an additional 30 days in accordance with Specification 6.9.2 outlining the cause of the inoperability and the plans for restoring the system to operable status.
- 3.14.4 The Halon systems located in the following areas shall be operable when equipment in the area is required to be operable and the storage tanks shall have at least 95% of the full charge weight and 90% of full charge pressure at 70°F:
- a. Computer Room (S07)
  - b. Relay Room (S08)
- 3.14.4.1 If a Halon system is inoperable, except during emergency conditions which prohibit access, within one hour, establish a continuous fire watch with backup fire suppression equipment for those areas in which redundant systems or components necessary for safe-shutdown could be damaged; for other areas establish a fire watch patrol to inspect the zone with the inoperable equipment at least once per hour and place portable equipment in the unprotected area(s).
- a. Restore the system to operable status within 14 days or prepare and submit a Special Report within an additional 30 days in accordance with Specification 6.9.2 outlining the cause of the inoperability and the plans for restoring the system to operable status.
- 3.14.5 The fire hose stations in Table 3.14-2 shall be operable.
- 3.14.5.1 With a hose station listed in Table 3.14-2 inoperable, except for hose station(s) within containment, route a hose to the unprotected area from an operable hose station within an hour.

- 3.14.5.2 If the water service to containment is inoperable, comply with the requirements of Specification 3.14.5 within 14 days or prepare and submit a Special Report within an additional 30 days in accordance with Specification 6.9.2 outlining the cause of the inoperability and the plans for restoring the system to operable status.
- 3.14.6 All fire barrier penetration fire seals protecting safety related areas shall be intact.
- 3.14.6.1 With a fire barrier penetration fire seal which protects a safety related area not intact; a continuous fire watch shall be established on one side of the penetration within one hour or, verify that fire detectors on at least one side of the inoperable seal are in service and establish an hourly fire watch patrol.
- a. Restore the system to operable status within 7 days or prepare and submit a Special Report within an additional 30 days in accordance with Specification 6.9.2 outlining the cause of the inoperability and the plans for restoring the system to operable status.
- 3.14.7 The yard hydrant on the southeast corner of the yard loop shall be operable.
- 3.14.7.1 With the yard hydrant on the southeast corner of the yard loop inoperable, within one hour have sufficient lengths of 2-1/2 inch diameter hose located in an adjacent operable hydrant hose house to provide fire protection to the transformers and the standby auxiliary feedwater building.
- a. Restore the system to operable status within 14 days or prepare and submit a Special Report within an additional 30 days in accordance with Specification 6.9.2 outlining the cause of the inoperability and the plans for restoring the system to operable status.



3.15 Overpressure Protection System

Applicability

Applies whenever the temperature of one or more of the RCS cold legs is  $\leq 330^{\circ}\text{F}$ .

Objective

To prevent overpressurization of the reactor coolant system.

Specification

- 3.15.1 Except during secondary side hydrostatic tests in which RCS pressure is to be raised above the PORV setpoint, 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 6.9.2.

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  $\leq 330^{\circ}\text{F}$ . 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  $\leq 50^{\circ}\text{F}$  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.



RESPONSIBILITIES (Continued)

- k. Review of all Reportable Events.

AUTHORITY

- 6.5.1.7 The PORC shall:
- a. Recommend in writing to the Station Superintendent approval or disapproval of items considered under 6.5.1.6(a) through (d) above.
  - b. Render determinations in writing with regard to whether or not each item considered under 6.5.1.6(a) through (d) above constitutes an unreviewed safety question as defined in 10CFR Section 50.59.
  - c. Provide immediate written notification to the Vice President, Electric and Steam Production, and the Nuclear Safety Audit and Review Board of disagreement between the PORC and the Station Superintendent; however, the Station Superintendent shall have responsibility for resolution of such disagreements pursuant to 6.1.1 above.

RECORDS

- 6.5.1.8 The PORC shall maintain written minutes of each meeting and copies shall be provided to the Vice President, Electric and Steam Production, the Chairman of the Nuclear Safety Audit and Review Board, and such others as the Chairman may designate.

## MEETING FREQUENCY

6.5.2.5 At least semi-annually and as required on call of the Chairman.

## QUORUM

6.5.2.6 A quorum shall consist of five members including the Chairman or Vice Chairman. At least one of the quorum shall be a non-company affiliated technical consultant.

## REVIEW

6.5.2.7 The NSARB shall review:

- a. The safety evaluations for 1) changes to procedures, equipment or systems as described in the safety analysis report and 2) tests or experiments completed under the provision of 10CFR Section 50.59 to verify that such actions did not constitute an unreviewed safety question.
- b. Proposed changes to procedures, equipment or systems which have been determined by the PORC to involve an unreviewed safety question as defined in 10CFR Section 50.59.
- c. Proposed tests or experiments which have been determined by the PORC to involve an unreviewed safety question as defined in 10CFR Section 50.59.
- d. Proposed changes in Technical Specifications or licenses.
- e. Violations of applicable statutes, codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.
- f. Significant operating abnormalities or deviations from normal and expected performance of plant equipment that affect nuclear safety.
- g. All Reportable Events.



6.6

REPORTABLE EVENT ACTION .

6.6.1

The following actions shall be taken for Reportable Events:

- a. The Commission shall be notified and a report submitted pursuant to the requirements of Section 50.73 to 10CFR Part 50, and
- b. Each Reportable Event shall be reviewed by the PORC and the results of this review shall be submitted to the NSARB and the Vice President, Electric and Steam Production.

6.9.2 Unique Reporting Requirements

- 6.9.2.1 Annually: Results of required leak tests performed on sources if the tests reveal the presence of 0.005 microcurie or more of removable contamination.
- 6.9.2.2 Annually: A tabulation on an annual basis of the number of station, utility and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man-rem exposure according to work and job functions, e.g., reactor operations and surveillance, in-service inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements. Small exposures totalling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources shall be assigned to specific major work functions. (NOTE: This tabulation supplements the requirements of Section 20.407 of 10CFR Part 20.)
- 6.9.2.3 Reactor Overpressure Protection System Operation
- In the event either the PORVs or the RCS vent(s) are used to mitigate a RCS pressure transient, a Special Report shall be prepared and submitted to the Commission within thirty days. The report shall describe the circumstances initiating the transient, the effect of

the PORVs or vent(s) on the transient and any other corrective action necessary to prevent recurrence.

6.9.2.4 Special reports shall be submitted to the Director of the NRC Regional Office listed in Appendix D, 10CFR Part 20, with a copy to the Director, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555 within the time period specified for each report.



TABLE 6.9-1

ENVIRONMENTAL RADIOLOGICAL MONITORING PROGRAM SUMMARY

Name of Facility R. E. Ginna Nuclear Power Plant Docket No. 50-244

Location of Facility Wayne County, New York Reporting Period \_\_\_\_\_

Medium or Pathway Sampled (Unit of Measurement)	Type and Total Number of Analyses Performed	Lower Limit of Detection <sup>a</sup> (LLD)	All Indicator Locations Mean (1) <sup>b</sup> Range	Locations with Highest Annual Mean Name Distance and Direction	Annual Mean Mean(1) <sup>b</sup> Range	Control Location Mean(1) <sup>b</sup> Range
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<sup>a</sup> Nominal Lower Limit of Detection (LLD) as defined in Table Notation a. of Table 4.12-1.

<sup>b</sup> Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parentheses (1).

TABLE 6.9-2

REPORTING LEVELS FOR RADIOACTIVITY CONCENTRATIONS IN ENVIRONMENTAL SAMPLES

Reporting Levels

Analysis	Water (pCi/l)	Airborne Particulate or Gases (pCi/m <sup>3</sup> )	Fish (pCi/Kg, wet)	Milk (pCi/l)	Broad Leaf Vegetables (pCi/Kg, wet)
H-3	2 x 10 <sup>4</sup>				
Mn-54	1000		3 x 10 <sup>4</sup>		
Fe-59	400		1 x 10 <sup>4</sup>		
Co-58	1000		3 x 10 <sup>4</sup>		
Co-60	300		1 x 10 <sup>4</sup>		
Zn-65	300		2 x 10 <sup>4</sup>		
Zr-Nb-95	400 <sup>(a)</sup>				
I-131	2	0.9		3	1 x 10 <sup>2</sup>
Cs-134	30	10	1 x 10 <sup>3</sup>	60	1 x 10 <sup>3</sup>
Cs-137	50	20	2 x 10 <sup>3</sup>	70	2 x 10 <sup>3</sup>
Ba-La-140	200 <sup>(a)</sup>			300	

(a) Total for parent and daughter

6.9-9

Amendment No. 4

6.10 RECORD RETENTION

In accordance with Rochester Gas and Electric Corporation policy, operating charts for the first year's operation will be permanently stored.

6.10.1 The following records shall be retained for at least five years:

- a. Records and logs of facility operation, including power levels and periods of operation at each power level.
- b. Records and logs of principal maintenance activities, including inspection, repair, substitution or replacement of principal items of equipment pertaining to nuclear safety.
- c. Reportable Event Reports.
- d. Records of surveillance activities, inspections, and calibrations required by these Technical Specifications.
- e. Records of reactor tests or experiments.
- f. Records of changes made in the Operating Procedures.
- g. Records of sealed source leak tests and results.
- h. Records of annual physical inventory of all sealed source material of record.

6.10.2 The following records shall be retained for the duration of the Facility Operating License:

- a. Records and drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report;

changes shall also be periodically incorporated into the as-built file.

- b. Records of new and irradiated fuel inventory, fuel transfers, and assembly burnup histories.
- c. Records of plant radiation and contamination surveys.
- d. Records of off-site environmental monitoring surveys.
- e. Records of radiation exposure of all plant personnel, including all contractors and visitors to the plant who enter radiation control areas.
- f. Records of radioactivity in liquid and gaseous material released to the environment and radioactive waste shipments.
- g. Records of transient or operational cycles for those facility components designed for limited number of transients or cycles.
- h. Records of training and qualification for current station technical and operations staff members.
- i. Records of in-service inspections performed pursuant to these Technical Specifications.
- j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR Section 50.59.
- k. Records of meetings of the PORC and the NSARB.
- l. Records of Quality Assurance activities as required by the QA Manual.



6.14

(Deleted)