EA 02-141

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 NO. 50-244/02-04

Dear Dr. Mecredy:

On June 29, 2002, the NRC completed an inspection of your R. E. Ginna Facility. The enclosed report documents the inspection findings which were discussed with you and other members of your staff during an exit meeting on July 2, 2002.

The 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 operating license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, one preliminary finding of low to moderate safety significance (White) was identified. The finding is associated with a failure to ensure that the alert and notification system (ANS) was capable of performing its function. Specifically, long standing problems with the ANS siren feedback system prevented RG&E or the Counties from being able to identify which, if any, siren(s) activated and to conduct backup route alerting within 45 minutes for the populace covered by the failed siren(s). Using Manual Chapter 0609, Appendix B, section 5.0, "Failure to Meet a Risk Significant Planning Standard," and the Emergency Preparedness Risk determination flow chart to evaluate the finding, the finding screened to Yellow. However, the Emergency Preparedness Significance Determination Process (EP SDP) recognizes that a finding placed in context through the SDP can result in a color that exceeds the actual impact on public health and safety. We concluded that the problems with the ANS siren feedback system did not have a substantial impact on the EP Cornerstone Objective, and therefore, the finding does not rise to the level of substantial safety significance (Yellow) and is more appropriately characterized as low to moderate safety significance (White). The finding has low to moderate safety significance because there was a potential that the populace within the 10 mile emergency planning zone (EPZ) may not be promptly notified in the event of a radiological emergency at Ginna Station.

There is no immediate safety concern at this time due to the interim compensatory measures which are addressed in your June 14 and June 28, 2002, letters which are being reviewed by us with input from the Federal Emergency Management Agency.

The finding is also an apparent violation of NRC requirements and is being considered for escalated enforcement action in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600. The current Enforcement Policy is included on the NRC's website at www.nrc.gov/OE.

We believe that we have sufficient information to make a final significance determination. However, before we make a final decision, you have the opportunity to request a Regulatory Conference, or provide a written position on your perspectives of the facts and assumptions applied by the NRC to determine this finding and its significance. If you choose to request a Regulatory Conference, you should be prepared to meet within 30 days of the receipt of this letter. In such case, we encourage you to provide supporting documentation at least one week prior to the conference in order to facilitate effectiveness and efficiency. A Regulatory Conference for a matter of this type would be open for public observation. If you decide to provide a written response, please send your submittal to the NRC within 30 days of the receipt of this letter.

Please contact Ms. Michele Evans, Chief, Reactor Projects Branch, at (610) 337-5224 within 10 business days of the date of receipt of this letter to notify the NRC of your intentions. If we have not heard from you within 10 days, we will continue with our significance determination and enforcement decision and you will be advised by separate correspondence of the results of our deliberations on this matter.

Since the NRC has not made a final determination in this matter, a Notice of Violation is not being issued for this inspection finding at this time. In addition, please be advised that the number and characterization of the apparent violation described in the enclosed inspection report may change as a result of further NRC review.

Immediately following the terrorist attacks on the World Trade Center and the Pentagon, the NRC issued an advisory recommending that nuclear power plant licensees go to the highest level of security, and all promptly did so . With continued uncertainty about the possibility of additional terrorist activities, the Nation's nuclear power plants remain at the highest level of security and the NRC continues to monitor the situation. This advisory was followed by additional advisories, and although the specific actions are not releasable to the public, they generally include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with law enforcement and military authorities, and more limited access of personnel and vehicles to the sites. The NRC has conducted various audits of your response to these advisories and your ability to respond to terrorist attacks with the capabilities of the current design basis threat (DBT). On February 25, 2002, the NRC issued an Order to all nuclear power plant licensees, requiring them to take certain additional interim compensatory measures to address the generalized high-level threat environment. With the issuance of the Order, we will evaluate Rochester Gas and Electric Corporation's (RG&E) compliance with these interim requirements.

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 Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC website at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

A. Randolph Blough, Director Division of Reactor Projects

Docket No. 50-244 License No. DPR-18

Enclosure: Inspection Report 50-244/02-04

Attachment 1: Supplemental Information

cc w/encl: P. Wilkens, President, Rochester Gas and Electric Corporation

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Authority

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U.S. NUCLEAR REGULATORY COMMISSION REGION I

Docket No: 50-244 License No: DPR-18

Report No: 50-244/02-04

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

Facility: R. E. Ginna Nuclear Power Plant

Location: 1503 Lake Road

Ontario, New York 14519

Dates: May 19 through June 29, 2002

Inspectors: S. Dennis, Senior Resident Inspector (Acting)

C. Welch, Resident Inspector J. Jang, Senior Health Physicist T. Moslak, Health Physicist

Approved by: M. G. Evans, Chief

Projects Branch 1

Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000244-02-04, Rochester Gas & Electric; 05/19-06/29/2002; R. E. Ginna Nuclear Power Plant. Alert Notification System (ANS).

The inspection was conducted by resident inspectors and regional specialists in radiation protection and radiological environmental monitoring. The inspection identified one finding. Preliminarily, the finding has been determined to be of low to moderate safety significance (White) and an apparent violation (AV) of regulatory requirements. The significance of most findings is indicated by their color (Green, White, Yellow, or Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process (SDP)." Findings for which the SDP does not apply may be "Green" or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. Inspector Identified Findings

Cornerstone: Emergency Planning

Preliminary White. The inspectors identified, that should emergency planning zone (EPZ) siren failures occur, the ability to notify the public in a timely manner, within the 10 mile EPZ, was compromised. The finding was evaluated using Inspection Manual Chapter (IMC) 0609, Appendix B, "Emergency Preparedness Significance Determination Process." Preliminarily, this finding has been determined to be of low to moderate safety significance and an apparent violation of regulatory requirement 10 CFR 50.47(b)(5), which requires in part that licensees establish a means to provide early notification and clear instruction to the populace within the plume exposure pathway EPZ.

(AV 50-244/02-04-01). (Section EP2)

B. <u>Licensee Identified Violations</u>

No licensee identified violations were identified.

Report Details

SUMMARY OF PLANT STATUS

Ginna operated at 100 percent reactor power for the majority of the inspection period. On June 26th, power was reduced to approximately 86 percent for 8 hours to troubleshoot and repair the main turbine electro-hydraulic control system which malfunctioned as a result of lightning strikes during severe weather (R14).

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

R04 Equipment Alignment

a. <u>Inspection Scope</u>

Partial walkdown inspections were performed on the following systems:

- Control room emergency air treatment system
- Service water redundant return line

These inspections verified that alignment of critical valves, electrical breakers, and/or damper positions were correct and as described in plant procedures (PT-17.4, "Control Room Radiation Monitor Operability Test," and T-36.2, "Service Water Redundant Return Line Operation") and applicable drawings. Control room indications and controls were also verified to be appropriate for the standby or operating status of the system. During the walkdowns, the inspectors evaluated the material condition and general housekeeping of the systems and adjacent spaces. A sample of outstanding maintenance work requests were reviewed to ensure system operability was not adversely affected.

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, the physical condition of installed fire suppression and detection systems, and the adequacy of compensatory measures when required. Additionally, the inspectors reviewed procedures SC-3, "Fire Emergency Plan," and SC-3.1, "Fire Emergency General Information," to verify that the fire protection program was being implemented in accordance with conditions stated in the procedures.

- Relay room
- A emergency diesel generator room
- B emergency diesel generator room
- Turbine building basement

b. <u>Findings</u>

No findings of significance were identified.

R11 Licensed Operator Requalification

a. Inspection Scope

The inspectors observed a licensed operator requalification training evaluation on June 15, 2002. The evaluation observed was training scenario #ES1213-05. The inspector reviewed the critical tasks associated with the evaluation, observed the operators performance during the scenario, and observed the post evaluation critique. The inspector also reviewed and verified compliance with Ginna procedure OTG-2.2, "Simulator Examination Instructions."

b. <u>Findings</u>

No findings of significance were identified.

R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors conducted maintenance rule implementation inspection activities to verify that: (1) failed structures, systems and components (SSCs) were properly characterized in the RG&E Maintenance Rule Monthly Reports, (2) goals and performance criteria were appropriate, (3) corrective action plans were appropriate, and (4) performance was being effectively monitored in accordance with RG&E procedures EP-2-P-0167, "Maintenance Rule Monitoring," and EP-2-P-0168, "Maintenance Rule Scoping." The inspectors selected the following safety significant systems in (a)(1) and (a)(2) status:

- Reactor protection system, train RPS02 transitioned to (a)(1) status.
- Containment isolation, train CTS02 primary sample system air operated valve 966B seal leakage.

b. Findings

No findings of significance were identified.

R13 Maintenance Risk Assessments and Emergent Work Evaluation

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/or 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.

- Planned maintenance and testing conducted on June 19th, which removed from service, the A residual heat removal pump and A charging pump.
- Planned maintenance and testing conducted on June 11th, which removed from service, the B component cooling water heat exchanger, the B spent fuel pool cooling pump, the constant voltage transformer for the B instrument bus, and the A emergency diesel generator.
- Unplanned maintenance on June 12th for the containment inner door due to unacceptable leak rate test results.
- Planned maintenance and testing conducted on June 25th, which affected the A component cooling water heat exchanger and nuclear instrumentation channel N-43.

b. <u>Findings</u>

No findings of significance were identified.

R14 Personnel Performance During Non-routine Plant Evolutions

a. Inspection Scope

On the afternoon of June 26th, a severe lightning storm created disturbances on the electrical grid and caused a malfunction of the main turbine electro-hydraulic (EH) control system. In response, the operators entered abnormal procedure AP-Turb.2, "Turbine Load Rejection," operating procedure O-5.1, "Load Reduction," and reduced power to approximately 86 percent. The storm also caused various spurious alarms, the activation of fire suppression system S23 for the 12B transformer, and three radiological monitoring system sample skid pumps to trip. Additionally, momentary electrical perturbations occurred on the technical support center supplemental uninterruptible power supply, and the station battery charger and inverter. Power was restored to 100 percent at 10:36 PM on June 26, 2002.

The resident inspectors arrived in the control room shortly after power had been reduced and observed plant stabilization and recovery efforts. The inspectors verified the operators' response was in accordance with station procedures through direct observation, interviews, and a review of collected data obtained from plant logs and computer printouts. Conditions were reviewed against the Technical Specifications, the Off-Site Dose Calculation Manual, and the Technical Requirements Manual.

b. Findings

No findings of significance were identified.

R15 Operability Evaluations

a. <u>Inspection Scope</u>

The inspectors reviewed the following operability determinations to determine if RG&E had adequately justified operability:

- AR 2002-1308, control room emergency air treatment system. On May 22, 2002, the inspectors found two small holes in one section of a flexible connector for the control room ventilation system. The engineering technical evaluation attached to AR 2002-1308 was reviewed to verify that the determined leakage through the holes did not exceed the limits specified for the system in the technical specifications and Updated Final Safety Analysis Report, Table 6.4-1. Permanent repairs are planned as part of the AR.
- AR 2002-1073, emergency diesel generator rooms A & B fire suppression system capability. The inspectors reviewed design analysis DA-ME-2002-040, "Hydraulic Sprinkler Calculations for the Diesel Generator Rooms A and B Fire Protection Systems S12 and S13," and the 1978 version of the National Fire Protection Association (NFPA) code, NFPA-13, "Standard for Installation of Sprinkler Systems," to assess the adequacy of the fire suppression systems.

b. Findings

No findings of significance were identified.

R19 Post Maintenance Testing

a. Inspection Scope

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

- PT-2.3, "Safeguard Power Operated Valve Operation," which was performed as a PMT following maintenance on the C safety injection pump and motor operated valves 871A and 1581A per WOs 20103701, 20104063, and 20103718.
- PT-2.5.4, "Air Operated Valve Quarterly Test," and PTT-23.12.B, "Containment Isolation Valve Leak Rate Testing" which were performed as PMTs following replacement of containment isolation valve 966B, pressurizer liquid space air operated sample valve, per WOs 20100263 and 20200524.
- PT-2.8Q, "Component Cooling Water Pump Quarterly Test," which was performed as a PMT following replacement of the internal power cables in motor control center C position 9M, for motor operated valve 738A component cooling water inlet isolation valve to the residual heat removal heat exchanger, per WO 20103689.

b. <u>Findings</u>

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, operational readiness, and met the requirements of the plant technical specifications. The inspectors reviewed samples of prior test performance results on the selected equipment to verify that degraded or non-conforming conditions were identified and corrected.

- PT-2.1Q, "Safety Injection System Quarterly Test"
- PT-3Q, "Containment Spray Pump Quarterly Test"
- PT-2.8Q, "Component Cooling Water Pump Quarterly Test"

b. <u>Findings</u>

No findings of significance were identified.

Emergency Preparedness [EP]

EP2 Alert Notification System Testing

a. <u>Inspection Scope</u>

The inspectors reviewed the results of the annual full duration audible test of the alert and notification system (ANS), performed on May 9, 2002. This inspection focused on the performance of the 96 sirens and their associated control stations, and the ability to identify siren failures through the siren feedback process. The inspection was accomplished through interviews and document reviews.

b. Findings

Introduction

(White) The inspectors identified, that should siren failures occur, the ability to notify the public in a timely manner (i.e. 45 minutes), within the 10 mile emergency planning zone (EPZ), was compromised. Preliminarily, this finding has been determined to be of low to moderate safety significance (White) and an apparent violation (AV) of regulatory requirement 10 CFR 50.47(b)(5), which requires in part that licensees establish a means to provide early notification and clear instruction to the populace within the plume exposure pathway EPZ.

<u>Description</u>

On May 9, 2002, RG&E conducted the annual full duration audible test of the siren system as required by section 6.3.13 of the Ginna Station Nuclear Emergency Response Plan. The acceptance criteria, contained in section 7.3.1 of the plan, allows for up to 10 siren failures. Having identified that only five sirens failed to activate, RG&E declared the test a success. Due to the failure of the siren feedback system, the siren test results were determined based on reports from field crews and door-to-door interviews. RG&E issued five ACTION reports to document deficiencies noted during the test (ARs 2002-1214, 1215, 1216, 1217, and 1218).

The siren feedback system is an integral part of the ANS system. It is recognized in Ginna's Nuclear Emergency Response Plan (NERP) in section 6.3.13 which states, "in 1993, a Siren Verification System was installed providing remote feedback capability to both counties and RG&E from all 96 siren units. The system is used to verify proper siren activation and to verify whether inadvertent siren activations have occurred." The system is also recognized in both the Monroe and Wayne County Emergency Response Plans and is procedurally relied upon to identify a failed siren(s). Problems with the siren feedback system have been long standing, as noted by ARs 2002-1214, 2002-1216, 2001-0789, 1997-0505, and the Ginna Siren System Action Plan dated September 22, 2000. (The failure to correct long standing ANS equipment and human performance deficiencies was addressed in NRC inspection report 50-244/02-09, dated May 16, 2002.)

RG&E's NERP, Appendix G, item E states, "The Counties' evacuation plans contain backup notification procedures such as route alerting in the event of a siren or tone alert system malfunction." Failure of the siren feedback system left the counties without the means to determine if the sirens activated or not. Both counties rely upon the feedback report to determine when and where to conduct route alerting. On May 9th, five sirens failed to activate, two of which were in adjacent areas within a heavily populated Zone. In addition, a review of the procedures in place for activating the sirens and for conducting route alerting identified that no procedural guidance existed regarding timeliness for initiating backup route alerting or how long to wait for the siren feedback report. Discussions, on June 11th, with Wayne County (WC) and Monroe County (MC) personnel indicated that they would potentially have waited for up to 20 - 30 minutes for the siren report, after which they would have initiated route alerting for the entire EPZ within their respective county. County estimates to complete route alerting within their

respective portion of the EPZ were 1.5 to 2 hours for WC and 45 minutes to 1 hour for MC, once route alerting actually started.

Analysis

The finding affects the Emergency Preparedness Cornerstone and is considered to be more than minor because the attribute of ANS availability was degraded. This affects the cornerstone objective of ensuring that the licensee is capable of implementing adequate protective measures to protect the health and safety of the public in the event of a radiological emergency.

The inspectors used Manual Chapter 0609, Appendix B, section 5.0, "Failure to Meet a Risk Significant Planning Standard" and the Emergency Preparedness Risk determination flow chart to evaluate the finding. The finding screened to Yellow using the following flow chart logic:

- Requirement Not Met: 10 CFR 50.54(q), 10 CFR 50.47(b)(5), and Ginna Station NERP section 6.3.13, pertaining to the prompt notification of the populace.
- Planning Standard Not Met: 10 CFR50.47(b)(5).
- Risk Significant Planning Standard Not Met: 10CFR50.47(b)(5).

Appendix B, section 1 states in part, " ... the design of the EP SDP ensures no false negative results, but can result in false positive results, i.e., a finding placed in context through the SDP can result in a risk significance level that exceeds the actual impact on public health and safety. ... Additional information may support downgrading findings that do not impact the licensees ability to meet the EP Cornerstone Performance Expectation." After consideration of the following, the significance of this finding was determined to be more appropriately categorized as White:

- The function of planning standard 50.47(b)(5) was not fully lost but more appropriately degraded.
- Both counties had in place the procedures, processes, and equipment to conduct route alerting and in fact they would have completed route alerting, albeit possibly untimely (i.e. > 45 minutes).
- In an actual event, external factors would more than likely have resulted in route alerting commencing and completing sooner rather than later.

However, in spite of the above considerations, the finding was determined to be greater than GREEN due to its potential adverse effect on public health and safety.

Enforcement

10 CFR 50.47(b)(5) requires, in part, that the licensee establish a means to provide early notification to the populace within the plume exposure pathway Emergency Planning Zone. By NRC letter dated April 22, 1986, forwarding the Federal Emergency Management Agency's (FEMA) ANS acceptance letter, dated March 7, 1986, the ANS compliance with the applicable evaluative criteria from NUREG-0654/FEMA-Rep 1, and FEMA-43 (superseded by FEMA-REP-10) was confirmed to the licensee. These letters established the means to provide early notification. In the Quality Assurance Verification report, which was a part of the FEMA approval letter, section B. 2, "Special Alerting (E.6.2.4, FEMA-43)" states: "Supplemental alerting of the public within the R.E. Ginna Nuclear Power Station EPZ is provided by means that include tone alert radios and route alerting." It further states: "If one or more sirens fail to activate, the county Fire Coordinator requests the appropriate fire department to effect route alerting in the area(s) by use of vehicles equipped with public address systems or bullhorns. Park, law enforcement, and fire personnel participate in route alerting." In accordance with FEMA-REP-10/November 1985, section E.6.2.4.6 the total elapsed time for alert and notification using police, fire, or rescue vehicles and personnel should not exceed 15 minutes (or 45 minutes, when the design objective of route alerting is to ensure coverage of a population who may not have received the initial alert and notification).

Contrary to the above, as evidenced by two integrated siren tests in May of 2001 and 2002, RG&E failed to correct problems with the ANS siren feedback system which resulted in a loss of ANS function per 10CFR50.47(b)(5). Specifically, RG&E or the county could not identify which, if any, siren(s) failed to activate and the county could not conduct backup route alerting within 45 minutes for the populace covered by the failed siren(s). The failure to maintain the ANS design function is an apparent violation of 10 CFR 50.47(b)(5) and is being considered for escalated enforcement action in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600. (AV 50-244/02-04-01.)

EP6 Drill Evaluation

a. <u>Inspection Scope</u>

On June15, 2002, the inspector observed a licensed operator training assessment that included an emergency activation level classification. Training scenario # ES1213-05 was observed. The inspector verified that the appropriate emergency classification was identified and external notifications to responsible parties were simulated in a timely manner.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

PS2 Radioactive Material Processing and Transportation

a. Inspection Scope

During the period June 3 - 6, 2002, the inspector conducted the following activities to verify that RG&E was processing and shipping radioactive material in accordance with the requirements contained within the Code of Federal Regulations (CFR), 10 CFR 20, 61, and 71; and Department of Transportation regulations 49 CFR 170-189.

The inspector conducted a walkdown, with the cognizant system engineer, of the liquid and solid radioactive waste processing systems to verify that the current system configuration and operation agreed with the descriptions contained in the Updated Final Safety Analysis Report (Chapter 11.2) and the Process Control Plan. Tours and independent radiological surveys were made in the Upper Radwaste Storage Building, Low Level Waste Facility, and Radioactive Materials Storage Building to confirm the accuracy of material inventories and posted survey results.

The inspector reviewed the most recent radio-chemical radioactive waste stream analyses for bead resin, dry active waste, mechanical filters, and the reactor makeup water tank rubberized bladder waste to determine if scaling factors for difficult-to-measure radio-nuclides were properly developed and applied in classifying waste shipments for burial.

The inspector reviewed five radioactive material shipment records for compliance with the relevant site shipping procedure and federal regulations contained in 10 CFR 20, 61, 71 and 49 CFR 170-189.

RG&E's Quality Assurance (QA) oversight of the radwaste processing and transportation programs was evaluated by reviewing a relevant QA audit (AINT 2000-0010-TJD), completed in February 2001. The audit was reviewed with respect to the requirement for conducting a comprehensive periodic and independent audit of the radioactive material shipping program as required by 10 CFR 71.137. The inspector confirmed that issues identified in the audit report were entered into the corrective action program for resolution.

b. Findings

No findings of significance were identified.

PS3 Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program

.1 Radiological Environmental Monitoring Program (REMP)

a. Inspection Scope

The inspector reviewed the following documents to evaluate the effectiveness of RG&E's REMP. The requirements of the REMP were specified in the Improved Technical Specification/Offsite Dose Calculation Manual (ITS/ODCM):

- the 2000/2001 Annual REMP Reports, including selected analytical data for 2002 REMP samples;
- the most recent ODCM (Revision 17, January 24, 2002) and technical justifications for ODCM changes, including sampling locations;
- the most recent calibration results of the primary (at 33-ft, 150-ft, and 250-ft, calibrated in August 2001) and the secondary (33-ft, calibrated in September 2001) meteorological monitoring instruments for wind direction, wind speed, and delta temperature;
- availability of the meteorological monitoring instruments from January 1, 2001 to December 31, 2001;
- the most recent calibration results for all TS required air samplers;
- implementation of the environmental thermoluminescent dosimeters (TLDs) program;
- the licensee's QC evaluation of the interlaboratory comparison program and the corrective actions for any deficiencies;
- Action Report Nos. 2002-0544, 2002-0376, 2002-0377, and 2002-1320, and corrective actions;
- the 2001/2002 QA audits (Audit Numbers; AINT-2001-0001-JMT and AINT-2002-0001-JMT) for the REMP/ODCM implementations;
- the 2001 QA Surveillance Report (Report Number SQUA-2001-0002-AZP) for the implementation of analytical and QC programs of the analytical laboratory;
- the Land Use Census procedure and the 2000/2001 results; and
- associated REMP procedures, including vendor's analytical procedures.

The inspector toured and observed the following activities to evaluate the effectiveness of RG&E's REMP.

- operability of the primary and secondary meteorological instruments;
- charcoal cartridge and filter sampling techniques;
- surface water sampling techniques (grab and automatic water samples); and
- walkdown for determining whether air samplers, milk farms, and 25 percent TLDs were located as described in the ODCM (including control and indicator stations) and for determining the equipment material condition.

b. <u>Findings</u>

No findings of significance were identified.

.2 Radioactive Material Control Program

a. Inspection Scope

The inspector reviewed the following documents and observed licensee activities to ensure that RG&E's surveys and controls were adequate to prevent the inadvertent release of licensed material to the public domain.

- the methods used for control, survey, and release from the Radiologically Controlled Area (RCA);
- the most recent calibration results for the radiation monitoring instrumentation (small articles monitor, SAM-9 and SAM-11), including the (a) alarm setting,
 (b) response to the alarm, (c) the sensitivity, and (d) alarm failure rate;
- the use of SAM-9 and SAM-11 by employees;
- the most recent calibration results for the gamma measurement system to use the material control program;
- the licensee's criteria for the survey and release of potentially contaminated material;
- associated procedures and records to verify for the lower limits of detection; and
- Action Reports Nos. 2001-2045, 2001-2047, 2002-2107, and 2002-1319, and corrective actions.

The review was against criteria contained in: (1) NRC Circular 81-07, "Control of Radioactively Contaminated Material"; (2) NRC Information Notice 85-92, "Surveys of Waste before Disposal from Nuclear Reactor Facilities"; (3) NUREG/CR-5569, "Health Physics Position Data Base (Positions 221 and 250)"; and (4) the licensee's procedures.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES [OA]

OA2 Identification and Resolution of Problems

a. Inspection Scope

The inspector reviewed ten Action Reports relating to the processing and shipping of radioactive materials between February 2001 and May 2002 to evaluate the licensee's threshold for identifying and resolving problems in implementing the radioactive material processing and shipping programs.

b. Findings

No findings of significance were identified.

OA6 Meetings, Including Exit

a. Exit Meeting Summary

On July 2, 2002, the inspectors presented their overall findings to members of RG&E management led by Dr. Mecredy. RG&E management acknowledged the findings presented. No proprietary information was identified.

Attachment 1

Supplemental Information

a. Key Points of Contact

RG&E:

P. Bamford Primary Systems and Reactor Engineering Manager

J. Bement Foreman, Radiation Protection Operations
M. Flaherty Nuclear Safety and Licensing Manager

G. Fuller Radiation Protection Technician, Radwaste Operations

K. Gould Senior Health Physicist, Operations M. Harrison Foreman, Radwaste Operations

D. Kotarski Radiation Protection Technician, Radwaste Operations

F. Mis Chemistry Manager

P. Perry Systems Engineer, Radwaste
P. Polfleit Corporate Emergency Planner
R. Popp Production Superintendent
J. Smith Maintenance Superintendent

J. St. Martin Licensing Engineer

W. Thomson Manager, Radiation Protection

R. Watts Nuclear Training Department Manager
J. Wayland I&C/Electrical Maintenance Manager

T. White Operations Manager J. Widay VP, Plant Manager

NRC

R. Conte Chief, Operational Safety Branch

D. Silk Senior Emergency Preparedness Inspector

b. <u>List of Items Opened, Closed, and Discussed</u>

Opened

AV 50-244/02-04-01, (TBD). RG&E failed to correct problems with the ANS siren feedback system which resulted in a loss of ANS function per 10CFR50.47(b)(5).

c. List of Documents Reviewed

AR 2002-1214, "Excess Time Required For Siren Verification"

AR 2002-1215, "Specific Sirens Did Not Activate"

AR 2002-1216, "Incorrect or Inadequate Siren Status"

AR 2002-1217, "Specific Sirens Did Not Shutdown"

AR 2002-1218, "Siren 43 Low Sound Level"

AR 2001-0789, "Specific Sirens Did Not Activate During 'Full Blow' Test"

RG&E letter dated 6/14/02, "Interim Compensatory Measures Associated with Prompt Notification System

RG&E letter dated 6/28/02, "Update of Interim Compensatory Measures Associated with Prompt Notification System

FEMA-REP-10/ November 1985, "Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants"

FEMA letter dated 4/21/87, "Guidance Memorandum AN-1, FEMA Action to Qualify Alert and Notification Systems Against NUREG-0654/FEMA-REP-1 and FEMA-REP-10 FEMA letter dated 3/7/86, "Analysis of the Prompt Alert and Notification System for the R.E. Ginna Nuclear Power Station"

FEMA letter dated 4/22/86, "FEMA Report on the Alert and Notification System Surrounding the R.E. Ginna Nuclear Power Station"

"An Off-Site Emergency Plan Prompt Alert and Notification System Addendum for the R.E. Gina Nuclear Power Station", dated November 1984, submitted by RG&E Ginna Station Nuclear Emergency Response Plan (Rev. 20)

Wayne County Radiological Emergency Preparedness Plan (Rev. 11) Monroe County Radiological Emergency Preparedness Plan (Rev. 3/01)

EPG-3, Rev 0, Activation of the Ginna Sirens

EPG-2, Rev 6, Silent Testing of the Ginna Sirens

EPG-1, Rev 10, Emergency Planning Guideline

PROCEDURES:

RP-RW-COMP-CFR61, Rev 3 10 CFR 61 Waste Classification Methodology and

Acceptance Criteria Documentation

RP-RW-WMG540, Rev 1 Radioactive Material Manifest

RP-SUR-REL, Rev 4 Unconditional Release of Material from Restricted

Areas

RP-RW-SHIP-LSA, Rev 6 Shipment of Radioactive Material, LSA, n.o.s. UN

2912

RP-RW-SHIP-MT, Rev 3 Shipment of Radioactive Material, Excepted

Package, Empty Package, 7 UN2910

RP-RW-SHIP-NOS Shipment of Radioactive Material, N. O. S., UN

2982

RPA-RW-SHIP-VR, Rev 2 Shipment of Radioactive (Waste) Material to a

Volume Reduction Facility

RPA-RW-PCP, Rev 7 Process Control Plan

RPA-RW-TRNG, Rev 1 Training and Responsibilities of Individuals

Involved in Radwaste Group Activities

RPA-RW-SHIP-WSTE, Rev 0 Preparation and Shipment of Radioactive (Waste)

Material

ACTION REPORTS:

 $2002\text{-}0542,\ 2001\text{-}2045,\ 2001\text{-}2107,\ 2001\text{-}1724,\ 2001\text{-}1410,\ 2001\text{-}1411,\ 2001\text{-}0778,\ 2001\text{-}0779,\ and\ 2001\text{-}0191$

RADIOACTIVE MATERIAL SHIPMENT RECORDS:

SHIPMENT NO.	DESCRIPTION	DATE SHIPPED
2001-031	DAW-LSA II	10/29/01
2001-017	Bead resin- LSA II	6/20/01
2001-016	Dewatered Filters/DAW- LSA II	6/11/01
2001-014	Bead Resin- LSAII	5/30/01
2001-004	DAW- LSAII	4/27/01

AUDIT:

AINT-2000-0010-TJD, Radwaste Shipping /Process Control Program Audit, February 9, 2001