February 26, 2001

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

SUBJECT: NRC's R. E. GINNA INSPECTION REPORT 05000244/2000-011

Dear Dr. Mecredy:

On February 10, 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 RG&E management led by Mr. J. Widay in an exit meeting on February 12.

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). The issue was determined to involve 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 the 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
License No. DPR-18

Enclosure: Inspection Report 05000244/2000-011

cc w/encl:
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REGION I

Docket No:	05000244
License No:	DPR-18
Report No:	05000244/2000-011
Licensee:	Rochester Gas and Electric Corporation (RG&E)
Facility:	R. E. Ginna Nuclear Power Plant
Location:	1503 Lake Road Ontario, New York 14519
Dates:	December 31, 2000 through February 10, 2001
Inspectors:	H. K. Nieh, Senior Resident Inspector C. R. Welch, Resident Inspector T. A. Moslak, Health Physicist
Approved by:	M.G. Evans, Chief Projects Branch 1 Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000244-00-11, 12/31/2000-02/10/2001; Rochester Gas & Electric; R. E. Ginna Nuclear Power Plant. Equipment Alignment

The inspection was conducted by resident inspectors and a regional radiation protection specialist. This inspection identified one 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 take appropriate corrective actions for an inoperable service water flow instrument.

  Without appropriate operational guidance for this condition, operators would not have been able to verify the service water flows to the component cooling water heat exchangers specified in emergency operating procedures. This finding is of very low safety significance because the inoperable flow instrument did not result in a loss of safety function in the affected systems. (Section R04)

Report Details

SUMMARY OF PLANT STATUS

Ginna began the period at full power. On January 27, 2001, operators reduced power to approximately 50 percent for emergent work on a heater drain tank pump. Full power operation resumed on January 28 and continued through the end of 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 following system trains while their redundant trains were out of service for maintenance.

- Residual heat removal train B
- Component cooling water (CCW) heat exchanger A and redundant service water (SW) system discharge line up

The inspectors reviewed alignment of system valves and electrical circuit breakers to ensure proper in-service or standby configurations 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

The inspectors identified that RG&E did not promptly correct a condition adverse to quality affecting the component cooling and service water systems. Specifically, RG&E did not implement appropriate corrective actions for an inoperable flow instrument on the A CCW heat exchanger redundant SW discharge line.

Between January 24 and 26, 2001, RG&E isolated the B CCW heat exchanger for planned maintenance on its SW outlet valve. This maintenance activity required isolation of the normal SW flow paths through both CCW heat exchangers. Therefore, operators placed the SW system's redundant discharge line in service to maintain the A CCW heat exchanger in an operable condition. The redundant discharge line is independent of the normal SW discharge flow path and is infrequently used to support maintenance and testing. Operators noted that the aforementioned SW flow instrument was inoperable, but they did not initiate an action report to evaluate and correct this condition.

This finding has a credible impact on safety because without adequate instrumentation or guidance, operators could not establish the prescribed SW flows to the CCW heat exchangers required by emergency operating procedures. The inspectors determined this issue to be Green, of very low safety significance, via the Significance Determination Process. This issue did not represent an actual loss of safety function of the CCW and SW systems. Operations department management initiated an Action

Report (No. 2001-0108) to address the failure to appropriately correct this condition adverse to quality and issued temporary guidance for estimating CCW heat exchanger SW flow using installed differential pressure instruments. The failure to promptly correct an inoperable SW flow instrument is a violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Actions." This violation of 10 CFR 50 is being treated as a Non-Cited Violation (NCV), consistent with Section VI.A.1 of the NRC Enforcement Policy, issued May 1, 2000 (65FR25368). **(NCV 05000244/2000-11-01)**

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 installed fire suppression and detection systems:

- Intermediate building - controlled side
- Main lube oil storage room
- Turbine building operating floor
- B emergency diesel generator room (with hot work in progress)

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 below listed performance problems. This inspection evaluated system scoping, performance criteria/goal monitoring, and problem classification.

- Air operated valve 5737 (steam generator blowdown containment isolation valve) repetitive maintenance preventable functional failures. Action Report (AR) Nos. 1997-1886 and 1998-0064.
- Containment spray additive tank relief valves 845C and 845D set points out of specification. AR Nos. 2000-1157 and 2000-1239.

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 RG&E's maintenance risk assessments required by paragraph a(4) of 10 CFR 50.65. 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 reviewed equipment tracking documentation, daily work schedules, and performed plant tours to gain reasonable assurance that actual plant configuration matched the assessed configuration. Additionally, the inspectors verified that RG&E's risk management actions, for both planned and emergent work, were consistent with those described in procedure IP-PSH-2, "Integrated Work Schedule Risk Management." Risk assessments for the following out of service systems, structures, and/or components were reviewed:

- January 11, D containment recirculation fan cooler and A emergency diesel generator
- January 12, A diesel generator fuel oil transfer system check valve 5961 (emergent work)
- January 16, A residual heat removal pump breaker and motor-operated valve 850A

b. Issues and Findings

No findings of significance were identified.

R15 Operability Evaluations

a. Inspection Scope

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

- Degraded auxiliary feedwater system piping snubber AFU-111 (AR No. 2000-1718)
- Anchor Darling valve weights (AR No. 2000-1060)

This inspection included discussion with plant personnel and reviews of applicable technical specifications and design bases information.

b. Issues and Findings

No findings of significance were identified.

R16 Operator Workarounds

a. Inspection Scope

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

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 (WOs) to verify that RG&E appropriately demonstrated the components' ability to perform their intended safety function:

• WO 20100139	Replace D containment recirculation fan cooler control switch
• WO 20100146, 20100167	Repair A diesel generator fuel oil transfer system check valve 5961
• WO 20100030	Repair containment spray system check valve 862B

b. Issues and 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 following activities to verify that the tests demonstrated the associated system's functional capability and operational readiness:

- PT-12.6, Diesel generator fuel oil transfer pump test.
- PT-2.2Q, Residual heat removal pump quarterly test.
- PTT-23.18B, Containment penetration 109 (containment spray header) leak rate testing.
- T-18D-G, Main turbine valve trip testing.

b. Issues and Findings

No findings of significance were identified.

R23 Temporary Plant Modifications

a. Inspection Scope

The inspectors reviewed the following temporary modifications to verify that the safety functions of the associated systems were not affected.

- 2000-010 Containment tendon grease filler pipe leak repair
- 2000-014 Air ejector radiation instrument R-15A in-line monitor

b. Issues and Findings

No findings of significance were identified.

2. RADIATION SAFETY

Occupation Radiation Safety [OS]

OS1 Access Control to Radiologically Significant Areas

a. Inspection Scope

During the period January 22-26, 2001, the inspector conducted the following activities to determine the effectiveness of access controls to the radiologically controlled areas (RCA) located in the Auxiliary Building, Intermediate Building (controlled side), and Containment Building while the plant was at full power.

Technical Specifications locked high radiation areas were verified to be secured and the keys inventoried. Independent measurements were made of radiation levels in selected locations within the auxiliary/intermediate buildings. The accuracy of posted survey results were verified and the adequacy of associated radiation work permits (RWP) for tasks performed in these areas was evaluated.

On January 24, 2001, the inspector attended a pre-job ALARA briefing for a containment entry to calibrate reactor coolant pump seal flow transmitters. For the actual entry, performed on January 25, 2001, the inspector confirmed that the radiological controls, as specified in RWP No. 011008, were implemented, that neutron survey instrumentation was operable, and that workers were knowledgeable of measures (specified during the job briefing) to minimize dose while performing their tasks.

The inspector reviewed pertinent records regarding cumulative exposure history for calendar year 2000, current exposure trends, and ongoing dose reduction activities in order to assess the licensee's effectiveness in establishing exposure goals and in keeping actual personnel exposure as low as is reasonably achievable.

b. Issues and Findings

No findings of significance were identified.

OS3 Radiation Monitoring Instrumentation

a. Inspection Scope

During the period January 22-26, 2001, the inspector conducted activities to evaluate the operability and accuracy of radiation monitoring instrumentation that is used for the protection of workers.

The inspector reviewed the associated procedures and observed the calibration of various beta/gamma survey instruments (Xetec Model 330A Telescan, RO-20, and ASP1/LND 725). Calibration records were reviewed for various alpha and beta/gamma contamination measuring instruments (Tennelec APC-II, Multi-Scalers 2 & 3, and SAC-4). The results of performance testing conducted by the National Voluntary Laboratory Accreditation Program for electronic dosimetry (RADOS RAD-51R) used by the licensee were reviewed.

The inspector observed technicians performing pre-operational checks and radioactive source checks on a variety of instrumentation including high range gamma survey meters (Telescan), beta/gamma survey instruments (RO-20, RO-2a, and ASP1/LND 725), alpha survey instruments (ASP-1/HP380A), airborne radioactivity monitors (AMS-4), a breathing zone sampler (Gil-Air5), small article contamination monitors (SAM9), personnel contamination monitors (PCM1B), and the whole body counter.

Additionally, the inspector evaluated the adequacy of the licensee's respiratory protection program regarding the issuance of self-contained breathing apparatus (SCBA) to licensed operators. Training, medical, and respirator fit test records for operators authorized to wear SCBAs were reviewed. SCBAs staged for use in the control room and at the Health Physics access point were physically checked, and maintenance and surveillance records of selected SCBAs were reviewed.

The inspector reviewed ARs involving the reliability of radiation monitoring instruments to determine if the problem was identified in a timely manner and that appropriate corrective actions were taken to address the identified degraded condition. The ARs reviewed were Nos. 2000-0609, 2000-0649, 2000-0683, 2000-0684, 2000-1303, 2000-1514, 2000-1588, and 2000-1720

a. Issues and Findings

No findings of significance were identified.

Public Radiation Safety [PS]

PS2 Radioactive Material Processing and Transportation

a. Inspection Scope

During the period February 5-8, 2001, the inspector conducted activities to verify that the licensee's radioactive material processing and transportation programs complied with the requirements of 10 CFR 20, 61, and 71, and Department of Transportation (DOT) regulations contained in 49 CFR 170-189.

The inspector conducted a walk-down, with the cognizant system engineer, of the liquid and solid radioactive waste processing systems to verify that the current system configuration and operation were consistent with the descriptions contained in the Final Safety Analysis Report and Process Control Plan. Tours and independent radiological surveys were made of the Upper RadWaste Storage Building and Radioactive Material Storage Building to confirm the accuracy of material inventories and posted survey results, to verify that access to these areas was properly controlled, and to verify that radioactive material containers were properly labeled.

The inspector reviewed the radio-chemical analysis results for each of the radioactive waste streams, including dry active waste (DAW), spent resin, and mechanical filters, to determine if scaling factors for difficult-to-measure radioisotopes were properly developed and correctly applied in classifying the waste. The inspector reviewed the documentation for filter media that was classified as greater than Class C waste that was stored on site awaiting final disposition.

Seven recent radioactive material shipments were reviewed to determine that the packages complied with applicable NRC and DOT requirements. Included in this review were shipments of low specific activity (LSA II) DAW (manifest Nos. 2000-4, 2000-16, 2000-44, and 2000-45) and surface contaminated objects (manifest Nos. 2000-3, 2000-32, and 2000-33).

Training records were reviewed for individuals authorized to sign shipping manifests to determine if the training was current and relevant to the duties performed by these individuals.

A Quality Assurance Audit Report (AINT-2000-0010-TJD), surveillances, and field observations for various radwaste processing/transportation program activities were reviewed. ARs related to the receipt and control of radioactive material and proper implementation of site procedures were reviewed to determine if the issue was identified in a timely manner and appropriate actions were taken to evaluate and resolve the issue. Identified problems were confirmed to be entered into the corrective action program. Included in this review were AR Nos. 2000-1363, 2000-1662, 2000-0772, and 2001-0053.

b. Issues and Findings

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 residual heat removal system unavailability performance indicator. This inspection consisted of discussions with associated personnel and a review of unavailability records, including operator logs, ARs, WOs, and surveillance test procedures from the second quarter of 2000.

The inspectors also verified the completeness and accuracy of the occupational exposure control effectiveness performance indicator. The inspector selectively examined records used by the licensee to identify occurrences involving locked high radiation areas, very high radiation areas, and unplanned personnel exposures for the fourth quarter of 2000 and for January 2001. The information contained in these records was compared against the applicable criteria contained in the Nuclear Energy Institute (NEI) 99-02, Regulatory Assessment Performance Indicator Guideline, Revision 0, to verify that all conditions that met the NEI criteria were recognized, identified, and reported as a Performance Indicator. The records reviewed included ARs, and ALARA records addressing individual exposures.

b. Issues and Findings

No findings of significance were identified.

OA6 Meetings

a. Exit Meeting Summary

On February 12, 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

RG&E

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
J. Bement	Lead Technician, Radiation Protection Operations
G. Bussard	Quality Control Technician, Radwaste & Transportation
G. Fuller	Technician, Radwaste & Transportation
M. Harrison	Lead Technician, Radwaste Management
A. Hedges	Instructor, Radwaste & Transportation Operations
A. Herman	Principal Health Physicist
D. Kotarski	Technician, Radwaste & Transportation
N. Leoni	Radiation Protection, Quality Assessment Coordinator
P. Perry	System Engineer, Plant Radwaste Systems

NRC

J. Trapp	Senior Reactor Analyst, Region 1

ITEMS OPENED AND CLOSED

Opened/Closed

NCV 05000244/2000-11-01	Failure to take appropriate corrective actions for an inoperable service water flow instrument.

LIST OF ACRONYMS USED

ALARA	As Low As Reasonably Achievable
AR	Action Report
CCW	Component Cooling Water
CFR	Code of Federal Regulations
DAW	Dry Active Waste
DOT	Department of Transportation
LSA	Low Specific Activity
NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
RCA	Radiologically Controlled Area
RG&E	Rochester Gas and Electric Corporation
RWP	Radiation Work Permit
SCBA	Self Contained Breathing Apparatus
SDP	Significance Determination Process
SW	Service Water
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	• Occupational	• Physical Protection
• Mitigating Systems	• Public	
• Barrier Integrity		
• Emergency Preparedness		

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.