U.S. NUCLEAR REGULATORY COMMISSION
REGION I

License No.	DPR-18
Report No.	50-244/99-04
Docket No.	50-244
Licensee:	Rochester Gas and Electric Corporation (RG&E)
Facility Name:	R. E. Ginna Nuclear Power Plant
Location:	1503 Lake Road Ontario, New York 14519
Inspection Period:	May 17, 1999 through June 27, 1999
Inspectors:	P. D. Drysdale, Senior Resident Inspector C. C. Osterholtz, Resident Inspector T. A. Moslak, Radiation Specialist
Approved by:	M. G. Evans, Chief Projects Branch 1 Division of Reactor Projects

EXECUTIVE SUMMARY

R. E. Ginna Nuclear Power Plant
NRC Inspection Report 50-244/99-04

This integrated inspection included aspects of licensee operations, engineering, maintenance, and plant support. The report covers a 6-week period of resident inspection, and it includes the results of an announced in-office inspection by a regional specialist in radiation protection requirements.

Operations

Operations personnel responded well to an unanticipated automatic withdrawal of control rods during maintenance on the nuclear instrument current comparator drawer N-38. Work package preparation and review for this work activity was poor, as it did not anticipate the need for control rods to be placed in manual. Additionally, Instrumentation and Control technicians exhibited a knowledge weakness by indicating that the comparator drawer work would not impact control rod motion. (O4.1)

Maintenance

Observed maintenance activities were accomplished in accordance with procedural requirements. The licensee's post maintenance testing was adequate to demonstrate the operability of equipment prior to it's return to service. Test procedures contained adequate details for accomplishing test requirements. Testing was performed by knowledgeable personnel, and test instrumentation was properly calibrated. (M1.1)

Offsite power circuit 767 cable replacement was successfully performed in a timely manner. However, the licensee demonstrated poor work coordination when activities outside the protected area, which could adversely impact the availability of the in-service offsite power circuit, were not suspended until after work on circuit 767 was commenced and after being brought to the licensee's attention by the inspectors. (M2.1)

The licensee took proper actions following discovery of the failed A-emergency diesel generator output breaker to troubleshoot, identify, and correct the breaker failure mechanism. The licensee's broader corrective actions to review all breaker maintenance procedures for adequacy with the vendor was considered a good initiative. (M2.2)

Engineering

The licensee has made progress to address program weaknesses for total instrument uncertainty calculations on Improved Technical Specification related instruments. (E8.1)

Plant Support

Licensee management identified, after the fact, a series of unplanned exposure events that were the result of deficiencies in the implementation of radiological controls, contrary to Improved

Executive Summary (cont'd)

Technical Specification 5.7. In accordance with the established corrective action process, the licensee conducted a root cause assessment and completed (or planned) appropriate corrective actions to prevent a recurrence. However, the corrective actions following the individual events were not effective, in that they did not prevent recurrence of the subsequent unplanned exposure events. In addition, the overall series of events represented an indifference to proper radiological controls and precautions on the part of the individual radiation workers, radiation protection technicians, and direct supervision involved in the events. The violation of Improved Technical Specifications was non-cited. (R8.1)

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ATTACHMENTS

Report Details

I. Operations

O1 Conduct of Operations[1]

O1.1 General Comments (Inspection Procedure (IP) 71707)

The inspectors observed plant operations to verify that the facility was operated safely and in accordance with licensee procedures and regulatory requirements. This review included tours of the accessible areas of the facility. The inspectors conducted ongoing verifications of engineered safeguard feature (ESF) system operability, verifications of proper control room and shift staffing, verification that the plant was operated in conformance with the Improved Technical Specifications (ITS) and appropriate action statements were implemented for out-of-service equipment, and verification that logs and records accurately identified equipment status or deficiencies.

O1.2 Summary of Plant Status

The plant was at approximately 98.5 percent (%) reactor power at the beginning of the inspection period, with a 1.5% margin from full power being maintained while overpower and overtemperature delta temperature evaluations were being completed. On May 17, 1999, the licensee placed offsite power in a 100/0 lineup on circuit 751, while circuit 767 was taken out-of-service for replacement of its underground cable (see section M2.1). Offsite power was returned to a 50/50 line-up on May 21, 1999.

On May 22, 1999, power was reduced to approximately 58% to repair switchyard isolation switch 90813 that had been operating at an elevated temperature. The isolation switch was repaired and the plant returned to 98.5% power the same day. On May 26, 1999, the plant returned to approximately 100% power following sub-component replacement and re-calibration of overpower and overtemperature delta temperature modules. On May 27, 1999, an inadvertent automatic outward rod motion of four steps occurred during instrumentation and controls (I&C) staff maintenance on nuclear instrument current comparator drawer N-38 (see section O4.1).

On May 29, 1999, power was reduced to approximately 46% to repair switchyard isolation switch 90811 (which was operating at an elevated temperature) and a leaking 5B feedwater heater drain valve, and to perform main turbine stop valve testing. These work activities were successfully completed and the plant returned to 100% power on May, 30, 1999. The plant remained at full power through the end of the inspection period.

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1 Topical headings such as O1, M8, etc., are used in accordance with the NRC standardized reactor inspection report outline. Individual reports are not expected to address all outline topics.

O4 Operator Knowledge and Performance

O4.1 Inadvertent Rod Motion During I&C Maintenance

a. Inspection Scope (71707)

The inspectors reviewed operations response to an inadvertent automatic withdrawal of control rods.

b. Observations and Findings

On May 27, 1999, an inadvertent automatic control rod withdrawal occurred during maintenance on the nuclear instrument (NI) rate comparator drawer N-38. I&C technicians removed a cable from the N-38 drawer to replace some light bulbs, and the rod control system sensed a change in power and generated a rods out demand signal. Control rods stepped out four steps, at which time control room operators properly placed rods in manual and entered abnormal procedure AP-RCC.1, "Continuous Control Rod Withdrawal/Insertion," and restored normal rod position.

The licensee subsequently discovered that the procedure used for the maintenance activity had not indicated that manual rod control was necessary. The licensee determined that the maintenance procedure used on May 27 was last used while the reactor was shut down and the N-38 drawer was de-energized. The inspector learned that a pre-job brief was conducted between the operators and I&C technicians, where operators specifically asked the technicians if the planned work would affect control rod motion. The technicians indicated it would not, since no such restriction was identified in the approved maintenance procedure. The licensee initiated an ACTION report (99-0957) to further review the issues related to the planning and review of the subject work package and the adequacy of the I&C technicians' knowledge of nuclear instrumentation operation.

c. Conclusions

Operations personnel responded well to a May 27, 1999, unanticipated automatic withdrawal of control rods during maintenance on the nuclear instrument current comparator drawer N-38. Work package preparation and review for this work activity was poor, as it did not anticipate the need for control rods to be placed in manual. Additionally, I&C technicians exhibited a knowledge weakness by indicating that the NI work would not impact control rod motion.

II. Maintenance

M1 Conduct of Maintenance

M1.1 Maintenance and Surveillance Testing Activities

a. Inspection Scope and Findings (62707 and 61726)

The inspectors observed portions of plant maintenance activities to verify: the correct parts and tools were used; applicable industry Codes and ITS requirements were satisfied; and that equipment operability was appropriately demonstrated upon completion of the maintenance. Selected surveillance tests were observed to verify: approved test procedures were in use; procedure details were adequate; test instrumentation was properly calibrated; and test results satisfied acceptance criteria or were properly dispositioned.

The following maintenance and surveillance activities were observed:

- Circuit 767 Cable Replacement
- Reactor Protection System Channel 3 Overpower Delta Temperature Math Module Calibration
- Inspection of the A-Containment Spray pump DB-50 circuit breaker
- Reactor Protection System Channel 3 Overpower Delta Temperature Bistable Reconfiguration and Testing
- Troubleshooting A-Emergency Diesel Generator DB-75 Supply Breaker to Bus 14 Following Test Failure (see section M2.2)
- Periodic Test (PT)-16Q-B, "B-Motor Drive Auxiliary Feedwater Pump"
- PT-2.1Q, "Safety Injection System Quarterly Test"
- PT-12.1, "Emergency Diesel Generator A"

b. Conclusions

Observed maintenance activities were accomplished in accordance with procedural requirements. The licensee's post-maintenance testing was adequate to demonstrate the operability of equipment prior to it's return to service. Test procedures contained adequate details for accomplishing test requirements. Testing was performed by knowledgeable personnel, and test instrumentation was properly calibrated.

M2 Maintenance and Material Condition of Facilities and Equipment

M2.1 Replacement of Offsite Power Circuit 767 Cables

a. Inspection Scope (62707)

The inspectors reviewed the licensee's activities to replace underground cabling for offsite power circuit 767.

b. Observations and Findings

The licensee decided to replace the underground cabling for both offsite power circuits 767 and 751 after an age related splice failure occurred in circuit 751 on November 20, 1998 (see IR 50-244/98-12). The cable replacement for circuit 751 was successfully completed February 11, 1999 (see IR 50-244/99-01). During this inspection period, the licensee maintained an offsite power lineup in a 100%/0% configuration on offsite circuit 751 from May 17, 1999 to May 21, 1999 during the 767 cable replacement. The offsite power lineup was returned to a 50%/50% lineup on both offsite circuits following completion of the 767 cable replacement on May 21, 1999.

On May 17, 1999, the inspectors noted that several activities were ongoing outside the protected area that could have adversely impacted circuit 751. Specifically, a backhoe was excavating along Slocum Road, near the power poles carrying the transmission lines of circuit 751, and optical cable was being hung on the same power poles that carry circuit 751. Upon being made aware of these activities, the licensee suspended that work until the circuit 767 cable replacement was completed and the plant was restored to the normal 50%/50% offsite power configuration.

c. Conclusions

Offsite power circuit 767 cable replacement was successfully performed in a timely manner. However, the licensee demonstrated poor work coordination when activities outside the protected area, which could adversely impact the availability of the in-service offsite power circuit, were not suspended until after work on circuit 767 was commenced and after being brought to the licensee's attention by the inspectors.

M2.2 Failure of Emergency Diesel Generator Output Breaker to Safeguards Bus 14

a. Inspection Scope (62707)

The inspectors reviewed the licensee's response to a failure of the A-emergency diesel generator (A-EDG) supply breaker to safeguards Bus 14.

b. Observations and Findings

On June 8, 1999, the A-EDG supply breaker to Bus 14 did not close on demand from the control room while running the periodic test (monthly). The test was aborted and the licensee commenced troubleshooting activities. The breaker was attached to monitoring equipment while still racked-in to the switchgear cubicle and in the test position. The breaker was successfully cycled twenty consecutive times. However, the licensee noted some sluggishness when resetting the tripper bar following breaker closure. On June 9, the breaker was removed from the cubicle and inspected on the bench in the electric shop. The licensee observed that gaps on end supports for the tripper bar were not uniform, hindering free movement of the tripper bar. The end supports were realigned and the tripper bar was observed to move freely. The breaker was re-installed and successfully tested on June 9, 1999.

Initial licensee belief that the A-EDG may have been inoperable since the last successful performance of the PT (approximately one month earlier) could not be validated. This was based upon the as-found condition of the breaker tripper bar and the inability to repeat the on-demand breaker closure failure. Consequently, the licensee concluded that the A-EDG was operable until June 8, 1999 (time of discovery) when the output breaker failed on-demand. Further, this A-EDG failure was not reportable per 10 CFR 50.72 and 50.73 and the June 10, 1999 notification (Event No. 35811) was retracted on June 30, 1999.

The inspector determined that the B-EDG supply breaker was inspected and the tripper bar was observed to be in the fully reset position. Therefore, the licensee determined that no common mode failure existed.

The licensee's corrective actions to prevent recurrence included system operating procedure and maintenance procedure changes to visually verify proper tripper bar alignment and to verify that the tripper bar freely resets following an opening (trip) of the breaker. In addition, a note will be added to the PT to have the system engineering staff and/or electricians locally observe breaker performance, when practicable, to monitor for any anomalies. The licensee has also contracted Westinghouse to review breaker maintenance procedures to verify that proper tests and inspections are performed.

c. Conclusions

The licensee took proper actions following discovery of the failed A-emergency diesel generator output breaker to troubleshoot, identify, and correct the breaker failure mechanism. The licensee's broader corrective actions to review all breaker maintenance procedures for adequacy with the vendor was considered a good initiative.

M8 Miscellaneous Maintenance Issues

M8.1 (Closed) Violation 50-244/97-12-01: Failure to Follow Administrative Procedure Requirements

During the 1996 and 1997 refueling outages, mechanical maintenance personnel improperly entered out-of-specification test data into a preventive maintenance procedure (M-15.1M) for the delta peak firing pressure on the B-emergency diesel generator (B-EDG), and certified the data as satisfactory. The licensee subsequently returned the B-EDG to service without consulting with maintenance management on the out-of-specification data, and also without initiating an ACTION Report to enter the degraded condition into the corrective action program. This represented a failure to comply with the licensee's administrative requirements contained in nuclear directive ND-MAI, "Maintenance," administrative procedure A-1603.5, "Work Order Execution," and maintenance procedure M-15.1M, "A or B Diesel Generator Mechanical Inspection and Maintenance." It was also a violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." Although site engineering had consulted with the equipment manufacturer (ALCO) and with an engine performance analyst before concluding that the B-EDG was operable, no formal action was taken to document the

extent of the degraded condition or to develop a plan to restore the engine to within the manufacturer's delta peak pressure specifications.

In December 1997, the licensee initiated ACTION Report 97-2095 to address improper documentation of test data in the maintenance work package. The ACTION Report's resolution included a revision to procedure M-15.1M to remove the instructions and data sheets for the peak firing pressures and temperatures, and delta peak pressure. The data sheets for these parameters were moved to the periodic surveillance tests for the EDGs and were to be used during engine diagnostic tests. The licensee also wrote a training work request and developed specific training for shop personnel on how to assure that out-of-specification data is properly addressed and evaluated. The resolution of ACTION Report 97-2095 documented the licensee's plan for further technical review and analysis of the out-of-spec data with the ALCO owners group and the EDG diagnostics consultant to RG&E. These actions were completed by March 1, 1998.

The licensee formally responded to the violation on March 13, 1998, and indicated that maintenance personnel inappropriately accepted the test data based upon the apparent acceptability of the data by the engineering staff. The licensee also reviewed the applicable nuclear directives and administrative procedures with all maintenance personnel, especially the requirements in procedure A-1603.5 for contacting maintenance supervision when unexpected or out-of-specification conditions were encountered during maintenance. This training was completed on October 1, 1998.

The inspectors concluded that the licensee's actions to address this violation were adequate. The inspectors have not identified any other instances where the licensee certified out-of-specification data as acceptable without a formal evaluation. This violation is closed.

III. Engineering

E8 Miscellaneous Engineering Issues

E8.1 (Updated) Inspector Follow-Up Item 50-244/98-13-01: Total Instrument Uncertainty Calculations Needed for Improved Technical Specification (ITS) Compliance

In December 1998, the inspectors identified that as-found out-of-specification conditions in some ITS-related plant instruments may not have been evaluated for operability in a timely manner. Plant instruments listed in the ITS had total instrument [loop] uncertainty (TIU) calculations available to support operability evaluations. However, other instruments needed to perform ITS surveillance tests, but not specifically listed in ITS, did not always have supporting TIU calculations. For example, the containment spray system sodium hydroxide (NaOH) tank level instrument and the containment hydrogen recombiner pressure instruments did not have TIU calculations available to evaluate operability when these instruments were found out of their specified tolerance range during recent calibrations. The inspectors initiated this follow-up item to review the

licensee's actions to investigate past instances of this problem and to review the licensee's assessment of their program for TIU calculations.

Inspector review determined that the licensee initiated Technical Staff Request (TSR) 99-001 to develop uncertainty calculations for those instruments that are relied upon to verify ITS limits, but that were not listed in the ITS. Additional licensee actions included: 1) requiring all ITS-related instruments found out-of-specification have an ACTION Report generated and an operability evaluation performed, whether or not the instrument already had a TIU calculation; 2) holding strategy meetings to develop a comprehensive plan to determine which ITS-related instruments need a TIU calculation; 3) hiring a technical consultant to review the existing TIU calculations, and to provide a cross reference to all ITS surveillances (including specific instruments used); 4) developing software to trend as-found out-of-specification data for ITS-related instruments over the past ten years; and, 5) obtaining a formal independent assessment from the consultant on the TIU program.

Overall, the licensee has made progress to address program weaknesses for TIU calculations on ITS-related instruments. This Inspector Follow-up Item remains open.

IV. Plant Support

R8 Miscellaneous Radiological Protection & Chemistry Issues

R8.1 Unplanned Exposure Incidents

a. Inspection Scope (83750)

An in-office review was completed of ACTION Report No. 99-0664 and subsequent telephone calls were made with the licensee to discuss associated issues. ACTION Report 99-0664 documented a series of incidents, occurring on April 6 and 7, 1999, in which workers wearing electronic dosimeters (ED) received unplanned exposures as a result of not hearing or seeing ED alarms when working in the reactor cavity, a High Radiation Area (HRA). The adequacy of the cause analysis and corrective actions that resulted from these incidents were evaluated.

b. Observations and Findings

During the period from 4:30 p.m. on April 6, 1999, to 6:00 a.m. on April 7, 1999, three incidents occurred in which workers received unplanned exposures while performing activities in the reactor cavity. These unplanned exposures were the result of the workers not being able to see or hear their ED alarming when the integrated dose setpoint was exceeded and poor Radiation Protection staff oversight of radiological work activities.

The first incident occurred on the afternoon of April 6, 1999. A crew of three individuals entered the reactor cavity to verify that the reactor head was correctly aligned and to perform radiation surveys following the setting of the reactor head on the vessel and

cavity draindown. While performing these tasks, two individuals were unable to hear their EDs alarming due to the high noise level in the area. In addition, they were unable to see the alarm because the ED was taped on the knee in such a way that the ED could not be read. The Radiation Protection Technician (RPT) accompanying the workers observed shortly after entering the cavity that the area dose rates were higher than expected, but did not take any remedial actions. Upon completing the tasks and exiting the cavity, the RPT observed the workers' EDs were alarming and directed the individuals to exit containment. The alarming EDs were found to have exceeded the integrated dose setpoint of 200 mrem (276mrem and 438 mrem).

The second incident occurred at about 2:00 a.m. on April 7, 1999. Following completion of a radiological survey of the cavity, the As Low As Reasonably Achievable (ALARA) group established a new ED integrated dose setpoint of 400 mrem and a maximum cavity stay time of 1.5 hours. The Radiation Work Permit (RWP) was modified accordingly. A crew entered the cavity to decontaminate the area and worked for over two (2) hours, because the stay time was not monitored by the RPT. Upon leaving the area, two workers' EDs were identified to be alarming with indicated doses of 415 mrem and 459 mrem.

The third incident occurred at about 6:00 a.m. on April 7, 1999. A crew entered the cavity to continue cleaning and removing equipment. A stay time of 1.5 hours was again established for the crew. As a result of the RPT providing ineffective timekeeping, the crew worked in the cavity for about two (2) hours. When the RPT entered the cavity to check personnel doses, four individuals' EDs were alarming with indicated doses of 400 mrem, 420 mrem, 437 mrem, and 506 mrem.

When day-shift (relief) management was informed of these three incidents, immediate actions were taken to prevent further occurrences and to evaluate the causes of the incidents. All cavity work was stopped, interviews were held with the cognizant individuals, and an ACTION Report was generated to initiate management actions to further evaluate this series of events. Details of the individual events, with immediate corrective measures and lessons learned, were promptly communicated to the work force through department stand-down meetings, shift turnover briefings, and daily management meetings. The radiation protection staff was counseled on management expectations regarding the proper use of EDs, monitoring of stay time, technician response to unexpected radiological conditions, and providing instructions to workers.

To address the known human performance deficiencies, broad-based and long-term corrective actions were being developed including: procedural changes mandating when RPTs must monitor stay times to ensure dose limits are not exceeded; increasing the number of RPTs trained in using the remote dosimetry monitoring system; and, revising ALARA packages to better define RPT responsibilities and communications with the ALARA group.

The ACTION Report No. 99-0664 and the associated corrective actions were discussed with the Manager, Radiation Protection and Chemistry and various staff members. Based upon information provided from these discussions and supporting records, the

inspector concluded that these events were in violation of Improved Technical Specification (ITS) 5.7, "High Radiation Area," which states, in part, "Any individual or group of individuals permitted to enter such areas shall be provided with...a radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received." Implicit in ITS 5.7 is that the use of such a device is sufficient to inform the worker that the established dose limit was exceeded. Contrary to this requirement, workers could not see or hear the electronic dosimeter alarms informing them that the integrated dose setpoint had been exceeded. ITS 5.7 also states, in part, "An individual qualified in radiation protection procedures... is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified... in the RWP." Contrary to this requirement, positive control was not provided by the RPTs, in that, the workers' stay time, as specified on the radiation work permit and associated records, was not monitored.

The root cause analysis for these events was appropriately conducted and identified various program controls that were ineffective. The immediate and long-term corrective actions were determined to be comprehensive and appropriate to prevent a recurrence. A human performance assessment was ongoing at the close of the inspection. Additionally, at the request of the inspector, the licensee re-evaluated the incident to determine whether the affected workers could have potentially received an exposure in excess of 10 CFR Part 20 limits. Based upon review of the licensee's subsequent evaluation, no substantial potential existed for a worker to receive a dose in excess of the regulatory limits.

This licensee identified and corrected Severity Level IV violation is being treated as a Non-Cited Violation **(NCV 50-244/99-04-01)**, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as ACTION Report No. 99-0664.

c. Conclusions

Licensee management identified, after the fact, a series of unplanned exposure events that were the result of deficiencies in the implementation of radiological controls, contrary to Improved Technical Specification 5.7. In accordance with the established corrective action process, the licensee conducted a root cause assessment and completed (or planned) appropriate corrective actions to prevent a recurrence. However, the corrective actions following the individual events were not effective, in that they did not prevent recurrence of the subsequent unplanned exposure events. In addition, the overall series of events represented an indifference to proper radiological controls and precautions on the part of the individual radiation workers, radiation protection technicians, and direct supervision involved in the events. The violation of Improved Technical Specifications was non-cited.

V. Management Meetings

X1 Exit Meeting Summary

After the inspection was concluded, the inspectors presented the results to members of licensee management on July 6, 1999. The licensee acknowledged the findings presented. The licensee indicated that no materials examined during the inspection were considered proprietary.

ATTACHMENT I

PARTIAL LIST OF PERSONS CONTACTED

Licensee

T. Alexander	Operational Review Manager
P. Bamford	Reactor Engineering Manager
G. Graus	I&C/Electrical Maintenance Manager
G. Hermes	Acting Primary Systems Engineering Manager
J. Hotchkiss	Mechanical Maintenance Manager
G. Joss	Results and Test Supervisor
M. Lilley	Quality Assurance Manager
R. Marchianda	Nuclear Assessment Manager
T. Marlow	Nuclear Engineering Services Manager
J. Pascher	Electrical Systems Engineering Manager
T. Plantz	Maintenance Systems Manager
R. Ploof	Secondary Systems Engineering Manager
P. Polfleit	Emergency Preparedness Manager
R. Popp	Production Superintendent
J. Smith	Maintenance Superintendent
W. Thomson	Radiological Protection & Chemistry Manager
J. Wayland	Scheduling Manager
T. White	Operations Manager
J. Widay	Plant Manager
G. Wrobel	Nuclear Safety & Licensing Manager

INSPECTION PROCEDURES USED

IP 37551:	Onsite Engineering
IP 40500:	Effectiveness of Licensee Controls in Identifying, Resolving, and Preventing Problems
IP 61726:	Surveillance Observation
IP 62707:	Maintenance Observation
IP 71707:	Plant Operations
IP 71750:	Plant Support
IP 92901:	Follow-up - Operations
IP 92902:	Follow-up - Maintenance
IP 92903:	Follow-up - Engineering

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

NCV	50-244/99-04-01	Unplanned Radiological Exposures

Closed

VIO	50-244/97-12-01	Failure to Follow Administrative Procedure Requirements
NCV	50-244/99-04-01	Unplanned Radiological Exposures

Discussed

IFI	50-244/98-13-01	TIU Calculations Needed for ITS Compliance

LIST OF ACRONYMS USED

ALARA	As Low As Reasonably Achievable
ED	Electronic Dosimeter
EDG	Emergency Diesel Generator
ESF	Engineered Safety Feature
HRA	High Radiation Area
IFI	Inspector Follow-up Item
IR	Inspection Report
I&C	Instrumentation and Control
ITS	Improved Technical Specification
LCO	Limiting Condition for Operation
NCV	Non-cited Violation
NRC	Nuclear Regulatory Commission
NRR	Nuclear Reactor Regulation
PDR	Pubic Document Room
PT	Periodic Test
RCA	Radiologically Controlled Area
RG&E	Rochester Gas and Electric Corporation
RP	Radiation Protection
RPT	Radiation Protection Technician
RP&C	Radiological Protection and Chemistry
RWP	Radiation Work Permit
TIU	Total Instrument Uncertainty
TSR	Technical Staff Request