

June 3, 1991

Docket No. 50-244

Dr. Robert C. Mecredy  
Vice President, Nuclear Production  
Rochester Gas & Electric Corporation  
89 East Avenue  
Rochester, New York 14649

*See Correction ltr of 6/10/91  
See Correction ltr of 7/2/91*

Dear Dr. Mecredy:

SUBJECT: ISSUANCE OF AMENDMENT NO. 42 TO FACILITY OPERATING LICENSE  
NO. DPR-18 - R.E. GINNA NUCLEAR POWER PLANT (TAC NO. 79829)

The Commission has issued the enclosed Amendment No. 42 to Facility Operating License No. DPR-18 for the R. E. Ginna Nuclear Power Plant. This amendment is in response to your application dated February 15, 1991.

This amendment revises the requirements of the Technical Specifications to modify the method of locking valve 856 open from removal of A.C. power to removal of D.C. control power in order to enable valve manipulation from the control room while maintaining the locked OPEN requirement.

A copy of our Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

signed by Allen R. Johnson

Allen R. Johnson, Project Manager  
Project Directorate I-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 42 to License No. DPR-18
2. Safety Evaluation

cc w/enclosures:  
See next page

\*See previous concurrence

OFC	:LA:PDI-3	:PE:PDI-3	:PM:PDI-3*	:SPZB*	:SICB*
NAME	:MRushbrooks	:AChu AC	:AJohnson	:RJones	:SNewberry
DATE	:5/13/91	:5/15/91	:05/01/91	:05/13/91	:05/10/91

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NAME	:R Bachmann	:R Weisman	:	:	:
DATE	:5/20/91	:5/31/91	:	:	:

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

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Sincerely,

A handwritten signature in black ink that reads "Allen R. Johnson".

Allen R. Johnson, Project Manager  
Project Directorate I-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 42 to License No. DPR-18
2. Safety Evaluation

cc w/enclosures:  
See next page

Dr. Robert C. Mecredy

Ginna

cc:

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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 FACILITY OPERATING LICENSE

Amendment No. 42  
License No. DPR-18

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
  - A. The application for amendment filed by the Rochester Gas and Electric Corporation (the licensee) dated February 15, 1991, 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 set forth in 10 CFR Chapter I;
  - 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.
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. 42, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION



Richard H. Wessman, Director  
Project Directorate I-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: June 3, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 42

FACILITY OPERATING LICENSE NO. DPR-18

DOCKET NO. 50-244

Replace the following page of the Appendix A Technical Specifications with the attached page. The revised page is identified by Amendment number and contains vertical lines indicating the area of change.

Remove

3.3-2

Insert

3.3-2

- d. At or above an RCS temperature of 350°F, two residual heat removal pumps are operable.
- e. At or above an RCS temperature of 350°F, two residual heat removal heat exchangers are operable.
- f. At the conditions required in a through e above, all valves, interlocks and piping associated with the above components which are required to function during accident conditions are operable.
- g. At or above an RCS temperature of 350°F, A.C. power shall be removed from the following valves with the valves in the open position: safety injection cold leg injection valves 878B and D. A.C. power shall be removed from safety injection hot leg injection valves 878A and C with the valves closed. D.C. control power shall be removed from refueling water storage tank delivery valves 896A, 896B and 856 with the valves open.
- h. At or above an RCS temperature of 350°F, check valves 853A, 853B, 867A, 867B, 878G, and 878J shall be operable with less than 5.0 gpm leakage each. The leakage requirements of Technical Specification 3.1.5.2.1 are still applicable.
- i. Above a reactor coolant system pressure of 1600 psig, A.C. power shall be removed from accumulator isolation valves 841 and 865 with the valves open.

DISTRIBUTION:

DOCKET File 50-244 ←

NRC PDR

LOCAL PDR

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GPA/PA - 2G5

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J. Linville, Region I



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 42 TO FACILITY OPERATING LICENSE NO. DPR-18  
ROCHESTER GAS AND ELECTRIC CORPORATION  
R. E. GINNA NUCLEAR POWER PLANT  
DOCKET NO. 50-244

1.0 INTRODUCTION

By letter dated February 15, 1991, the Rochester Gas and Electric Corporation (RG&E) (the licensee) requested an amendment to Facility Operating License No. DPR-18 to change the Technical Specification for the Ginna Nuclear Power Plant as set forth in Appendix A to that license. The proposed amendment would revise the Technical Specification 3.3.1.1g to reflect a plant modification that is being prepared to enable the operation, from the control room, of Motor Operated Valve MOV-856 which is the refueling water storage tank (RWST) delivery valve. This modification involves the installation of a key-operated-switch in the control room that will remove and lock open the 125 VDC control power to the valve actuator. The same method was approved for MOV-896A and B, the RWST outlet valves in the NRC SER to Amendment 7 of the R. E. Ginna Provisional Operating License, dated May 14, 1975.

2.0 EVALUATION

MOV-856 must be in the open position during the injection phase of a loss of coolant accident (LOCA) when the reactor coolant system (RCS) temperature is at or above 350°F. This is to ensure that water can be immediately delivered from the RWST to the reactor vessel upon initiation of a Safety Injection (SI) signal. However, MOV-856 must be closed for two other conditions: (1) for the recirculation phase of a LOCA, and (2) when the reactor is shutdown with the Residual Heat Removal (RHR) System in operation.

The current Technical Specification of R. E. Ginna requires the removal of AC power from the valve motor when the RCS temperature is at or above 350°F to prevent inadvertent or spurious closure. This is ensured by locking open the breaker which provides 480 VAC power to the valve motor, but the disadvantage of this method is that the close function of MOV-856 cannot be performed completely from the control room. An entry must first be made into the controlled auxiliary building to unlock and close the breaker to restore the AC power to the valve.

In the event of a LOCA, the Post LOCA Emergency Procedures require that, when the RWST level reaches 28%, RHR pumps are stopped and valves realigned so that the suction source of water for the RHR pumps is switched from the RWST (by closing MOV-856) to containment sump "B". This switchover procedure is initiated to isolate the RWST from any potentially high radioactive source of water in containment sump "B" released from the RCS following a LOCA.

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The Post LOCA Emergency Procedures also require the RHR pump to be started following valve realignment but not before RWST level has further decreased to 15% to ensure adequate RHR pump NPSH. In the limiting case of a large break LOCA, an estimated time for the RWST level to decrease from 28% to 15% could be on the order of 10 minutes. Consequently, time is limited for personnel to restore power to the valve with the present valve control configuration as mentioned above.

The new proposed configuration would install a key-operated-switch in the control room to remove and lock open the 125 VDC control power to the valve actuator. By requiring the actuation of the key-operated-switch in conjunction with the existing AC power control switch, the proposed modification will maintain the existing assurance of proper valve alignment. In addition, the elimination of entry into the auxiliary building during a LOCA will reduce the risk of radiological hazards to personnel.

In the NRC SER to Amendment 7 of the R. E. Ginna Provisional Operating License, dated May 14, 1975, the staff stated that locking out of A.C. power to motor operated valves was an acceptable procedure to design against a single failure that could cause an undesirable component action and result in a loss of capability to perform an intended safety function. Branch Technical Position ELESC 18, in Appendix 7A of the Standard Review Plan is to be applied to each of the "active," manually controlled electrically operated valves that are required to operate during various safety system operational sequences.

In addition, the capability of the proposed configuration to withstand the effects of a seismic or fire event is not decreased, because the key switch installation will be qualified to meet the standards set forth by IEEE Std. 383-1974, Vertical Flame Test Requirements. Additional circuitry will not be installed in any plant areas which do not already contain MOV-856 power and control circuitry. Therefore, 10CFR50 Appendix R analyses will remain unchanged.

Based on the staff's review, we find that the licensee's proposed modification will improve the safe operation of the plant especially when time is critical for the switchover of valve position during a large break LOCA. We also find that this same modification method for MOV-896A and B was reviewed for its operational safety and approved in the NRC SER to Amendment 7 of the R. E. Ginna Provisional Operating License dated May 14, 1975. Therefore, we conclude that the licensee's proposed modification for MOV-856 is acceptable.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the State of New York State official was notified of the proposed issuance of the amendment. The State official had no comments.

### 4.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has

determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously published a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (56 FR 20045). Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

#### 5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: A. Chu

Date: June 3, 1991