October 31, 2001

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

SUBJECT: R. E. GINNA - NRC INSPECTION REPORT 50-244/01-08

Dear Dr. Mecredy:

On September 29, 2001, 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 you and other members of Rochester Gas and Electric Corporation (RG&E) management in an exit meeting on October 5.

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 was determined to involve a violation of NRC requirements. However, because of its very low safety significance and because it was 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.

Since September 11, 2001, the R. E. Ginna facility has assumed a heightened level of security based on a series of threat advisories issued by the NRC. Although the NRC is not aware of any specific threat against nuclear facilities, the heightened level of security was recommended for all nuclear power plants and is being maintained due to the uncertainty about the possibility of additional terrorist attacks. The steps recommended by the NRC include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with local law enforcement and military authorities, and limited access of personnel and vehicles to the site.

The NRC continues to interact with the Intelligence Community and to communicate information to RG&E. In addition, the NRC has monitored maintenance and other activities which could relate to the site's security posture.

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. 50-244
License No. DPR-18

Enclosure: Inspection Report 50-244/01-08

Attachment 1: Supplemental Information

cc w/encl: P. Wilkens, Senior Vice President, Generation
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C. Donaldson, Esquire, State of New York, Department of Law
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W. Flynn, President, New York State Energy Research and Development Authority
J. Spath, Program Director, New York State Energy Research and Development Authority
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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No: 50-244

License No: DPR-18

Report No: 50-244/01-08

Licensee: Rochester Gas and Electric Corporation (RG&E)

Facility: R. E. Ginna Nuclear Power Plant

Location: 1503 Lake Road
Ontario, New York 14519

Dates: August 12 through September 29, 2001

Inspectors: H. K. Nieh, Senior Resident Inspector
C. R. Welch, Resident Inspector
P. R. Frechette, Physical Security Inspector

Approved by: M.G. Evans, Chief
Projects Branch 1
Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000244-01-08, 08/12-09/29/2001, Rochester Gas & Electric, R. E. Ginna Nuclear Power Plant. Event follow-up.

The inspection was conducted by resident inspectors and a regional security specialist. This inspection identified one green issue which was a Non-Cited Violation. The significance of most findings is indicated by its color (Green, White, Yellow, or Red) and was determined 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 http://www.nrc.gov/NRR/oversight/index/html.

A. Inspector Identified Findings

Cornerstone: Mitigating systems

Green. RG&E did not include appropriate instructions and acceptance criteria in applicable station documents for the acquisition, installation, and vendor testing of the emergency diesel generator (EDG) fuel oil booster pumps. As a result, incorrectly assembled pumps experienced shaft seal failures when their associated EDGs were placed in service.

This finding was determined to be a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." This issue had an actual impact on safety because both EDGs experienced unplanned unavailability due to the common cause failures of the fuel oil booster pump shaft seals. (Section 40A3)

B. Licensee Identified Violations

A violation of very low significance, which was identified by RG&E, has been reviewed by the inspector. Corrective actions taken by the licensee appear reasonable. This violation is listed in section 4OA7 of this report.

Report Details

SUMMARY OF PLANT STATUS

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

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

R04 Equipment Alignment

a. Inspection Scope

The inspectors performed partial walkdowns of the redundant A and B train battery chargers and associated direct current (DC) electrical distribution components, while battery charger 1A1 was out of service for maintenance. Key system components such as battery cells, circuit breakers, control switches, and instrumentation were verified to be properly aligned for in-service and standby operation. The inspectors also verified that the associated equipment tagout was implemented in accordance with procedure A-1401, "Station Holding Rules." Ginna's updated final safety analysis report and technical specifications were used as references.

b. Findings

No findings of significance were identified.

R05 Fire Protection

a. Inspection Scope

The inspectors toured the below listed 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.

- Turbine building - main feed pump room
- Standby auxiliary feedwater room
- Auxiliary building - charging pump room
- Intermediate building (clean side) - cable tunnel

These inspections verified that no uncontrolled transient combustibles were present, that sprinkler heads and installed fire/smoke detectors were clean and unobstructed, that fire barriers and penetration seals were properly maintained, and that portable fire extinguishers and fire hose stations were in good condition. Ginna's technical requirements manual and station procedures A-54.7, "Fire Protection Tour," FPS-1, "Fire Barrier Control Procedure," FPS-2, "Ginna Station Fire Barrier Penetration Seal Program," and FPS-16, "Bulk Storage of Combustible Materials and Transient Fire Loads," were used as references.

b. Findings

No findings of significance were identified.

R11 Licensed Operator Requalification

a. Inspection Scope

On August 20, 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 inspectors 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 maintenance rule implementation for the following performance problems. This inspection evaluated system scoping, performance criteria/goal monitoring, and problem classification.

- Check valve 8419, condensate de-ionized water supply to containment, failed its prompt closure test (ACTION report No. 2001-1166).
- Safety injection pump B tripped after start (ACTION report No. 2001-1011).
- Channel No. 4 steam flow bistable malfunction during calibration check (ACTION report No. 2001-0268).
- Charging pump A speed controller not functioning properly (ACTION report No. 2001-0572).

b. Findings

No findings of significance were identified.

13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspectors evaluated the effectiveness of RG&E's risk assessment required by paragraph a(4) of 10 CFR 50.65 for planned maintenance on battery charger 1A1 (Work Order No. 20100164). This inspection verified, through plant tours, that the actual plant configuration was consistent with the assessed plant configuration. Additionally, the inspectors witnessed portions of the maintenance activity at the work site to identify if the activity created any additional sources of increased risk that were not anticipated. The inspectors also reviewed RG&E's controls for emergent work on power range nuclear instrument channel N-41, on August 29, 2001 (Work Order No. 20103230).

b. Findings

No findings of significance were identified.

R15 Operability Evaluations

a. Inspection Scope

The following operability evaluations were reviewed to determine if system operability was properly justified:

- High iron content in D service water pump upper motor bearing oil sample (ACTION report No. 2001-1476).

- A and B emergency diesel generator fuel oil booster pump seal leakage (ACTION report Nos. 2001-1365 and 1395)

The inspectors referenced the associated sections of plant technical specifications and Ginna's updated final safety analysis report to obtain the affected systems' licensing and design bases information. The inspectors also reviewed the root causes and corrective actions associated with each condition.

The emergency diesel generator fuel oil booster pump seal leakage issue is further described in section 4OA3 of this report.

b. Findings

No findings of significance were identified.

R17 Permanent Plant Modifications

a. Inspection Scope

The inspectors reviewed phase 1B of plant change request No. 99-090, which modified the traveling screen spray wash system by providing a source of high pressure water from the fire suppression water system. This plant modification installed the necessary piping, valves, wiring, instrumentation, and controls for plant operators to manually align higher pressure water from the discharge of the motor driven fire pump to the existing traveling screen spray wash header supplied from the service water system.

The inspectors reviewed the modification's associated safety evaluation (SEV-1143) against the service water and fire suppression systems' design bases information contained in plant technical specifications and Ginna's updated final safety analysis report. This review verified that the modification did not adversely affect the functional capabilities of the modified systems. The inspectors walked down the modification, located in the screenhouse, to verify that RG&E installed the modification as designed. Portions of associated work order (WO) No. 20100126 were reviewed to determine if the post-maintenance tests adequately verified the modification's safety features. Lastly, the inspectors sampled several plant procedures and drawings affected by the modification to gain assurance that the necessary plant documents were appropriately updated.

b. Findings

No findings of significance were identified.

R19 Post Maintenance Testing

a. Inspection Scope

The inspectors reviewed the post-maintenance tests for the following WOs to verify that RG&E appropriately demonstrated the components' ability to perform their intended safety function:

- WO No. 20100263 — Repair air operated valve 966B, pressurizer liquid space sample containment isolation valve.
- WO No. 20103230 — Replace power range nuclear instrument N41B isolation amplifier NM302.
- WO No. 20100164 — Replace float potentiometer on battery charger 1A1.

The inspectors witnessed the performance of the post-maintenance test and reviewed the test data. Additionally, the inspectors verified that RG&E incorporated guidance from applicable vendor manuals, where appropriate.

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.

- PT-16Q-B Auxiliary feed water pump B - quarterly test.
- PT-12.1 Emergency diesel generator A - monthly test.
- CPI-PRESS-945 Containment pressure loop 945 calibration.

During these inspections, the inspectors verified that the test sequence did not precondition the tested components, that the associated procedures were properly performed, that the specified acceptance criteria were met, and that applicable code requirements were satisfied. Additionally, selected acceptance criteria basis documents were reviewed to determine if the test criteria adequately verified functional capability.

b. Findings

No findings of significance were identified.

3. SAFEGUARDS

Physical Protection [PP]

PP1 Access Authorization

a. Inspection Scope

The following activities were conducted to determine the effectiveness of the licensee's behavior observation portion of the personnel screening and fitness-for-duty programs, as measured against the requirements of 10 CFR 26.22 and the RG&E's fitness-for-duty program documents.

Five supervisors representing the maintenance, procurement, safety, quality assurance, and operations departments were interviewed, on August 7, regarding their understanding of behavior observation responsibilities and the ability to recognize aberrant behavior traits. Two access authorization/fitness-for-duty self-assessments, two semi-annual fitness-for-duty performance data reports, an audit, and event reports and loggable events for the four previous quarters were reviewed, during August 6 - 8. On August 7, five individuals who perform escort duties were interviewed to establish their knowledge level of those duties. Behavior observation training procedures and records were reviewed on August 6.

b. Findings

No findings of significance were identified.

PP2 Access Control

a. Inspection Scope

A number of activities were conducted during the inspection period to verify that the licensee had effective site access controls and in-place equipment designed to detect and prevent the introduction of contraband (firearms, explosives, incendiary devices) into the protected area, as required by 10 CFR 73.55(d), the physical security plan, and associated implementing procedures.

Site access control activities were observed involving personnel and package processing through the search equipment during peak ingress periods on August 6 - 8. Two vehicle searches were observed on August 8. On August 7, testing of all access control equipment was assessed, including: metal detectors; explosive material detectors; and X-ray examination equipment. The access control event log, an audit, and three maintenance work requests were also reviewed.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES [OA]

OA1 Performance Indicator Verification

a. Inspection Scope

The inspectors reviewed the licensee's programs for gathering and submitting data for the fitness-for-duty, personnel screening, and protected area security equipment performance indicators. This review included RG&E's tracking and trending reports, personnel interviews, and security event reports for the performance indicator data collected from the 3rd quarter of 2000 through the 3rd quarter of 2001.

The inspectors also verified the completeness and accuracy of the data submitted for the safety system functional failure performance indicator. This inspection reviewed licensee event reports for the data collection period of September 2000 to August 2001

b. Findings

No findings of significance were identified.

OA3 Event Follow-up

a. Inspection Scope

During routine surveillance testing of the A and B emergency diesel generators on August 2 and 7, respectively, RG&E identified fuel oil booster pump shaft seal failures when plant personnel observed fuel oil leaking from the pumps. The maximum rate of leakage observed was estimated to be approximately 0.1 gallons per minute. The inspectors reviewed the circumstances and RG&E's actions associated with these failures. This inspection involved system walkdowns, observations of related maintenance activities, discussions with engineering and maintenance personnel, and document reviews.

b. Findings

Green. The inspectors identified a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to include the appropriate instructions and acceptance criteria in the station documents used for the acquisition, installation, and 1996 vendor testing of the emergency diesel generator fuel oil booster pumps.

RG&E determined that the pumps, which are driven by the EDG crankshaft, were improperly assembled for Ginna's application. The pumps, which maybe utilized in either a clockwise or counterclockwise rotation, were assembled for a clockwise rotation. Ginna's EDGs require a counterclockwise setup. The improper orientation of the pump's bracket plate, positioned based on direction of pump rotation, allowed the seal chamber to be pressurized to pressures higher than the shaft seals were rated for, thus causing their failure. The inspectors identified that the fuel oil booster pump's technical manual contained sufficient information to alert the user that correct assembly based on rotational direction, was a critical attribute for proper performance of the shaft seals.

This issue affected the mitigating systems cornerstone, and had an actual impact on safety because the repair activities for the seal failures resulted in unplanned unavailability of both emergency diesel generators. This issue screened as green, very low safety significance, in phase one of the significance determination process because the actual seal failure condition did not cause the emergency diesel generators to become inoperable. The inspectors concluded that the failure to incorporate the verification of the pump's bracket plate into the quality assurance acceptance criteria was a violation of 10 CFR 50, Appendix B, Criterion V. However, because of the very low safety significance of this violation and because RG&E has entered the issue into their corrective action program (ACTION report Nos. 2001-1356 and 1395), this violation is being treated as a non-cited violation, in accordance with section VI.A.1 of the NRC's Enforcement Policy. **(NCV 50-244/01-08-01)**

OA6 Meetings

a. Exit Meeting Summary

On October 5, 2001, the inspectors presented their overall findings to members of RG&E management led by Dr. R. Mecredy . RG&E management acknowledged the findings presented. No proprietary information was identified.

OA7 Licensee Identified Violations

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

NCV Tracking Number	Requirement Licensee Failed to Meet
NCV 50-244/01-08-02	Technical specifications surveillance requirement 3.6.3.2 requires, in part, that containment isolation boundaries that are located outside containment and not locked, sealed, or otherwise secured are verified to be in their required position every 92 days. On September 4, 2001, RG&E identified that this surveillance was not being performed as required for the main steam isolation bypass valves. This issue was entered into the corrective action program (ACTION report No. 2001-1588) and is being treated as a Non-Cited Violation.

Attachment 1

Supplemental Information

a. Key Points of Contact

RG&E

J. Widay	VP, Plant Manager
P. Bamford	Primary Systems and Reactor Engineering Manager
R. Biedenbach	Safety/Fire Coordinator
M. Flaherty	Licensing 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

b. List of Items Opened, Closed, and Discussed

Opened/Closed

NCV 50-244/01-08-01	Failure to include all appropriate acceptance criteria in the quality assurance testing procedures used for emergency diesel generator fuel oil booster pumps.
NCV 50-244/01-08-02	Failure to perform technical specification surveillance requirement 3.6.3.2 for the main steam isolation bypass valves.

c. List of Documents Reviewed

Procedures

CME-38-06-BYCA1	Corrective maintenance procedure for battery charger A1.
T-36.5	Alternate Screenwash from the Motor Fire Pump.
PT-13	Fire Pump Operation and System Alignment.
AR-I-17	Travel Screen Hi Diff Level Alarm Response.
AR-I-25	Travel Screen Emerg Hi Diff Level 10" Alarm Response.

Vendor Manuals

VTD-C1000-4001	C&D Autoreg Handbook (battery charger A1).
VM T343-0202.00	Tuthill Pump Vendor Manual (EDG fuel oil booster pump).

Drawings

SK33013-1896A	Instrument Air - Turbine Building and Screen House.
33013-1989	Fire Protection Systems, Fire Service Water.
33013-1250	Station Service Water Cooling - Safety Related.
33013-2801	Screenwash Piping Modification (Phase 1B).

Other

ACB 2001-0044, 2000-0059, B motor driven auxiliary feedwater pump acceptance criteria bases.
AINT-2000-0015-DHK, Fitness for Duty Program Audit, September 29, 2000.
AINT-2001-008-DHK, Physical Security Program Audit, August 17, 2001.
RG&E Fitness for Duty Training Requirements, January 17, 2001.
Fitness for Duty Performance Data Report, July - December, 2000.
Fitness for Duty Performance Data Report, January - June, 2001.

d. List of Acronyms

CFR	Code of Federal Regulations
DC	Direct Current
EDG	Emergency Diesel Generator
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
PARS	Publically Available Records
RG&E	Rochester Gas and Electric Corporation
SDP	Significance Determination Process
WO	Work Order