January 19, 2001

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

SUBJECT: NRC's R. E. GINNA INSPECTION REPORT 05000244/2000-010

Dear Dr. Mecredy:

On December 30, 2000, the NRC completed an inspection of your R. E. Ginna facility. The enclosed report presents the results of that inspection. Preliminary findings were presented to RG&E management led by Mr. J. Widay in an exit meeting on January 4, 2001.

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.

Based on the results of this inspection, the inspectors identified one issue of very low safety significance (Green). This issue involved a violation of NRC requirements. However, because of its very low safety significance and because it has been entered into your corrective action program, the NRC is treating this issue as a non-cited violation, in accordance with section VI.A.1 of the NRC's Enforcement Policy. If you deny this non-cited violation, you should provide a response with the basis of 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 1; the Director, Office of Enforcement; and the NRC Resident Inspector at the Ginna facility.

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 in the Public Electronic Reading Room, http://www/nrc/gov/NRC/ADAMS/index.html.

Sincerely,

/RA/

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

Docket No. 05000244

Dr. Robert C. Mecredy

License No. DPR-18

Enclosure: Inspection Report 05000244/2000-10

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
- F. William Valentino, President, New York State Energy Research and Development Authority
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- T. Judson, Central NY Citizens Awareness Network

Dr. Robert C. Mecredy

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# U.S. NUCLEAR REGULATORY COMMISSION

# **REGION I**

Docket No: License No:	05000244 DPR-18
Report No:	05000244/2000-10
Licensee:	Rochester Gas and Electric Corporation (RG&E)
Facility:	R. E. Ginna Nuclear Power Plant
Location:	1503 Lake Road Ontario, New York 14519
Dates:	November 12 through December 30, 2000
Inspectors:	H. K. Nieh, Senior Resident Inspector C. R. Welch, Resident Inspector
Approved by:	M.G. Evans, Chief Projects Branch 1 Division of Reactor Projects

### SUMMARY OF FINDINGS

IR 05000244-00-10, 11/12-12/30/2000; Rochester Gas & Electric; R. E. Ginna Nuclear Power Plant. Fire Protection.

The inspection was conducted by resident inspectors. This inspection identified one Green issue, which was a non-cited violation. The significance of each finding is indicated by its color (Green, White, Yellow, or Red) and was determined using inspection manual chapter 0609, "Significance Determination Process (SDP)" (reference Attachment 1). Findings for which the SDP does not apply are indicated by "No Color," or by the severity level of the applicable violation.

#### A. Inspector Identified Findings

Cornerstone: Mitigating Systems

• Green. The inspectors identified a non-cited violation involving the failure to properly implement fire protection program procedures. RG&E did not adequately station a continuous fire watch for an inoperable automatic fire suppression system.

This finding was of very low safety significance because the inadequate compensatory fire watch existed for a short duration, the installed fire detection systems were operable, and the station's fire brigade effectiveness was not degraded. (1R05)

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# ATTACHMENT

Attachment 1- NRC's REVISED REACTOR OVERSIGHT PROCESS

## Report Details

## SUMMARY OF PLANT STATUS

Ginna began the period at full power and remained there throughout the period.

1. REACTOR SAFETY Initiating Events, Mitigating Systems, and Barrier Integrity

#### R01 Adverse Weather Protection

a. <u>Inspection Scope</u>

The inspectors reviewed RG&E's cold weather protection features for various risk significant systems and areas, such as service water, standby auxiliary feedwater, the auxiliary building, and the emergency diesel generator rooms. Procedure A-54.4.1, "Cold Weather Walkdown Procedure," was used as a reference. The inspectors also reviewed selected corrective actions associated with issues from previous frazil ice events (action reports 2000-167, 174, and 176).

b. Issues and Findings

No findings of significance were identified.

- R04 Equipment Alignment
- a. Inspection Scope

The inspectors performed partial walkdowns of the following system trains while their redundant trains were out of service for maintenance.

- Emergency diesel generator B
- Containment recirculation fan cooler A

These inspections reviewed alignment of system valves and electrical circuit breakers to ensure proper in-service or standby configurations as described in plant procedures and drawings. During the walkdowns, the inspectors also evaluated material conditions and general housekeeping of the systems and adjacent spaces.

b. Issues and Findings

No findings of significance were identified.

#### R05 <u>Fire Protection</u>

#### 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 installed fire suppression and detection systems.

- Battery room A
- Emergency diesel generator rooms A and B
- Control room
- Circulating water screen house
- Intermediate building cable tunnel
- Auxiliary building basement east
- Auxiliary building component cooling water system area

The inspectors also reviewed and observed RG&E's controls during the isolation of the intermediate building cable tunnel deluge suppression system for maintenance and testing.

#### b. Issues and Findings

On November 28, 2000, the inspectors identified that RG&E failed to adequately establish a continuous fire watch while the intermediate building cable tunnel deluge suppression system was out of service for planned maintenance and testing. Specifically, the compensatory fire watch was stationed outside the cable tunnel entrance. Additionally, the inspectors determined, through questioning the fire watch, that he did not have an adequate understanding of his responsibilities.

This issue has a credible impact on safety because a cable tunnel fire can significantly affect main control room operations and control of systems needed to achieve safe shutdown. The inspectors determined that this issue affected a fire protection defensein-depth element (detection and manual suppression capability) because the inadequate fire watch could not have provided early detection and incipient response to a cable tunnel fire without being in the area. Using the fire protection portion of the Significance Determination Process, the inspectors determined this issue to be of very low safety significance (Green). The inspectors used a cable tunnel fire ignition frequency from RG&E's probabilistic safety assessment (1.35 E -3 per year) and an exposure time of two hours, which was the approximate time the noted deluge system was out of service. Other assumptions used were: 1) no degradation in fire brigade effectiveness; 2) installed cable tunnel fire detection systems remained operable; and 3) remaining mitigation actions were adequately described in procedure ER-FIRE-2, "Alternate Shutdown for Cable Tunnel Fire."

This issue is a violation of technical specification 5.4.1, which requires, in part, that fire protection program procedures be implemented. In this instance, RG&E did not properly station a continuous fire watch with instructions, as required by Ginna's fire protection program implementation procedure SC-3.15.2, "Fire Protection Equipment Impairment." This finding has been entered into RG&E's corrective action program

(action report 2000-1721) and is being treated as a non-cited violation, consistent with section VI.A of the NRC's Enforcement Policy, issued on May 1, 2000 (65FR25368). **(NCV 05000244/2000-10-01)** 

### R11 Licensed Operator Requalification

#### a. Inspection Scope

On December 4, 2000, the inspectors observed and evaluated a simulator exam to assess training effectiveness and the operating crew's performance. The inspectors reviewed the evaluators' critique and verified that the simulator's board configuration matched that of the actual control room.

#### b. Issues and Findings

No findings of significance were identified.

### R12 Maintenance Rule Implementation

#### a. Inspection Scope

The inspectors reviewed RG&E's maintenance rule implementation for the following systems. This inspection evaluated scoping, performance criteria/goal monitoring, and problem classification.

- Offsite power train OAC01
- Intermediate range nuclear instrument train NIS05

## b. Issues and Findings

No findings of significance were identified.

## R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspectors evaluated the effectiveness of risk assessments performed for the following scheduled work orders (WO).

- WO 20003257 Main feedwater regulating valve packing adjustments
- WO 19902283 Replace fire protection valve 5208F diaphragm

This inspection included discussions with control room operators and scheduling department personnel regarding the use of RG&E's online risk monitoring software. The inspectors verified that RG&E's risk management actions were consistent with those described in procedure IP-PSH-2, "Integrated Work Schedule Risk Management." The inspectors also reviewed RG&E's emergent work controls for the following maintenance activity:

- WO 20003559 Containment recirculation fan cooler C breaker repair.
- b. <u>Issues and Findings</u>

No findings of significance were identified.

- R14 Personnel Performance During Nonroutine Plant Evolutions
- a. Inspection Scope

On December 13, 2000, control room operators responded to an electrical power supply failure that resulted in an automatic actuation of the relay room's Halon fire suppression system. The inspectors reviewed the operators' actions and RG&E's subsequent investigation of the event, which affected engineered safety feature actuation logic.

b. Issues and Findings

No findings of significance were identified.

- R15 Operability Evaluations
- a. Inspection Scope

The inspectors reviewed RG&E's evaluation regarding seat leakage in service water valve 4613 (action report 2000-1396). This inspection involved reviews of applicable design bases documents and interviews with engineering department personnel.

b. Issues and Findings

No findings of significance were identified.

- R19 Post Maintenance Testing
- a. Inspection Scope

The inspectors reviewed the post maintenance tests for the following work orders (WO) to verify that RG&E appropriately demonstrated the components' ability to perform their intended safety function:

- WO 20003559 Containment recirculation fan cooler C breaker repair.
  - WO 20003556 Replace inverter MQ-483 power supply.
- WO 19902283 Replace fire protection valve 5208F diaphragm.
- b. <u>Issues and Findings</u>

•

No findings of significance were identified.

R22 <u>Surveillance Testing</u>

#### a. Inspection Scope

The inspectors witnessed the performance and/or reviewed test data for the following activities to verify that the tests demonstrate the associated system's functional capability and operational readiness:

- PT-32A A reactor trip breaker testing.
- PT-13.3 Fire pump electrical equipment surveillance.
- b. <u>Issues and Findings</u>

No findings of significance were identified.

### 4. OTHER ACTIVITIES [OA]

- OA1 Performance Indicator Verification
- a. Inspection Scope

The inspectors verified the completeness and accuracy of the reactor coolant system (RCS) specific activity and leak rate performance indicators. This inspection reviewed associated records from April 2000 through October 2000. Additionally, the inspectors witnessed the performance of actual RCS specific activity and leak rate measurements.

b. Issues and Findings

No findings of significance were identified.

#### OA3 Event Follow-up

a. Inspection Scope

The inspectors reviewed Licensee Event Report (LER) 05000244/2000-005-00, which described a manual reactor trip on October 21, 2000, following the loss of a circulating water pump. All plant systems functioned as designed. This LER is captured in RG&E's corrective action program (action report 2000-1489) and is closed.

b. Issues and Findings

No findings of significance were identified.

- OA6 <u>Meetings</u>
- a. Exit Meeting Summary

On January 4, 2001, the inspectors presented their overall findings to members of RG&E management led by Mr. J. Widay. RG&E management acknowledged the

findings presented and did not contest any of the inspectors' conclusions. No proprietary information was identified.

# PARTIAL LIST OF PERSONS CONTACTED

<u>RG&E</u>

J. Widay	VP, Plant Manager			
P. Bamford	Primary Systems and Reactor Engineering Manager			
R. Biedenbach	Safety/Fire Coordinator			
M. Flaherty	Configuration Support Manger			
B. Flynn	Scheduling Manager			
R. Forgensi	Operational Review			
G. Graus	I&C/Electrical Engineering Manager			
J. Hotchkiss	Mechanical Maintenance Manager			
G. Joss	ISI/IST Coordinator			
M. Lilley	Quality Assurance Manager			
R. Marchionda	Nuclear Assessment Department Manager			
F. Mis	Acting Radiation Protection and Chemistry Manager			
T. Plantz	Maintenance Systems Manager			
R. Ploof	Balance of Plant Systems Engineering Manager			
P. Polfleit	Corporate Emergency Planner			
R. Popp	Production Superintendent			
J. Smith	Maintenance Superintendent			
R. Teed	Nuclear Security Supervisor			
R. Watts	Nuclear Training Department Manager			
J. Wayland	I&C/Electrical Maintenance Manager			
T. White	Operations Manager			
G. Wrobel	Nuclear Safety & Licensing Manager			
NRC				
R. Fuhrmeister	Senior Reactor Inspector			
IX. I driffielster				
ITEMS OPENED AND CLOSED				
Opened/Closed				
	Follows to polo suptably potablish a continuous first suctably			
NCV 05000244/2000-10-01	Failure to adequately establish a continuous fire watch.			
Closed				
LER 05000244/2000-005-00	Loss of "B" Circulating Water Pump Results in Manual			

Reactor Trip.

## LIST OF ACRONYMS USED

- Licensee Event Report Non-Cited Violation LER
- NCV
- Nuclear Regulatory Commission Reactor Coolant System NRC
- RCS
- Rochester Gas and Electric Corporation RG&E
- SDP Significance Determination Process
- WO Work Order

# **ATTACHMENT 1**

# NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting and assessing safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

## Reactor Safety

## Radiation Safety

# Safeguards

- Initiating Events
- Mitigating Systems
- Barrier Integrity
- Emergency Preparedness
- Public
- Occupational
  Physical Protection

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: http://www.nrc.gov/NRR/OVERSIGHT/index.html.