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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 PROVISIONAL OPERATING LICENSE

Amendment No. 45 License No. DPR-18

- The Nuclear Regulatory Commission (the Commission) has found that: 1.
 - A. The application for amendment by Rochester Gas and Electric Company (the licensee) notarized October 10, 1978 (transmitted by letter dated October 12, 1978) as supplemented by submittals dated April 18, 1979 and August 10, 1979, 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:
 - There is reasonable assurance (i) that the activities authorized C. 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
 - The issuance of this amendment is in accordance with 10 CFR Part 51 . E. of the Commission's regulations and all applicable requirements have been satisfied.

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

The Technical Specifications contained in Appendix A, as revised through Amendment No. 45, 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 issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Dennis M. Crutchfield, Mief

Operating Reactors Branch #5 Division of Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: August 27, 1981

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ATTACHMENT TO LICENSE AMENDMENT NO. 45

PROVISIONAL 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 contain the captioned amendment number and marginal lines which indicate the area of changes.

| PAGES | ٠ | : |
|--------|---|---|
| 3.7-1 | | |
| 3.7-2 | | |
| 3.7-3* | | |
| 3.7-4. | | |

This page is included for pagination purposes only.

3.7 AUXILIARY ELECTRICAL SYSTEMS

Applicability

Applies to the availability of electrical power for the operation of plant auxiliaries.

Objective

To define those conditions of electrical power availability necessary (1) to provide for safe reactor operation, and (2) to provide for the continuing availability of engineered safeguards.

Specification

- 3.7.1 The reactor shall not be maintained critical without:
 - a. The 34.5 KV-4160 Volt station service transformer in service.
 - b. 480-volt buses 14, 16, 17 and 18 energized.
 - c. 4160-volt buses 12A and 12B energized.
 - d. Two diesel generators operable with onsite supply of 10,000 gallons of fuel available.
 - e. Both batteries and both d.c. systems operable, and at least one 150 amp battery charger or two 75 amp battery chargers in service for each battery.

3.7.2 During reactor operation the requirements of 3.7.1 may be modified as follows:

3.7-1

- Power operation may continue with the station service a. transformer out of service provided (a) the failure shall be reported to NRC within 24 hours with an outline of the plans for prompt restoration of offsite power and the. additional precautions to be taken while the transformer is out of service and (b) both diesel generators are operable. Under conditions of fulfillment of (b) and nonfulfillment of (a), continued power operation shall not extend beyond 24 hours. Non-fulfillment of, (b) shall be deemed sufficient cause for immediate reactor shutdown.. Power operation may continue if one diesel generator is ь. 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.

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

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'Basis:

on 6 buses. The 4160-volt equipment also is supplied from 4 buses.

Two separate outside sources supply station service power to the plant.

The plant auxiliary equipment is arranged electrically so that multiple items receive their power from the two different sources. The charging pumps are supplied from the 480-volt buses No. 14 and 16. The four containment fans are divided between 480-volt buses No. 14 and 16. The two residual heat pumps are on separate 480-volt buses. Valves are supplied from motor control centers.

One outside source of power is required to give sufficient power to run normal operating equipment. One transmission line can supply all the plant auxiliary power. The 115-34.5 kv station service transformer can supply all the auxiliary loads.

The bus arrangements specified for operation ensure that power is available to an adequate number of safeguards auxiliaries. With additional switching, more equipment could be out of service without infringing on safety.

Two diesel generators have sufficient capacity to start and run at design load all the engineered safeguards equipment. The safeguards operated from one diesel generator can adequately cool the core for any loss-of-coolant incident, and they also

3.7-3

maintain the containment pressure within the design value. The minimum diesel fuel oil inventory at all times is maintained to assure the operation of both diesels carrying design load of all the engineered safeguards equipment for at least 40 hours. ⁽¹⁾ Commercial oil supplies and trucking facilities exist to assure deliveries within 8 hours.

The plant design includes two 150 amp battery chargers and two 75 amp battery chargers. The 75 amp battery chargers are capable of manual transfer from one d. c. system to the other. At least one 150 amp battery charger or two 75 amp battery chargers shall be in service for each battery so that the batteries will always be at full charge. This ensures that adequate dc power will be available.

The plant can be safely shutdown without the use of offsite power since all vital loads (safety systems, instruments etc.). can be supplied from the emergency diesel generators.

The two diesel generators, each capable of supplying safeguards loads, and the station auxiliary transformer provide three separate sources of power immediately available for operation of these loads. Thus the power supply system meets the single failure criteria required of safety systems.⁽²⁾

<u>References:</u>

(1) FSAR - Section 8.2.1

(2) FSAR - Appendix 8A

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