April 29, 2003

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

SUBJECT: R. E. GINNA NUCLEAR POWER PLANT - NRC INTEGRATED INSPECTION REPORT 50-244/03-03

Dear Dr. Mecredy:

On March 29, 2003, the NRC completed an inspection of your R. E. Ginna facility. The enclosed integrated report documents the inspection findings, which were discussed on April 3, 2003, with you and other members of your staff.

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

Based on the results of this inspection, the inspectors identified four issues of very low safety significance. None of the issues was an immediate safety concern. Three of these issues were determined to involve a violation of NRC requirements. However, because of their very low safety significance, and because they have been entered into your corrective actions program, the NRC is treating these issues as non-cited violations, in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny the non-cited violations noted in this report, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, D.C. 20555-0001; and the NRC Resident Inspector at the Ginna facility.

Since the terrorist attacks on September 11, 2001, the NRC has issued two Orders (dated February 25, 2002, and January 7, 2003) and several threat advisories to licensees of commercial power reactors to strengthen licensee capabilities, improve security force readiness, and enhance controls over personnel access authorization. The NRC also issued Temporary Instruction 2515/148 on August 28, 2002, that provided guidance to inspectors to audit and inspect licensee implementation of the interim compensatory measures (ICMs) required by the February 25th Order. Phase 1 of TI 2515/148 was completed at all commercial nuclear power plants during calendar year (CY) '02, and the remaining inspections are scheduled for completion in CY '03. Additionally, table-top security drills were conducted at several licensees to evaluate the impact of expanded adversary characteristics and the ICMs on licensee protection and mitigative strategies. Information gained and discrepancies identified during the audits and drills were reviewed and dispositioned by the Office of Nuclear

Security and Incident Response. For CY '03, the NRC will continue to monitor overall safeguards and security controls, conduct inspections, and resume force-on-force exercises at selected power plants. Should threat conditions change, the USNRC may issue additional Orders, advisories, and temporary instructions to ensure adequate safety is being maintained at all commercial power reactors.

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/reading-rm/adams.html.

Sincerely,

/RA/

James M. Trapp, Chief
Projects Branch 1
Division of Reactor Projects

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

Enclosure: Inspection Report 50-244/03-03

Attachment 1: Supplemental Information

cc w/encl:
P. Wilkens, President, Rochester Gas and Electric
P. Eddy, Electric Division, Department of Public Service, State of New York
C. Donaldson, Esquire, State of New York, Department of Law
N. Reynolds, Esquire
W. Flynn, President, New York State Energy Research and Development Authority
J. Spath, Program Director, New York State Energy Research and Development Authority
D. Stenger, Ballard Spahr Andrews and Ingersoll. LLP
T. Wideman, Director, Wayne County Emergency Management Office
M. Meisenzahl, Administrator, Monroe County, Office of Emergency Preparedness
T. Judson, Central New York Citizens Awareness Network

Distribution w/encl (**VIA E-MAIL**):
H. Miller, RA/J. Wiggins, DRA (1)
T. McGinty, RI EDO Coordinator
R. Laufer, NRR
R. Clark, PM, NRR
P. Milano, PM, NRR (Backup)
K. Kolaczyk, SRI - Ginna
B. Fuller, RI Nine Mile Point
M. Marshfield, RI
J. Trapp, DRP
R. Junod, DRP
Region I Docket Room (with concurrences)

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No:	50-244
License No:	DPR-18
Report No:	50-244/2003-03
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 29, 2002 - March 29, 2003
Inspectors:	K. Kolaczyk, Senior Resident Inspector M. Marshfield, Resident Inspector B. Fuller, Resident Inspector, Nine Mile Point A. Blamey, Senior Operations Engineer S. Chaudhary, Senior Reactor Inspector N. Perry, Senior Project Engineer D. Silk, Senior Emergency Preparedness Inspector
Approved by:	J. M. Trapp, Chief Projects Branch 1 Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000244/2003-003, Rochester Gas & Electric; 12/29/2002 - 3/29/2003; R. E. Ginna Nuclear Power Plant. Equipment Alignment, Fire Protection, Licensed Operator Requalification Program, Other Activities.

The report covered a three month period of inspection by resident inspectors, three regional DRS (Division of Reactor Safety) specialists and a regional projects inspector. This inspection identified four issues of very low safety significance. Three of the issues, were non-cited violations (NCVs). 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 may 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. NRC-Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

- Green. The inspectors identified a non-cited violation of Technical Specification 5.4.1.d; which requires, in part, that procedures be established, implemented, and maintained covering the fire protection program. Contrary to the above, RG&E did not maintain procedures that described how the control room emergency air treatment system (CREATS) should be operated if a fire occurred in the control room.

  This finding associated with the Mitigating Systems Cornerstone, was determined to be greater than minor because it could adversely impact the ability of plant personnel to mitigate the effects of a fire in the control room structure. In phase one of the fire protection SDP, the finding screened to green since fire protection features in the control room remained operable, and the control room is continuously occupied, which would facilitate rapid detection and suppression of a fire before adverse consequences resulted. (Section 1R04)

- Green. The inspectors identified that ongoing water leakage through the control room roof had not been entered into the RG&E corrective action program. The roof had been leaking intermittently since the last time it had been repaired in 2000. A Green non-cited violation was identified for a failure of RG&E to identify and correct a degraded condition as required by 10 CFR 50 Appendix B Criterion XVI.

  This finding, associated with the Mitigating Systems Cornerstone, was considered greater than minor because water entering the control room structure could damage the safety-related equipment located within the control room rendering equipment inoperable or cause a reactor trip. Additionally, the water leakage could cause the roof to degrade beyond the assumptions provided in the

control room design analysis. In phase one of the reactor safety SDP, the finding screened to Green since the roof was repaired before the leakage exceeded the design assumptions described in the Updated Final Safety Analysis Report (UFSAR). (Section 1R05).

- Severity Level IV. The inspectors identified a non-cited violation in which three senior reactor operator (SRO) licenses had expired without the appropriate renewal forms being submitted. Two of these individuals improperly fulfilled Technical Specification positions that required an SRO license from October 2, 2002, to October 11, 2002.

  The violation was determined to be of very low safety significance and a non-cited violation of Technical Specification Sections 5.2.2.b & 5.2.2.e, which requires, in part, that two (2) SRO licensed individuals must be on the operating crew and the operating supervisor must hold an SRO license, respectively. Traditional enforcement was used because failure to submit the license renewal forms affected the NRC's ability to perform its regulatory function to periodically review the medical and requalification training qualifications of licensed operators. (Section 1R11)

Cornerstone: OTHER

- Green The inspectors identified that RG&E did not provide control room operators with guidance regarding when they should use the self contained breathing apparatus (SCBA) located in the control room. Chapter 6.4.2.2.2 of the Ginna UFSAR and Licensee Event Report (LER) 2002-002 indicate operators would use the SCBA if toxic gas or airborne particulate activity was detected in the control room.

  This finding, associated with the Mitigating Systems Cornerstone, was considered greater than minor, since absent procedural guidance, it was not evident operators would use the SCBA as RG&E intended. As a result, an event such as a toxic gas release may become a more significant safety concern. In phase one of the reactor safety SDP, the finding screened to Green since a release of toxic gas did not occur and operators could shut down the plant at remote operating stations if they had to leave the control room. Further, although there were no procedures governing when the SCBA equipment should be used, there were SCBAs in the control room, and operators were familiar with their use. (Section 4OA5)

B. Licensee Identified Violations

None.

REPORT DETAILS

Summary of Plant Status

Ginna began the inspection period at 100% of rated thermal power. On March 1, 2003, plant power was reduced to less than five percent power, and the turbine/generator was disconnected from the grid to allow planned maintenance to be conducted on the "A" feedwater regulating valve. Later that day, following completion of the work, plant power was increased, and the turbine/generator was reconnected to the grid. Full power was reached on March 2, 2003, and the plant remained at that power level for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R04 Equipment Alignment

a. Inspection Scope

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

- control room emergency air treatment system
- emergency diesel generator "B"
- safety injection system

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

b. Findings

Introduction. The inspectors determined RG&E did not maintain procedures that described how the control room emergency air treatment system (CREATS) should be operated if a fire occurred in the control room. Further, the procedure that provided instructions on how smoke should be removed from the control room referred to equipment that was not located as described in the procedure. This procedure deficiency was a non-cited violation of Technical Specification 5.4.1.d; which requires, in part, that procedures be established, implemented, and maintained covering the fire protection program.

Description. The Ginna CREATS Technical Specification (TS) basis indicates the CREATS can be placed in five different configurations depending on the accident condition. According to the TS basis, two of the configurations, Modes D and F, are used to purge the control room of smoke.

If a fire occurred in the control room, RG&E personnel would implement several procedures to extinguish the fire including Fire Response Plan Procedure (FRP) 20.0 "Control Room" and SC- 3.16.13, "Operating Instruction - Smoke Ventilation/ Cooling." Although FRP-20.0 indicated that the CREATS should be placed in the recirculation mode in the event of a control room fire, it did not describe how or when that task should be accomplished. Procedure SC-3.16.13, did not mention the modes CREATS should be placed in; instead it indicated that personnel were to remove smoke from the control room using two portable ejectors that were located in an emergency cabinet outside of the control room. However, the inspectors determined the ejectors were not located in the cabinet. Instead, they had been moved to a remote fire protection equipment locker.

Analysis. The finding, associated with the Mitigating Systems Cornerstone, was determined to have a credible impact on safety due to its adverse impact on the ability of plant personnel to mitigate the effects of a fire in the control room structure. In phase one of the fire protection SDP, the finding screened to Green since fire protection features in the control room remained operable, and the control room is continuously occupied, which would facilitate rapid detection and suppression of a fire before adverse consequences resulted.

Enforcement. The finding was determined to be a violation of Technical Specification 5.4.1.d, which requires, in part, that written procedures be established, implemented, and maintained for implementing the Fire Protection Program. Contrary to Technical Specification 5.4.1., by not correctly identifying the process by which smoke could be removed from the control room structure, RG&E did not adequately maintain fire protection procedures SC-3.16.13 and FRP-20.0. However, because of the very low safety significance of this violation and because RG&E has entered the issue into their corrective action program (ARs 2003-0084, 2003-161, and 2003-162) this violation is being treated as a non-cited violation, in accordance with Section VI.A.1 of the NRC's Enforcement policy. **(NCV 50-244/03-03-01)**

1R05 Fire Protection

a. Inspection Scope

The inspectors conducted walkdowns of fire areas to determine if there was adequate control of transient combustibles and ignition sources. The material condition of fire protection systems, equipment and features, and the material condition of fire barriers were also inspected against industry standards. In addition, the passive fire protection features were inspected, including the ventilation system fire dampers, structural steel fire proofing, and electrical penetration seals. Documents reviewed during the walkdowns are listed in the attachment to this report. The following plant areas were inspected:

- Screenhouse
- Control Room
- Cable Tunnel
- Intermediate Building Clean Basement
- "A" and "B" Battery Rooms
- Intermediate Building Main Steam Header Floor

b. Findings

Introduction. A Green NCV was identified for a failure of RG&E to identify and correct a degraded condition, control room roof leakage, as required by 10 CFR 50 Appendix B Criterion XVI. The roof had been leaking intermittently since the last time it had been repaired in 2000.

Description. On January 13, 2003, while conducting a fire protection walkdown of the control room, the inspector noted the northeast corner of the control room roof appeared to be leaking as evidenced by a water stain on the ceiling tile. Through discussions with control room operators, the inspectors determined the roof had been leaking intermittently since the last time it had been repaired in 2000. However, RG&E personnel did not document the leakage in the corrective action program. As a result, this degraded condition was not identified and repaired. RG&E documented the inspector's observation regarding the condition of the control room roof in Action Report 2003-0073, "Water Damage to Control Room Ceiling Tiles Indicates Potential for In Leakage."

The RG&E control room is housed in a structure that has been significantly modified since the start of commercial operation in 1969 to address concerns related to security, and the forces generated by a High Energy Line Break in the Turbine Building. The control room ceiling, as well as the south and west walls of the structure are concrete. The north and east walls consisted of steel siding that was later augmented with armor plating following the start of commercial operation.

An RG&E investigation determined the water leakage was occurring through a seam on the east wall where the concrete roof slab joined the armor plate. To stop the leakage, RG&E personnel injected a foam sealant into the seam. When weather conditions improve, RG&E intends to conduct additional repairs of the roof.

Depending on the size of the hole, water inleakage could indicate that the control room envelope is inoperable since excessive air inleakage of radionuclides or toxic gas may occur during an event rendering the control room uninhabitable. Current design assumptions in the Ginna UFSAR limit the size of a leak path in the control room boundary to a 5.21 square inch hole. The inspector reviewed an analysis prepared by RG&E which evaluated the degraded condition. The analysis concluded, in part, that based upon the intermittent nature of the leak, the degraded leak path area was within the UFSAR design assumptions.

Analysis. This finding, associated with the Mitigating Systems Cornerstone, was considered greater than minor because water entering the control room structure could damage the safety-related equipment located within the control room, rendering equipment inoperable or cause a reactor trip. Additionally, the water leakage could cause the roof to degrade beyond the assumptions provided in the control room design analysis. In phase one of the reactor safety SDP, the finding screened to Green since the roof was repaired before the leakage exceeded the design assumptions described in the Updated Final Safety Analysis Report (UFSAR).

Enforcement. 10 CFR 50 Appendix B Criterion XVI states, in part, that ". . . Measures shall be established to assure that conditions adverse to quality. . . are promptly identified and corrected." Contrary to the above, although the control room roof had leaked intermittently since 2000, this condition was not entered into the Ginna corrective action program. As a result, the significance of this degraded condition was not assessed and corrected. Because RG&E's failure to identify and correct the degraded control room roof was of very low safety significance, and was entered into the Ginna corrective action program (AR 2003-0085, ARs Not Initiated for Control Building Problems), this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy. **(NCV 50-244/03-03-02)**.

1R11 Licensed Operator Requalification

.1 Simulator Scenario

a. Inspection Scope

The inspector observed a licensed operator training scenario conducted on January 6, 2003. The training scenario was #FRP1-05, "Pressurized Thermal Shock," and involved a sequence of events which could have led to a pressurized thermal shock condition. The inspector reviewed the critical tasks associated with the evaluation, observed the operators' performance during the exercise, and observed the post evaluation critique. The inspector also reviewed and verified compliance with Ginna procedure OTG-2.2, "Simulator Examination Instructions."

b. Findings

No findings of significance were identified.

.2 Licensed Operator Certification Program Review

a. Inspection Scope

An in-office review was conducted on selected operator licensing docket files that were identified as being overdue for renewal in the Operator Licensing Tracking System (OLTS). The inspection assessed the docket files using 10 CFR 55 Subpart F - Licenses, section 10 CFR 55.55, "Expiration," and 10 CFR 55.57, "Renewal of License."

In addition, the inspectors reviewed RG&E corrective action document AR 2002-2318, "Three SRO Licenses Inadvertently Expired."

b. Findings

Introduction. The inspectors identified two examples of a non-cited violation of technical specifications (TS) due to a common cause. A shift manager and the operations supervisor, both licensed Senior Reactor Operators (SROs), performed TS-licensed duties with expired licenses. Technical Specification Section 5.2.2.b requires two (2) SROs to be present on an operating crew and TS Section 5.2.2.e requires the operations supervisor to hold an SRO license. Preliminary apparent cause was administrative oversight.

Description. On October 10, 2002, the NRC Region I office notified RG&E that three (3) SRO licenses had expired on October 2, 2002. The next day, October 11, 2002, RG&E removed two of the individuals from their TS licensed duties; the third individual was not performing TS-licensed duties. RG&E confirmed that a timely renewal of the individual operator licenses was not made. The first individual was a shift manager. He had stood watch and performed licensed activities six times with the expired license which resulted in reducing the number of SRO licensed individuals to less than the two (2) required per operating crew. The other individual was the operations supervisor and he continued to perform TS-licensed duties from October 2, 2002, until October 11, 2002, when he was relieved of his TS-licensed duties. RG&E determined that the root cause of the SRO license expiration was failure to submit the license renewal forms within 30 days of the license expiration due to an administrative oversight.

Analysis. The finding, associated with the Mitigating System Cornerstone, was determined to be greater than minor because it resulted in individuals with expired SRO licenses fulfilling TS positions that required an SRO license. Traditional enforcement was used because failure to submit the license renewal forms affected the NRC's ability to perform its regulatory function to periodically review the medical and requalification training qualifications of licensed operators. The finding is of very low safety significance because the individuals were current with respect to requalification training and medical qualifications and, therefore, they were assumed to be capable of discharging their licensed responsibilities correctly.

Enforcement. This finding was determined to be a violation of Technical Specification sections 5.2.2.b & 5.2.2.e, which requires, in part, that two (2) SRO licensed individuals must be on the operating crew and the operating supervisor must hold an SRO license, respectively. Contrary to this requirement, from October 2, 2002 to October 11, 2002, RG&E failed to meet the operating crew staffing requirement six times (TS 5.2.2.b) and failed to meet the operations supervisor requirements (TS 5.2.2.e) due to expired SRO licenses. However, because of the very low safety significance of this violation and because RG&E has entered the issue into their corrective action program (AR 2002-2318) this violation is being treated as a non-cited violation- Severity Level IV, in

accordance with Section VI.A.1 of the NRC's Enforcement policy. **(NCV 50-244/03-03-03**)

1R12 Maintenance Effectiveness

.1 Routine

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.

- Structural Degradation of Control Building Envelope

b. Findings

No findings of significance were identified. Issues surrounding the integrity of the control room are discussed in Section 1RO5.

.2 Periodic Evaluation

a. Inspection Scope

The inspector reviewed the periodic evaluations required by 10 CFR 50.65 (a)(3) to verify adequate consideration for the balancing of reliability and unavailability was provided for structures, systems and components (SSCs) contained within the scope of the maintenance rule. The inspector reviewed the licensee's most recent periodic evaluation report, which covered the period from October 19, 2000 through April 18, 2002.

The inspector reviewed the safety significant systems that were in (a)(1) status to verify that: (1) goals and performance criteria were appropriate, (2) industry operating experience was considered, (3) corrective action plans were effective, and (4) performance was being effectively monitored. As of 03/24/03, there were six systems in (a)(1) status, out of which four were in a monitoring status (Yellow), and two were in development and implementation of corrective actions (Red). The inspector also reviewed the licensee's assessment of the balance between reliability and availability for these systems. The following systems were reviewed:

- fire protection system (System 17); fire protection barriers(FPS06)
- radiation monitoring system (System 43D); toxic gas (CBV02)
- chemical and volume control (System 07); charging, letdown, seal return, and RWST suction (CVCS07)
- primary containment (System 21); containment isolation (CVS 02)

- nuclear instrumentation (System 43C); source range channels N-31, N-32 (NIS 01, NIS 02), and intermediate range channel N-36 (NIS 04)
- primary plant control system (sub-systems SAS 01 and SAS 02)

The inspector reviewed the following (a)(2) high safety significant systems to verify that performance was acceptable:

- 125 VDC electrical system (System 64)
- instrument air system (System 11)
- main steam system (System 81)

b. Findings

No findings of significance were identified

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspectors evaluated the effectiveness of RG&E's maintenance risk assessments required by section 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 and 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:

- forced outage (FO13) risk profile for a reduction in power on March 1, 2003, to repair the "A" feedwater regulating valve;
- planned maintenance for the "B" diesel generator conducted on March 18, 2003;
- planned maintenance on the 11B/12B cross-tie breaker that was planned but not conducted on March 5, 2003. Work delayed for operational reasons, not due to risk factors;
- planned maintenance on the "B" residual heat removal (RHR) system conducted on March 26, 2002;
- March 28, 2003, surveillance testing conducted on the bus 14 and 18 undervoltage protective instrumentation.

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-routine Plant Evolutions

a. Inspection Scope

On March 1 and 2, 2003, the inspectors observed operators increase reactor power following the performance of maintenance on the "A" feedwater regulating valve. Prior to the power increase, reactor power had been reduced to less than five percent and the turbine had been disconnected from the electrical grid. During the power increase, the inspectors verified systems were restored to an operable status as required by plant Technical Specifications, trip setpoints were properly adjusted, and operators used three-way communications.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the following operability evaluations to determine if system operability is properly justified.

- AR 2003-0043, "Total RCP Seal Leakoff Flow is Greater Than 5.74 gpm." This AR documented an RG&E discovery that seal leak off flow from the reactor coolant pumps had exceeded the 5.74 gpm limit contained in procedure O-6.13, "Daily Surveillance Log." Excessive RCP seal leakage could invalidate assumptions contained in the Ginna accident analysis. The inspector reviewed an analysis that assessed the significance of the leakage, and concluded it had provided a reasonable assurance that the leakage did not invalidate assumptions contained in the Ginna accident analysis.

- AR 2003-0073, "Control Room Roof Leakage." This AR documented an NRC discovery that the control room roof was leaking. Roof leakage could indicate that the control room ventilation system may not be able to meet the design functions contained in the plant Updated Final Safety Analysis Report (UFSAR) during a design basis event. The inspector reviewed an RG&E analysis of the condition, which concluded the leakage would not invalidate the UFSAR design assumptions. The inspector reviewed the analysis, and the degraded area in the control room roof, and determined that based upon the observed condition, the analysis provided reasonable assurance that the roof leakage would not invalidate design assumptions contained in the plant UFSAR.

- AR 2003-0203, "MOV 9746 Failed to Trip on Torque Switch Resulted in Overthrust." This AR documented the overthrust of the "D" standby auxiliary feedwater pump (SAFW) discharge valve MOV-9746. The valve provides isolation such that the "D" SAFW pump can be cross-tied to feed the "A" steam generator. An analysis of the event outlined in DA-ME 2003-006 "Evaluation of MOV-9746 Overthrust" concluded that no overstress of the pressure boundary

occurred and that functionality of the valve was maintained. The inspector reviewed the analysis, and determined it provided reasonable assurance that the valve would provide the required pressure boundary and isolation functions.

- AR 2003-0534, "Charging Pump B Minimum Flow Not Met." This AR documented that the "B" Charging pump did not meet the minimum flow requirements outlined in procedure PT-31 "Charging Pump Inservice Test." An RG&E assessment of this condition determined that the pump minimum speed stops had to be adjusted to restore pump operability. The stops were subsequently adjusted, and the pump was later tested and declared operable. The inspector reviewed the corrective actions outlined in AR 2003-0534, discussed the condition with the system engineer and Inservice Test (IST) personnel, and concluded adequate corrective action was implemented.

b. Findings

No findings of significance were identified.

1R19 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 as described in the plant UFSAR.

- WO 20201236, "Perform PM on TSC UPS System"
- WO 20201443, "PM Inspection on 52/SIP1A"
- WO 20203903, "PM run of "A" Emergency Diesel Generator after maintenance on Fuel Oil and Service Water components"
- WO 20203087, "PM of "A" Feedwater Regulating Valve after positioner replacement"
- WO 20200607, "PM run of "B" Charging Pump after relief valve and plunger replacement"
- WO 20202740, "Replacement and Calibration of "B" train control room toxic gas monitor"

b. Findings

No findings of significance were identified.

1R22 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-2.2Q, "Residual Heat Removal System- Quarterly" performed on December 30, 2002.
- S-12.4, "RCS Leakage Surveillance Record Instructions" performed on December 29, 2002.
- M-38, "Equalizing Charge For Station Battery Systems 1A Battery and 1B Battery" completed on January 17, 2003.
- PT-12.7A, "A Diesel Generator Starting Air Compressor Discharge Check Valve Closure Test" performed on January 16, 2003.
- O-6.3, "Maximum Unit Power" performed on January 22, 2003
- PT-2.1Q "A Safety Injection Pump Quarterly Test "

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications

a. Inspection Scope

The following temporary modification was reviewed by the inspectors to verify the modifications were installed in conformance with the instructions contained in procedure IP-DES-3, "Temporary Modifications":

2003-0004, "RTD-1 Terminal Block Changes in Rack R1 for Failed Thot resistance Temperature Detector RETD TE-401A."

b. Findings

No findings of significance were identified.

Cornerstone : Emergency Preparedness [EP]

EP4 Emergency Action Level and Emergency Plan Changes

a. Inspection Scope

The inspector conducted an in-office review of RG&E-submitted changes for the emergency plan-related documents to determine if the changes decreased the effectiveness of the plan. A thorough review was conducted of documents related to the risk significant planning standards (RSPS), such as classifications, notifications, and protective action recommendations. A cursory review was conducted for non-RSPS documents. These changes were reviewed against 10 CFR 50.54(q) to ensure that the changes do not decrease the effectiveness of the plan, and that the changes as made continue to meet the standards of 10 CFR 50.47(b) and the requirements of Appendix E. These changes are subject to future inspections to ensure that the impact of the changes continues to meet NRC regulations. The submitted and reviewed documents (EPIPs- Emergency Plan and Implementing Procedures) are listed as attached.

b. Findings

No findings of significance were identified.

EP6 Drill Evaluation

a. Inspection Scope

On January 6, 2003, the inspector observed a licensed operator training assessment that included an emergency activation level classification. Training scenario #FRP1-05, "Pressurized Thermal Shock," was observed. The inspector verified that the appropriate emergency classification was identified, and external notifications to responsible parties were completed in a timely manner as required by the Ginna emergency response plan.

On March 4, 2003, the inspector observed portions of the annual emergency preparedness drill. The drill scenario included a fire in the "B" diesel generator, a low pressure turbine blade failure, and a loss of coolant accident in the reactor coolant system. The inspector verified that the appropriate emergency classification was identified, and external notifications to responsible parties were completed in a timely manner as required by the Ginna emergency response plan.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification

a. Inspection Scope

The inspector reviewed the accuracy of the reported Performance Indicator (PI) data for unplanned scrams per 7,000 critical hours, scrams with loss of normal heat removal, and unplanned power changes per 7,000 critical hours for calendar year 2002. To verify the accuracy of the PI data reported during that period, the inspector reviewed Monthly Operating Reports, NRC inspection reports, and Licensee Event Reports issued during calender year 2002. To verify the basis in reporting for each data element, the inspector reviewed the PI definitions and guidance contained in NEI 99-02, “Regulatory Assessment Indicator Guideline,” Rev 1.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems

.1 Cross Reference to PI&R Findings Documented Elsewhere

Section 1R05 describes an instance where RG&E personnel did not identify and correct ongoing water leakage through the control room roof. The leakage has been occurring on an intermittent basis since 2000. This finding is an example of a cross-cutting issue in the PI&R area.

.2 Service Water System Leaks

a. Inspection Scope

The inspector reviewed Action Reports (AR)s 2002-0037, 2158, 2306, and 2569 to ensure that the corrective actions for the associated plant issues were appropriate. These issues were selected for follow-up review due to their potential safety significance. The ARs addressed various leaks in the service water system, some in carbon steel threaded piping and some in copper tubing. The inspector discussed the leaks with cognizant station personnel, and conducted in-plant inspections of the current condition of system piping. The inspector reviewed the ARs to ensure that the issues were properly identified in a timely manner, the evaluations and dispositions of the issues were appropriate, extent of condition was addressed, the issues were appropriately prioritized, causes were identified, and corrective actions were identified and planned or completed. The ARs were evaluated against the requirements of RG&E procedure IP-CAP-1, "Abnormal Condition Tracking Initiation or Notification (Action) Report."

During review of the above ARs, the inspector noted that one of the issues associated with the carbon steel threaded piping at the component cooling water heat exchangers was not effectively resolved in June 2002 such that leakage was identified again in October 2002. In June the valve where the threaded connection was leaking was replaced, but the carbon steel piping threaded section was not. The piping threads were cleaned and it was determined that pipe replacement was not necessary at that time. However, in October, leakage was identified at the same threaded connection. The identified leakage was caused by corrosion of the carbon steel, possibly aggravated slightly by mild galvanic action and stress associated with previous valve replacement activities. Corrective action this time included replacement of the valve and the threaded piping section. Additionally, all other carbon steel threaded connections at the two component cooling water heat exchangers were inspected for degradation.

During review of the ARs associated with the copper tubing leaks, the inspector observed that the leaks were minor pinhole-type leaks and were caused by flow accelerated erosion-corrosion. Corrective actions included replacing the leaking sections of tubing. The long term corrective actions associated with the copper tubing leaks are addressed in the Service Water System Reliability Optimization Program, which is an active program intended to assure that the probability of tubing failures, that could cause an outage, are minimized through preventive maintenance.

b. Findings

The inspector found that the corrective actions associated with the reviewed ARs were appropriate and acceptable upon completion. Cause evaluations, engineering evaluations and operability determinations were thorough. No operability concerns were identified.

4OA5 Other Activities

a. Inspection Scope

The inspectors reviewed Licensee Event Report (LER) 2002-002, “Small Breach in Ventilation System Results in Potentially Not Being Able to Mitigate the Consequences of an Accident,” issued on December 20, 2002, to determine if there was adequate guidance to implement the compensatory actions outlined in the LER.

b. Findings

Introduction. The inspectors identified that RG&E did not provide control room operators with guidance regarding when they should use the Self Contained Breathing Apparatus (SCBA) located in the control room. Chapter 6.4.2.2.2 of the Ginna UFSAR and LER 2002-002 indicate operators would use the SCBA if toxic gas or airborne particulate activity was detected in the control room.

Description. LER 2002-002, which assessed the significance of an RG&E-identified tear in a control room ventilation system duct, stated that in the event toxic fumes entered

the control room, there were Self Contained Breathing Apparatus (SCBA)s available for use by the operators. SCBA use was also recognized in Chapter 6.4.2.2.2 of the Ginna UFSAR which indicated SCBAs were available for operators to use in the event airborne activity was detected in the control room. Despite the references to the SCBA gear in LER 2002-002 and UFSAR, the inspector determined there were no plant procedures that described when the SCBA equipment should be used.

Some control room operators interviewed indicated that they would evacuate the control room if toxic fumes entered the area and proceed to the remote shutdown stations, instead of using SCBA equipment and remaining in the control room. The inspector determined this response would be inconsistent with the information that was outlined in LER 2002-002, and the UFSAR.

Analysis. This finding, associated with the Mitigating Systems Cornerstone, was considered greater than minor, since absent procedural guidance, it was not evident operators would use the SCBAs as RG&E intended. As a result, a minor event such as a toxic gas release may become a more significant safety concern. In phase one of the reactor safety SDP, the finding screened to Green since a release of toxic gas did not occur, and operators could shut down the plant at remote operating stations if they had to leave the control room. Further, although there were no procedures governing when the SCBA equipment should be used, there were SCBAs in the control room and operators were familiar with their use. **(FIN 50-244/03-03-04)**

Enforcement. No violation of NRC requirements occurred.

4OA6 Meetings, Including Exit

a. Exit Meeting Summary

On April 3, 2003, the inspectors presented their overall findings to members of RG&E management led by Mr. Mecredy. RG&E management acknowledged the findings presented. No proprietary information was identified.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

RG&E personnel

P. Bamford	Operations Manager
M. Flaherty	Nuclear Safety & Licensing Manager
R. Forgensi	Operational Review
J. Hotchkiss	Mechanical Maintenance Manager
G. Joss	ISI/IST Coordinator
M. Lilley	Quality Assurance Manager
R. Marchionda	Nuclear Assessment Department Manager
R. Ploof	Scheduling Manager
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	Balance of Plant Systems Engineering Manager
J. Widay	VP, Plant Manager

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

50-244/2003-03-01	NCV	Failure to Maintain Fire Protection Procedures Accurate (Section 1R04)
50-244/2003-03-02	NCV	Failure to Identify and Correct Control Room Roof Leakage (Section 1R05)
50-244/2003-03-03	NCV	Failure to Ensure Licensed Operator Certifications Have Been Renewed (Section 1R11)
50-244/2003-03-04	FIN	Failure to provide adequate guidance on using Self Contained breathing apparatus (40A5).

Discussed

50-244/2002-002	LER	Tear In the Control Room Ventilation Ductwork

LIST OF DOCUMENTS REVIEWED

Section 1R05: Fire Protection

Action Reports

AR 2003-0073, “Control Room Roof Leakage.”

Procedures

FRP-17.0, "Battery Room A"
FRP-18.0, "Battery Room B"
FRP-12.0, "Intermediate Building Main Steam Header Floor"

Documents

Fire Hazards Analysis Sections 7.2, 7.4, and 7.5

Section 1R11: Licensed Operator Requalification

Action Reports

AR 2002-2318, “Three SRO Licenses Inadvertently Expired”

Procedures

OTG-2.2, “Similator Examination Instructions”

Section 1R12: Maintenance Effectiveness

Action Reports

System 17, 21 ARs - from 01/01/2002 through 03/21/2002;
System 07, 6 ARs - from 01/02/2002 through 01/06/2002
System 43D, 63 ARs - from 01/17/2002 through 02/07/2003
System 43C, 4 ARs - from 06/24/2002 through 01/29/2003
System 21, 11 ARs - from 03/13/2002 through 01/24/2003
Aux Bldg., 9 ARs - From07/10/2001 through 02/21/2003 (especially. AR 2002-2204, Aux Bldg roof leak in the northeast corner, and 2002-2456, RHR Pit leakage)
Control Building, 7 ARs - from 05/13/2002 through 01/28/2003

Documents

Periodic Assessment of the R. E. Ginna Maintenance Rule Program for the period October 19, 2000 through April 18, 2002.
R. E. Ginna System Status Report - 4th Quarter 2002.
System Engineering Note Book Report identifying MR trends from January 1, 2002 to January 31, 2003 (Electronic Version).
System Unavailability Hours and Functional Failure Report for 03/01/2000 - 02/28/2003 Electronic and hard copies).
Monitoring Challenge Index for selected systems.
Safety Evaluation, Spent Fuel Pool Leakage Release Path Assessment, SEV-1123, Revision 00, Structural Evaluation Relative to Spent Fuel Pit Leakage, TSR 99-015
Auxiliary Operator Rounds and Log Sheets, Revs 15 and 19.

Section 1R13: Maintenance Risk Assessments and Emergent Work Evaluation

Procedures

IP-PSH-2, "Integrated Work Schedule Risk Management"

Section 1R15: Operability Evaluations

Action Reports

AR 2003-0043, "Total RCP Seal Leakoff Flow is Greater Than 5.74 gpm."
AR 2003-0073, "Control Room Roof Leakage."
AR 2003-0203, "MOV 9746 Failed to Trip on Torque Switch Resulted in Overthrust."
AR 2003-0534, "Charging Pump B Minimum Flow Not Met."

Section 1R19: Post Maintenance Testing

Work Orders

WO 20201236, "Perform PM on TSC UPS System"
WO 20201443, "PM Inspection on 52/SIP1A"
WO 20203903, "PM run of "A" Emergency Diesel Generator after maintenance on Fuel Oil and Service Water components"
WO 20203087, "PM of "A" Feedwater Regulating Valve after positioner replacement"
WO 20200607, "PM run of "B" Charging Pump after relief valve and plunger replacement"
WO 20202740, "Replacement and Calibration of "B" train control room toxic gas monitor"

Section 1R22: Surveillance Testing

Procedures

PT-2.2Q,"Residual Heat Removal System- Quarterly"
S-12.4, "RCS Leakage Surveillance Record Instructions"
M-38, "Equalizing Charge For Station Battery Systems 1A Battery and 1B Battery"
PT-12.7A, "A Diesel Generator Starting Air Compressor Discharge Check Valve Closure Test"
O-6.3, "Maximum Unit Power"
PT-2.1Q "A Safety Injection Pump Quarterly Test"

Section 1R23: Temporary Plant Modifications

Procedures

IP-DES-3, "Temporary Modifications"

Documents

TM 2003-0004, "RTD-1 Terminal Block Changes in Rack R1 for Failed Thot resistance Temperature Detector RETD TE-401A"

Section EP4: Emergency Action Level and Emergency Plan Changes

Procedures

EPIP 1-0, Ginna Station Event Evaluation and Classification, Rev 29
EPIP 1-5, Notifications, Rev 51, 52
EPIP 1-6, Site Evacuation, Rev 15
EPIP 1-9, Technical Support Center Action, Rev 22
EPIP 1-11, Survey Center Activation, Rev 28
EPIP 2-2, Obtaining Meteorological Data and Forecast and Their Use in Emergency Dose Assessment, Rev 13
EPIP 2-16, Core Damage Estimation, Rev 13
EPIP 3-1, Emergency Operations Facility (EOF) Activation and Operations, Rev 19
EPIP 3-3, Immediate Entry, Rev 9
EPIP 4-7, Public Information Organization Staffing, Rev 21
EPIP 5-10, Emergency Response Data System, Rev 7

Documents:

Nuclear Emergency Response Plan, Rev 21

Section 40A2: Identification and Resolution of Problems

Procedures

IP-CAP-1, “Abnormal Condition Tracking Initiation or Notification (Action) Report”

Section 4OA5: Other Activities

Documents

LER 2002-002, “Small Breach in Ventilation System Results in Potentially Not Being Able to Mitigate the Consequences of an Accident”