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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 33 TO PROVISIONAL OPERATING LICENSE NO. DPR-18

ROCHESTER GAS AND ELECTRIC CORPORATION

R. E. GINNA NUCLEAR POWER PLANT

DOCKET NO. 50-244

1.0 INTRODUCTION

In response to NRC staff letter dated July 23, 1979, Rochester Gas and Electric Company (the licensee) submitted by application dated March 7, 1980 (transmitted by letter dated March 12, 1980, a proposed technical specification change for implementation of a secondary water chemistry monitoring and control program at R. E. Ginna Nuclear Power Plant. After further consideration of this generic issue, we found it to be more appropriate to approve the implementation of this program by incorporating a license condition in the license rather than by issuing technical specification provisions. We have discussed this change with the licensee and we have mutually agreed upon it.

2.0 DISCUSSION AND EVALUATION

The NRC staff recognizes that different utilities use different secondary water treatment methods to limit steam generator tube corrosion. Moreover, we recognize that a licensee's choice of a particular water treatment method, including specific values of operating limits for chemistry parameters, is governed by plant and site characteristics that are unique to each facility. In addition, we do not believe at this time that sufficient service experience exists to conclude that any particular method is superior to another for controlling impurities that may be introduced into the secondary coolant. Such experience would be necessary before prescriptive Technical Specifications on secondary water chemistry could, with assurance, minimize tube degradation.

Restricting the amount of chemical additions to control the water chemistry parameters would not ensure the desired steam generator operating conditions. Realizing that meeting the secondary coolant water quality criteria would not be possible during all periods of operation, it is necessary that the most effective procedure for reestablishing out-of-specification chemistry parameters be available without unduly restricting plant operations. This can be accomplished most rapidly by continuing to operate the unit so that chemical additives to the secondary water can be made to achieve a balanced chemistry.

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We believe that other methods for reducing the impurity concentration in the steam generator such as periodic chemical cleaning for long-term solution, fluxing or free surface boiling for an intermediate term solution, or the use of chelating agents for the control of secondary water purity are more practical. These methods are likely to be more effective in limiting corrosion than specific Technical Specifications that may lack the flexibility needed for proper control of secondary water chemistry. The NSSS vendors are now considering these alternate methods in lieu of restrictive secondary water chemistry limits for assuring steam generator tube integrity. We proposed, by our letter dated July 23, 1979, that the licensee implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation.

Based on the above, we conclude that a license condition requiring a secondary water chemistry monitoring program is acceptable.

3.0 ENVIRONMENTAL CONSIDERATIONS

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

4.0 CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: June 13, 1980

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-244

ROCHESTER GAS AND ELECTRIC CORPORATION

NOTICE OF ISSUANCE OF AMENDMENT TO
PROVISIONAL OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 33 to Provisional Operating License No. DPR-18, to Rochester Gas and Electric Corporation (the licensee), which revised the license for operation of the R. E. Ginna Plant (facility) located in Wayne County, New York. This amendment is to become effective June 30, 1980.

The amendment approves the implementation of a secondary water chemistry program.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated March 7, 1980 (transmitted by letter dated March 12, 1980), (2) Amendment No. 33 to License No. DPR-18, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. and at the Rochester Public Library, 115 South Avenue, Rochester, New York 14627. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 13th day of June, 1980.

FOR THE NUCLEAR REGULATORY COMMISSION

Dennis M. Crutchfield

Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

Hazel

William O. Miller, Chief
License Fee Management Branch, ADM

Date: 4/1/80
Amended Form Date:

FACILITY AMENDMENT CLASSIFICATION - DOCKET NO(S). 50-244

Licensee: Rochester Gas

Plant Name and Unit(s): Ginna

License No(s): DPR-18 Mail Control No: 8003/3055

Request Dated: 3/12/80 (Ltr.) 3/7/80 (Appl.) Fee Remitted: Yes ____ No ✓

Assigned TAC No: TAC 8236

Licensee's Fee Classification: Class I ____, II ____, III ____, IV ____, V ____, VI ____, None

Subject: Secondary Water Chemistry monitoring program

Amendment No. 33 Date of Issuance 6/13/80

[X] 1. This request has been reviewed by DOR/DPM in accordance with Section 170.22 of Part 170 and is properly categorized.

[ ] 2. This request is incorrectly classified and should be properly categorized as Class ____. Justification for classification or reclassification: The licensee submitted a proposed TS 11/1/76. Therefore, as stated in our letter dated 7/23/79, a fee is not required

[ ] 3. Additional information is required to properly categorize the request:

[ ] 4. This request is a Class II type of action and is exempt from fees because it:

(a) ____ was filed by a nonprofit educational institution,

(b) ____ was filed by a Government agency and is not for a power reactor,

(c) ____ is for a Class ____ (can only be a I, II, or III) amendment which results from a written Commission request dated ____ for the application and the amendment is to simplify or clarify license or technical specifications, has only minor safety significance, and is being issued for the convenience of the Commission, or

(d) ✓ other (state reason therefor): initial application was submitted prior to the effectiveness of the fee schedule.

L. R. Rubin
Division of Operating Reactors/Project Management

[X] THE INITIAL FEE DETERMINATION HAS BEEN REASSESSED AND IS HEREBY AFFIRMED JS/HS

[ ] The above request has been reviewed and is exempt from fees.

J Shea 3/28/80
J Shea

J Shea
Date

William O. Miller, Chief
License Fee Management Branch

Date

LFMB 6/78

LICENSE AUTHORITY FILE COPY

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

June 13, 1980

DO NOT REMOVE

Docket No. 50-244

Am-33 to
DPR-18

Mr. Leon D. White, Jr.
Vice President
Electric and Steam Production
Rochester Gas and Electric Corporation
89 East Avenue
Rochester, New York 14649

Dear Mr. White:

The Commission has issued the enclosed Amendment No. 33 to Provisional Operating License No. DPR-18 for the R. E. Ginna Nuclear Power Plant. This amendment is in response to your application dated March 7, 1980 (which was transmitted by letter dated March 12, 1980).

The amendment adds a new license condition which approves implementation of a secondary water chemistry monitoring program, effective June 30, 1980.

During further review of this generic issue we found it to be more appropriate to approve the implementation of this program by incorporating a license condition in the license rather than issuing technical specification provisions. We have discussed this change with your representative and we have mutually agreed upon it.

Copies of our related Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

Dennis M. Crutchfield

Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

Enclosures:
1. Amendment No. 33 to License No. DPR-18
2. Safety Evaluation
3. Notice of Issuance

cc w/enclosures:
See next page

ML010540171

cc w/enclosures:
Harry H. Voigt, Esquire
LeBoeuf, Lamb, Leiby & MacRae
1757 N Street, N. W.
Washington, D. C. 20036

Mr. Michael Slade
12 Trailwood Circle
Rochester, New York 14618

Rochester Committee for
Scientific Information
Robert C. Lee, Ph.D.
P. O. Box 5236 River Campus
Station
Rochester, New York 14627

Jeffrey Cohen
New York State Energy Office
Swan Street Building
Core 1, Second Floor
Empire State Plaza
Albany, New York 12223

Director, Technical Development Programs
State of New York Energy Office
Agency Building 2
Empire State Plaza
Albany, New York 12223

Rochester Public Library
115 South Avenue
Rochester, New York 14604

Supervisor of the Town
of Ontario
107 Ridge Road West
Ontario, New York 14519

Director, Technical Assessment
Division
Office of Radiation Programs
(AW-459)
U. S. Environmental Protection
Agency
Crystal Mall #2
Arlington, Virginia 20460

U. S. Environmental Protection
Agency
Region II Office
ATTN: EIS COORDINATOR
26 Federal Plaza
New York, New York 10007

Herbert Grossman, Esq., Chairman
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Washington, D. C. 20555

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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. 33
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 7, 1980 (transmitted by letter dated March 12, 1980), 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.

2. Accordingly, a new Paragraph 2.C(6) is hereby incorporated in Provisional Operating License No. DPR-18 to read as follows:

2.C(6) Secondary Water Chemistry Monitoring Program

The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall be described in the plant procedures and shall include:

a. Identification of a sampling schedule for the critical parameters and control points for these parameters;

b. Identification of the procedures used to measure the values of the critical parameters;

c. Identification of process sampling points;

d. Procedure for the recording and management of data;

e. Procedures defining corrective actions for off control point chemistry conditions; and

f. A procedure identifying (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective action.

3. This license amendment is to be come effective June 30, 1980.

FOR THE NUCLEAR REGULATORY COMMISSION

Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

Date of Issuance: June 13, 1980

UNITED STATES
NUCLEAR REGULATORY COMMISSION
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2.0 DISCUSSION AND EVALUATION

The NRC staff recognizes that different utilities use different secondary water treatment methods to limit steam generator tube corrosion. Moreover, we recognize that a licensee's choice of a particular water treatment method, including specific values of operating limits for chemistry parameters, is governed by plant and site characteristics that are unique to each facility. In addition, we do not believe at this time that sufficient service experience exists to conclude that any particular method is superior to another for controlling impurities that may be introduced into the secondary coolant. Such experience would be necessary before prescriptive Technical Specifications on secondary water chemistry could, with assurance, minimize tube degradation.

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We believe that other methods for reducing the impurity concentration in the steam generator such as periodic chemical cleaning for long-term solution, fluxing or free surface boiling for an intermediate term solution, or the use of chelating agents for the control of secondary water purity are more practical. These methods are likely to be more effective in limiting corrosion than specific Technical Specifications that may lack the flexibility needed for proper control of secondary water chemistry. The NSSS vendors are now considering these alternate methods in lieu of restrictive secondary water chemistry limits for assuring steam generator tube integrity. We proposed, by our letter dated July 23, 1979, that the licensee implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation.

Based on the above, we conclude that a license condition requiring a secondary water chemistry monitoring program is acceptable.

3.0 ENVIRONMENTAL CONSIDERATIONS

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

4.0 CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: June 13, 1980

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The amendment approves the implementation of a secondary water chemistry program.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated March 7, 1980 (transmitted by letter dated March 12, 1980), (2) Amendment No. 33 to License No. DPR-18, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. and at the Rochester Public Library, 115 South Avenue, Rochester, New York 14627. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 13th day of June, 1980.

FOR THE NUCLEAR REGULATORY COMMISSION

Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing