July 20, 2001

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

SUBJECT: R. E. GINNA - NRC INSPECTION REPORT 50-244/01-06

Dear Dr. Mecredy:

On June 30, 2001, the NRC completed an inspection of your R. E. Ginna facility. The enclosed report documents the inspection findings which were discussed on July 3, 2001, with you and other members of your staff.

This inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel. No findings of significance were identified.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publically Available Records (PARS) component of the NRC's document management system (ADAMS). ADAMS is accessible from the NRC website at, <a href="http://www/nrc/gov/NRC/ADAMS/index.html">http://www/nrc/gov/NRC/ADAMS/index.html</a> (the Public Electronic Reading Room).

Sincerely,

/RA/

Michele G. Evans, Chief Projects Branch 1 Division of Reactor Projects

Docket No. 05000244 License No. DPR-18

Enclosure: Inspection Report 50-244/01-06

Attachment 1 - Supplemental Information

# Dr. Robert C. Mecredy

cc w/encl:

- P. Wilkens, Senior Vice President, Generation
- P. Eddy, Electric Division, Department of Public Service, State of New York
- C. Donaldson, Esquire, State of New York, Department of Law
- N. Reynolds, Esquire
- W. Flynn, President, New York State Energy Research and Development Authority
- J. Spath, Program Director, New York State Energy Research and Development Authority
- T. Judson, Central NY Citizens Awareness Network

Dr. Robert C. Mecredy

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# U.S. NUCLEAR REGULATORY COMMISSION

**REGION I** 

| Docket No:   | 50-244   |
|--------------|--|
| License No:  | DPR-18   |
| Report No:   | 50-244/01-06   |
| Licensee:    | Rochester Gas and Electric Corporation (RG&E)  |
| Facility:    | R. E. Ginna Nuclear Power Plant  |
| Location:    | 1503 Lake Road<br>Ontario, New York 14519  |
| Dates:       | May 13, 2001 through June 30, 2001   |
| Inspectors:  | H. K. Nieh, Senior Resident Inspector<br>C. R. Welch, Resident Inspector<br>R. A. Fernandes, Acting Senior Resident Inspector<br>J. C. Jang, Senior Health Physicist |
| Approved by: | M. G. Evans, Chief<br>Projects Branch 1<br>Division of Reactor Projects  |

### SUMMARY OF FINDINGS

IR 05000244-01-06, 05/13-06/30/2001; Rochester Gas & Electric; R. E. Ginna Nuclear Power Plant. Resident Inspector Report.

The inspection was conducted by resident inspectors and a regional Senior Health Physicist inspector. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violation. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at <a href="http://www.nrc.gov/NRR/Oversight/index.html">http://www.nrc.gov/NRR/Oversight/index.html</a>.

A. Inspector Identified Findings

None

B. Licensee Identified Violations

The inspectors reviewed one violation of very low significance that was identified by RG&E. The associated corrective actions taken or planned by RG&E appear reasonable. This violation is listed in section 4OA7 of this report.

# **Report Details**

## SUMMARY OF PLANT STATUS

During the inspection period Ginna operated at full power except for several hours on June 24, when power was reduced to approximately 75% for planned work on off-site electrical distribution circuit No. 908.

# 1. REACTOR SAFETY Initiating Events, Mitigating Systems, and Barrier Integrity [Reactor - R]

- R04 Equipment Alignment
- a. <u>Inspection Scope</u>

The inspectors performed a partial walkdown of the safety injection system, train A, while train B was out of service for emergent work. This inspection verified that key system components such as pumps, valves, control switches, instruments, and circuit breakers, were properly aligned for in-service or stand-by operation, as described in plant procedures and drawings. The inspectors also evaluated material conditions and general housekeeping of the system and adjacent spaces. In addition to plant procedures and drawings, the inspectors also referenced the applicable sections of the Updated Final Safety Analysis Report (UFSAR) and Improved Technical Specifications (ITS).

b. Findings

No findings of significance were identified.

- R05 Fire Protection
- a. Inspection Scope

The inspectors toured the following plant areas to assess RG&E's control of combustible materials and ignition sources, and the physical condition of the installed fire suppression and detection systems.

- Technical support center diesel generator room
- Technical support center inverter room
- Technical support center battery room
- Relay room
- Battery room A
- Battery room B

The inspectors, on a sampling basis, verified that the required fire extinguishers were present and properly charged, that access to fire fighting equipment was not blocked, that sprinkler heads and gas nozzles were not damaged or blocked, and that fire doors were closed and in proper working order. Fire mains were verified to be properly aligned and charged up to the applicable zone control valves and hose reels. Fire

dampers were verified to be unobstructed. Fire barrier penetration seals were verified to be present, where required, and in good condition. Smoke and heat detection systems, as applicable, were verified unobstructed and energized.

The inspectors reviewed the following completed surveillance procedures to assess the operational readiness of the installed suppression systems:

- PT-13.4.33, "Station Halon Systems Bottle Weighing and S08 (Relay Room and Computer Room) Air Flow Test."
- PT-13.4.21, "Flood Valve Testing Suppression System S10, Relay Room W Manual Deluge."
- PT-13.4.22, "Flood Valve Testing Suppression System S11, Relay Room NE Manual Deluge."
- PT-13.4.20, "Flood Valve Testing Suppression System S09, Relay Room SE Manual Deluge."
- PT-13.4.29, "Halon System Testing Relay Room/Computer Room (S08)."

# b. Findings

No findings of significance were identified.

### R11 Licensed Operator Regualification

a. Inspection Scope

On June 25, 2001, the inspectors observed and evaluated a simulator exam to assess training effectiveness and the operating crew's performance against established training standards. Areas of assessment included: communications, command and control, procedure usage, the ability to take timely action in a safe direction, and emergency action level identification and notification timeliness. The inspector's reviewed the evaluator's critique and verified that the simulator's board configuration matched that of the actual control room.

b. Findings

No findings of significance were identified.

#### R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors reviewed RG&E's implementation of the maintenance rule for the below listed performance problems. Through discussions with associated system engineering personnel, this inspection evaluated system scoping, performance criteria/goal monitoring, and problem classification for each item. The inspectors referenced industry guidance documents and Ginna station procedures related to the maintenance rule.

- Action Report (AR) No. 2001-0019, Battery charger BYCA erratic output.
- AR No. 2001-0012, Check valve 862B failed its inservice closure test.

- AR 2001-0046, Diesel generator fuel oil transfer pump A discharge check valve 5961 failed its closure test.
- b. <u>Findings</u>

No findings of significance were identified.

#### R13 Maintenance Risk Assessments and Emergent Work Control

#### a. <u>Inspection Scope</u>

The inspectors evaluated the effectiveness of RG&E's maintenance risk assessments required by the maintenance rule, 10 CFR 50.65, paragraph a(4), for the following activities:

- Emergent work on June 15, 2001, to repair the B safety injection pump breaker and replace the pump's main control board switch.
- Emergent work on June 26, 2001, to repair a minor steam leak in the turbine building.
- Planned maintenance on June 19, 2001, on the B containment spray pump and NaOH additive system air-operated valve No. 836B.

The inspectors reviewed equipment tracking documentation, daily work schedules, and performed plant tours to gain reasonable assurance that the actual plant configuration matched the assessed configuration. The inspectors discussed with control room operators and scheduling department personnel their use of RG&E's online risk monitoring software. Additionally, the inspectors verified that RG&E's risk management actions, for both planned and/or emergent work, were consistent with those described in procedure IP-PSH-2, "Integrated Work Schedule Risk Management."

b. Findings

No findings of significance were identified.

#### R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the below listed operability evaluations to determine if system operability was properly justified. The inspection included discussions with plant personnel and reviews of applicable ITS and design bases information.

- AR No. 2001-0769, Control room toxic gas monitor calibrated with ammonia standard below specification.
- AR No. 2001-0881, Faulted dual alarm module installed in pressure controller No. 430A.
- AR No. 2001-0890, Auxiliary feedwater system air-operated valve Nos. 4297 and 4298 fail-as-is.

### b. Findings

No findings of significance were identified.

#### R16 Operator Workarounds

#### a. <u>Inspection Scope</u>

The inspectors reviewed the cumulative effects of Ginna's existing operator workarounds/challenges. The inspection focused on the overall impact to plant systems and operator event response capability. Ginna procedure A-52.16, "Operator Workaround/Challenge Control," technical specifications, system design information, and corrective action program records were referenced. The inspectors also looked for potential operator workarounds/challenges not formally evaluated by RG&E.

b. Findings

No findings of significance were identified.

#### R19 Post Maintenance Testing

a. Inspection Scope

The inspectors reviewed the following work orders (WO) and the associated post maintenance test (PMT) to verify that RG&E had appropriately demonstrated the components' operability and functional capability prior to its return to service.

- WO 20100071, Service water pump C breaker preventive maintenance and service water pump C main control board switch replacement.
- WO 20100239, Safety injection pump B main control board switch replacement.

The inspectors observed all or portions of the PMTs and reviewed the results. The updated final safety analysis report, technical specifications, system design information, and related drawings were reviewed to assess the adequacy of the PMT and the specified acceptance criteria. Test equipment was verified to be in proper calibration and to be removed following the test.

b. Findings

No findings of significance were identified.

#### R22 Surveillance Testing

#### a. Inspection Scope

The inspectors witnessed the performance and/or reviewed test data for the below listed activities to verify that the tests demonstrated the associated system's functional capability and operational readiness. Key attributes considered during the inspection included the potential for preconditioning, test equipment qualification, acceptance criteria adequacy, and adherence to applicable code requirements.

- PT-2.7.1, "Service Water Pumps (C&D only)."
- PT-16Q-T, "Auxiliary Feedwater Turbine Pump Quarterly."
- CPI-CV-624, "Calibration of Residual Heat Removal Heat Exchanger Outlet Valve No. 624."

#### b. Issues and Findings

No findings of significance were identified.

#### 2. RADIATION SAFETY

### Public Radiation Safety [PS]

#### PS1 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems

a. Inspection Scope

The inspector reviewed the below listed documents to evaluate the effectiveness of RG&E's radioactive gaseous and liquid effluent control programs. The requirements are specified in RG&E's ITS and Offsite Dose Calculation Manual (ODCM).

- 1999 and 2000 Radiological Annual Effluent Release Reports, including projected public radiation dose assessments.
- The most recent ODCM (Revision 15, January 22, 2001) and associated technical justifications.
- Analytical results for charcoal cartridge, particulate filter, and noble gas samples.
- Implementation of the compensatory sampling and analysis program when the effluent radiation monitoring system (RMS) is out of service.
- Trending of the effluent RMS availability (from May 1, 2000 to May 1, 2001).
- Trending and evaluation of the monthly source check results for the effluent RMS.
- Calibration records for laboratory measurements equipment (gamma and liquid scintillation counters).
- Implementation of measurement laboratory quality control program, including intra-laboratory and inter-laboratory comparisons.
- Action Reports (ARs) related to the effluent control program and associated resolutions (Nos. 2001-0189, 2001-0198, 2001-0223, 2001-0259,2001-0297, 2001-0398, and 2001-0264).

- AR Nos. 2001-0989 and 2001-1001, "ODCM Tables 3.1-2 and 3.2-2 inconsistent with NUREG 1301, June 12, 2001" and corrective actions (included ODCM improvement projects).
- Selected 2000 and 2001 radioactive liquid and gaseous release permits.
- Associated effluent control procedures.
- Monthly tritium analytical results for the four on-site ground water monitoring stations.
- Self-assessment for the Radiological Effluent Control Program (No. 2000-0015).
- 2001 QA audit (AINT-2001-0001-JMT) for the ODCM implementation.
- Most recent surveillance tests results (visual inspection, delta P, in-place testing for High Efficiency Particulate Air (HEPA) and charcoal filters, air capacity test, and laboratory test for iodine collection efficiency) for the following air treatment systems, as required by Section 5.5.10 of the ITS: Control room emergency air treatment system (October 2000); Containment air recirculation system(October 2000); Containment post-accident charcoal system (October 2000); Spent fuel pool charcoal absorber system (April 2000).
- Most recent channel calibration test results for the radioactive liquid and gaseous effluent RMS which are listed in Tables 3.1-2 and 3.2-2 of the ODCM:
  - Containment Fan Coolers Monitor (R-16, January 25, 2000).
  - Component Cooling Water Monitor (R-17, January 26, 2000).
  - Liquid Waste Disposal Monitor (R-18, February 21, 2001).
  - Steam Generator Blow-down Monitor (R-19, February 22, 2001).
  - Spent Fuel Pool Heat Exchanger (R-20A, 1/26/01; and R-20B, 4/27/01).
  - Turbine Building Floor Drain Monitor (R-21, December 28, 2000).
  - Turbine Building Floor Drain Monitor (R-21, December 28, 2000).

- Containment Purge Noble Gas Monitors (R-12, June 2000, and R-12A, January 2001).

- Plant Vent Noble Gas Monitors (R-14, June 2000; and R-14A, November

2000).

- Condenser Air Ejector Monitors (R-15, 8/15/00); and R-15A, November 2000).
- Functional test results (January 28, 2000 and March 20, 2001) for the radioactive liquid and gaseous effluent RMS which are listed in Tables 3.1-2 and 3.2-2 of the ODCM (R-12, R-14, R-15, R-16, R-17, R-18, R-19, R-20A, R-21, and R-22).

The inspector conducted walkdowns of the following systems to evaluate the effectiveness of RG&E's radioactive gaseous and liquid effluent control programs, and to determine the systems availability/operability and the equipments' material condition:

- Radioactive liquid/gaseous effluent RMS.
- Air cleaning systems.

#### b. Findings

No findings of significance were identified.

# 4. OTHER ACTIVITIES [OA]

#### OA1 Performance Indicator Verification

#### a. <u>Inspection Scope</u>

The inspector reviewed the following documents to verify the RETS/ODCM Radiological Effluent Occurrences performance indicator from the first quarter 2000 to the first quarter 2001: monthly projected dose assessment results due to radioactive liquid and gaseous effluent releases; quarterly projected dose assessment results due to radioactive liquid and gaseous effluent releases; and, associated station procedures.

b. Findings

No findings of significance were identified.

## OA6 Meetings

.1 Exit Meeting Summary

On July 3, 2001, the inspectors presented their overall findings to members of RG&E management led by Dr. R. Mecredy. No proprietary information was identified.

#### .2 NRC/RG&E Management Meeting

A public meeting was held on June 20, 2001, in the Ginna Training Center, to discuss the End-of-Cycle (EOC) Plant Performance Assessment results. This assessment was performed under the new Reactor Oversight Process and was documented in a letter to NMPC, dated May 31, 2001. The NRC presentation was lead by Michele G. Evans, Chief, Projects Branch 1, Division of Reactor Projects. Slides from this meeting can be found in the Publicly Available Records component of the NRC's document system (ADAMS) under ascension number ML011730196.

#### OA7 Licensee Identified Violations

The following finding of very low significance was identified by RG&E and is a violation of NRC requirements which meets the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as a Non-Cited Violation (NCV).

| NCV Tracking Number     | Requirement Licensee Failed To Meet  |
|-------------------------|--|
| NCV 05000244/2001-06-01 | Section 5.5.4 of the Improved Technical Specifications and<br>Table 3.2-2 of the Offsite Dose Calculation Manual require<br>that the radioactive gaseous effluent vent flow rate |

determination be performed every 18 months. RG&E did not perform flow rate determinations for the plant and the containment vents as specified in the ODCM. RG&E documented the corrective actions in Action Report No. 2000-1630. This is being treated as a NCV.

If you deny this Non-Cited Violation, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement; and the NRC Resident Inspector at the Ginna Nuclear Power Plant.

# ATTACHMENT 1

# PARTIAL LIST OF PERSONS CONTACTED

## RG&E

| J. Widay<br>P. Bamford<br>M. Flaherty<br>B. Flynn<br>R. Forgensi<br>G. Joss<br>F. Mis<br>T. Plantz<br>R. Ploof<br>R. Popp<br>J. Smith<br>R. Watts<br>J. Wayland<br>T. White | VP, Plant Manager<br>Primary Systems and Reactor Engineering Manager<br>Configuration Support Manger<br>Scheduling Manager<br>Operational Review<br>Inservice Inspection and Testing Coordinator<br>Acting Radiation Protection and Chemistry Manager<br>Maintenance Systems Manager<br>Balance of Plant Systems Engineering Manager<br>Production Superintendent<br>Maintenance Superintendent<br>Nuclear Training Department Manager<br>I&C/Electrical Maintenance Manager<br>Operations Manager |
|---|--|
| G. Wrobel   | Nuclear Safety & Licensing Manager   |
| G. Jones  | Radiochemist, Primary Systems  |

# ITEMS OPENED AND CLOSED

# Opened/Closed

| NCV 05000244/2001-06-01 | Failure to perform the required radioactive gaseous effluent vent |
|-------------------------|---|
|                         | flow rate determination every 18 months in accordance with        |
|                         | Section 5.5.4 of the ITS and Table 3.2-2 of the Offsite Dose      |
|                         | Calculation Manual.   |

# LIST OF ACRONYMS USED

| AR<br>HEPA<br>ITS<br>NCV<br>NRC<br>ODCM | Action Report<br>High Efficiency Particulate Air<br>Improved Technical Specifications<br>Non-Cited Violation<br>Nuclear Regulatory Commission<br>Offsite Dose Calculation Manual |
|---|--|
| ODCM                                    | Offsite Dose Calculation Manual  |
| PARS                                    | Publically Available Records   |
| PMT                                     | Post Maintenance Test  |
| RG&E                                    | Rochester Gas and Electric Corporation   |
| RMS                                     | Radiation Monitoring System  |
| SDP                                     | Significance Determination Process   |
| UFSAR                                   | Updated Final Safety Analysis Report   |
| WO                                      | Work Order   |