U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Inspection Report 50-244/94-22 License: DPR-18

Facility: R. E. Ginna Nuclear Power Plant
Rochester Gas and Electric Corporation (RG&E)

Inspection: September 1, 1994 through October 3, 1994

Inspectors: T. A. Moslak, Senior Resident Inspector, Ginna
E. C. Knutson, Resident Inspector, Ginna

Approved by: Acting for 10/17/94
W. J. Lazarus, Chief, Reactor Projects Section 3B Date

INSPECTION SCOPE

Plant operations, maintenance, engineering, plant support, and safety assessment/quality verification.

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INSPECTION EXECUTIVE SUMMARY

Operations

At the beginning of the inspection period, the plant was operating at full power (approximately 98 percent). On September 10, 1994, power was reduced to just below 50 percent for balance-of-plant maintenance. The plant was returned to full power operation on September 11, 1994. On September 16, 1994, an error in a post-maintenance test procedure resulted in loss of offsite power to two of the four class 1E 480-volt buses. The associated emergency diesel generator (EDG) automatically started as required and power generation was not affected. On September 21, 1994, one of the two offsite electrical power supplies was interrupted due to an offsite disturbance. This resulted in a temporary loss of two class 1E 480-volt buses until the associated EDG automatically started and assumed loads. As before, power generation was not affected, and operators promptly stabilized plant conditions.

Maintenance

During the previous inspection period, the A-service water (SW) pump was replaced due to low differential pressure. Following post-installation testing and evaluation, the A-SW pump was declared operable on September 8, 1994.

On September 20, 1994, the C-SW pump was declared inoperable due to excessive noise and vibration. Upon removal, the pump was found to have undergone major mechanical failure. The suspected cause of failure was that the pump had rotated backwards while idle, which, due to the pump design, caused the rotating assembly to partially uncouple from the shaft. Reverse rotation was believed to be due to partial or intermittent failure of the associated discharge check valve. At the close of the inspection period, a new style check valve was being installed concurrently with pump replacement.

On September 17, 1994, an attempt to replace a faulty indicating light resulted in loss of DC power to the B-train ESF load sequencers for one hour and 22 minutes. As a result, both automatic and manual initiation of B-train ESF had been inoperable, placing the licensee in TS 3.0.1. Loss of power was found to be due to a blown fuse.

Review of a planned maintenance outage of the post-accident sample system determined that the licensee's existing mechanism for tracking the status of the repairs warranted increased management attention.

Engineering

Engineering has been closely involved in examination and development of repair strategies for temporary repair of a gasket leak on the A-steam generator secondary side manway.

(EXECUTIVE SUMMARY CONTINUED)

Plant Support

The licensee completed transition to exclusive use of electronic self-reading dosimetry and computer controlled exposure tracking.

During the Ginna Open House on September 17-18, 1994, appropriate measures were implemented so that the potential for personnel contamination and exposure was minimized.

Safety Assessment/ Quality Verification

RG&E has downsized its work force and is reorganizing its corporate structure. Work force reduction is being accomplished through early retirement. The most significant effect on Ginna Station has been consolidation of quality assurance, operating experience, corrective action, and emergency planning, into the newly formed Nuclear Assessment organization.

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DETAILS

1.0 OPERATIONS (71707)

1.1 Operational Experiences

At the beginning of the inspection period the plant was operating at full power (approximately 98 percent). On September 10, 1994, power was reduced to just below 50 percent for investigation of high vibration levels on the B-main feedwater pump and to plug leaking circulating water tubes in the main condenser 1B2 waterbox. The plant was returned to full power operation on September 11, 1994. On September 16, 1994, post-maintenance testing on an output circuit breaker (12AX) from one of the station auxiliary transformers caused an associated breaker (12BX) that was supplying plant loads from the other station auxiliary transformer to inadvertently open on interlock. As a result, two of the four class 1E 480-volt buses were deenergized and subsequently reenergized when the associated emergency diesel generator (EDG) automatically started and assumed load. The transient had no effect on power generation and operators promptly stabilized plant conditions. On September 21, 1994, one of the two offsite electrical power supplies was interrupted due to an offsite distribution disturbance. This resulted in a temporary loss of two class 1E 480-volt buses until the associated EDG automatically started and assumed loads. As before, power generation was not affected, and operators promptly stabilized plant conditions. There were no other significant operational events or challenges during the inspection period.

1.2 Control of Operations

Control room staffing was as required. Operators exercised control over access to the control room. Shift supervisors maintained authority over activities and provided detailed turnover briefings to relief crews. Operators adhered to approved procedures and were knowledgeable of off-normal plant conditions. The inspectors reviewed control room log books for activities and trends, observed recorder traces for abnormalities, assessed compliance with technical specifications, and verified equipment availability was consistent with the requirements for existing plant conditions. During normal work hours and on backshifts, accessible areas of the plant were toured. No operational inadequacies or concerns were identified.

1.3 Power Reduction For Secondary Plant Maintenance

During the inspection period, routine chemistry monitoring identified minor circulating water leakage in the main condenser 1B2 waterbox. Removing the waterbox from service for repairs would require a 50 percent power reduction. Such main condenser leakage does not require immediate action, since the resultant impurities are removed by the condensate polishers. However, when higher than normal vibration was detected on the B-main feedwater (MFW) pump, the licensee concluded that the combination of problems warranted a power reduction for repairs.

On September 10, 1994, plant power was reduced to just below 50 percent to allow the B-MFW pump to be secured and the 1B2 waterbox to be isolated. Utilizing several different methods for leak detection, a total of seven leaking circulating water tubes were identified and plugged in the 1B2 waterbox. Investigation of the B-MFW pump vibration revealed slight misalignment between the motor and the speed increaser. Following realignment, vibration returned to expected levels. All maintenance was completed and the plant was returned to full power operation on September 11, 1994.

The inspector observed operations at 49 percent power and during the power escalation. No off-normal operational conditions occurred, and the inspector noted no significant problems.

1.4 Losses of Offsite Power to Class 1E 480-Volt Electrical Buses

On September 16, 1994, technicians performed preventive maintenance on a breaker in the offsite power supply system. The breaker, 12AX, receives power from offsite circuit 751 via the 12A station auxiliary transformer, and supplies two class 1E 480-volt buses, 16 and 17. To support the maintenance on 12AX, the offsite power supply system had been realigned such that the second offsite power supply circuit (circuit 767) was supplying buses 16 and 17 from the other station auxiliary transformer (12B), via an alternate supply breaker (12BX). Maintenance was performed per procedure PME-50-04-52/12AX, a product of the recently completed Maintenance Procedure Upgrade Program (MPUP).

Following the completion of maintenance, the technicians proceeded with post maintenance operability testing in accordance with PME-50-04-52/12AX. The breaker was installed and placed in the test position. When the breaker was closed, as specified by the procedure, the alternate supply breaker, 12BX, unexpectedly opened. As a result, buses 16 and 17 deenergized and isolated on undervoltage. In response to the undervoltage condition, the B-emergency diesel generator (EDG) automatically started and reenergized buses 16 and 17 in approximately 10 seconds.

Control room operators responded in accordance with AP-ELEC.1, "Loss of 12A and/or 12B Transformer." Affected loads were restored and plant conditions were stabilized. The transient had no effect on reactor power. Once the cause was determined to have been testing of the 12AX breaker, electric power to buses 16 and 17 was transferred back to circuit 767 and the B-EDG was secured. A four hour non-emergency notification of the NRC was completed as required by 10 CFR 50.72.

The licensee determined that the loss of buses 16 and 17 was due to a procedural error in PME-50-04-52/12AX. The error was the result of misunderstanding of the conventions used to depict switch contact positions, as opposed to relay contact positions, in schematic diagrams. Relay contacts are normally shown in their deenergized position, which may be open or closed. Switch contact positions, however, are always shown in the open position, with an annotation that tells which position of the switch will cause the contact to be closed. In this event, the problem arose from the 12AX/12BX interlock portion of the breaker control circuitry. This interlock, designed to prevent uncontrolled paralleling of circuits 751 and 767 through 12AX and 12BX, causes either breaker to open if the other breaker is closed without its synchroscope operating. The interlock consists of a circuit to energize the breaker trip coil through two contacts in series: one from the associated synchroscope switch (SS); the other from a position relay in the opposite breaker. On a schematic diagram, this appears as two open contacts. In developing the test procedure, it was known that the 12AX position contact in the 12BX control circuit would close when the 12AX breaker was tested; however, the annotation "OFF" by the open SS contact was apparently taken to indicated that this contact would be open when the 12BX SS was in the off position. Because synchroscope switches are normally maintained in the off position, it was concluded that the 12BX SS contact would prevent the 12BX trip coil from being energized when the 12AX breaker was tested. Since the "OFF" annotation actually indicated that the contact would be closed, test closure of the 12AX breaker instead caused the 12BX breaker to open due to normal operation of the 12AX/12BX interlock.

As corrective action, the licensee quarantined from use all MPUP procedures for corrective and preventive electrical maintenance (PME and CME procedures), and for protective relays (PRI procedures), pending review for similar problems. The inspector assessed this corrective action to be appropriate.

On September 21, 1994, the plant again experienced a loss of bus 16 and 17. On this occurrence, an individual working in a field near the circuit 751 right-of-way inadvertently fell out of a tree onto the line, causing a loss of circuit 751. Loss of power to the 12A station auxiliary transformer caused buses 16 and 17 to deenergize and isolate on undervoltage. The resulting plant transient was effectively the same as had occurred five days earlier. Again, operators restored loads as necessary and stabilized plant conditions. Buses 16 and 17 were transferred to circuit 767 while the cause of the circuit 751 failure was investigated, and the B-EDG was secured. A four hour non-emergency notification of the NRC was completed as required by 10 CFR 50.72.

The inspector observed recovery from this loss of circuit 751 and noted good control by the control room foreman, good procedure use, and prompt management response. Good consideration was given to not altering the electrical distribution lineup before information that would possibly be useful in troubleshooting could be collected. The inspector had no additional concerns on this matter.

2.0 MAINTENANCE (62703, 61726)

2.1 Preventive/Corrective Maintenance

2.1.1 Service Water System Pump Maintenance

During the previous inspection period, the A-SW pump had been replaced due to low differential pressure. At the end of that period, the new pump, although in-use, had not been declared operable, due to unexpectedly low differential pressure.

Following additional testing and evaluation, a new baseline differential pressure was established and the A-SW pump was declared operable on September 8, 1994. Given the recent history of SW pump problems, the inspector considered this lengthy acceptance process to have been appropriately conservative.

On September 20, 1994, the C-SW pump was declared inoperable due to excessive noise and vibration. This pump had been installed in May 1994, when the previously installed pump failed a periodic test due to low differential pressure and high vibration. In that case, examination of the failed pump had found that the upper pump bushing had stripped out from the casing, but identified no other significant problems. On this most recent occurrence, however, the pump was found to have major mechanical degradation. The upper pump bushing was again found backed out of the casing, but, in addition: there was a hole in the casing in the area of the lower pump bushing; the lower bushing itself had been destroyed (some fragments remained in the installed location, and some were found in the discharge check valve cavity); and the lower impeller wear ring was considerably worn, with one between-blade section missing altogether.

The suspected cause of failure was that the pump had been rotated backwards. Reverse threads on the upper pump bushing cause it to tighten during normal operation, whereas operation in the reverse direction would tend to loosen it. This would explain the uncoupling of the upper pump bushing without significant thread damage. With the resultant freedom of axial motion, thrust generated by the impellers during a pump start could have driven the shaft into the lower bushing and produced the observed failure. The resultant freedom of radial shaft motion during subsequent pump operation would account for the observed damage to the lower impeller wear ring. However, pump monitoring did not detect reverse rotation and the actual cause of the failure remains inconclusive.

The A- and B-SW pump discharge check valves were replaced with a new style valve during the 1994 outage, with replacement of the C- and D-pump check valves scheduled for the 1995 outage. Because check valve failure would be considered a likely cause of reverse motor rotation, the licensee decided to install the new style check valve concurrently with the pump replacement. This work was in progress at the close of the inspection period.

The inspectors considered licensee actions to maintain service water pump operations to be prudent because the root cause of the initial degradation had not been determined. Check valve replacement was also considered appropriate based on the suspected cause of the problem. The inspector will continue to track this maintenance, as well as the root cause determination for the pump failures.

2.1.2 Load Sequencers For One Train of Engineered Safety Features Inoperable Due To Loss of DC Power

On September 17, 1994, an operator noted that a normally lit "Safeguards DC Failure" light on the relay room SI rack "B" panel was extinguished. When bulb replacement was attempted, the operator observed a flash from the light socket and the "SI Unblock" light extinguished. In the control room, main control board annunciator L-31, "Safeguards DC Failure," alarmed at 12:24 p.m. Instrument and control (I&C) technicians investigated and found a blown fuse in the DC power for the B-train ESF load sequencers. The fuse was replaced at 1:46 p.m., which cleared the main control board annunciator alarm.

The loss of DC power rendered the B-train ESF load sequencers inoperable for one hour and 22 minutes. This meant that both automatic and manual initiation of B-train ESF had not been operable. Although B-train ESF equipment could still have been started individually during this period, power operation with one train of ESF inoperable is not allowed by technical specifications (TS); therefore, TS 3.0.1, concerning required action for conditions in excess of those addressed in individual specifications, applied during this event. Since action to restore B-train ESF operability was completed within the time period (less than six hours) specified in TS 3.0.1, this event did not constitute a violation of TS.

The inspector assessed that corrective action in this event had been prompt.

2.1.3 Post-Accident Sample System Maintenance

On August 29, 1994, the post accident sample system (PASS) was declared inoperable for corrective maintenance. The system remained inoperable until September 29, 1994. The PASS is required by 10 CFR 50.34, however, it is not addressed in technical specifications; as such, there are no specific requirements for system operability and no restrictions on allowable outage time. The inspector was concerned, however, that the system had been inoperable for one month and that additional management attention should have been directed to restoring the system.

Investigation revealed that the PASS outage was originally scheduled for one week. The inspector determined that good planning had gone into preparation for the outage; material, shop, technical, and administrative support had been arranged, in large part, through the efforts of the system engineer. During the outage, extensive maintenance was completed, including six valve replacements and completion of a minor engineering modification to reorient a flow transmitter for greater ease of calibration.

All work on the PASS was completed on September 13, 1994. The target outage duration of one week was exceeded primarily due to higher priority emergent work. Required acceptance testing was completed and the system was technically operable as of September 13; however it remained administratively inoperable pending the conduct of a full system hydrostatic test. Such a test was considered desirable based on the large amount of work that had been performed, and was not a code requirement. Procedure preparation and approval further delayed system restoration, as did correction of minor material problems discovered during the test. The hydrostatic test was completed and the system was declared operable on September 29, 1994.

The inspector concluded that the PASS outage had been well planned. Despite there being no time constraints imposed by technical specifications, the activity was planned in the same manner as a Limiting Condition for Operations

(LCO) maintenance outage. A significant amount of corrective maintenance was completed in a reasonable period of time. However, it did not appear that management was involved in the decision to maintain the PASS inoperable for an additional two weeks following the completion of maintenance. The inspector concluded that the status of this maintenance could have received additional management attention. The licensee responded by including the dates that such equipment were declared inoperable in the listing that is presented at the daily Morning Priority Action Required (MOPAR) meeting. The inspector had no additional concerns on this matter.

2.2 Surveillance Observations

2.2.1 Routine Observations

Inspectors observed portions of surveillances to verify proper calibration of test instrumentation, use of approved procedures, performance of work by qualified personnel, conformance to limiting conditions for operation (LCOs), and correct system restoration following testing. The following surveillances were observed:

- Periodic Test (PT)-2.1M, "Safety Injection System Monthly Test," revision 12, effective date April 8, 1994, observed September 8, 1994

- PT-2.2M, "Residual Heat Removal System - Monthly," revision 3, effective date February 5, 1993, observed September 20, 1994

The inspector determined through observing this testing that operations and test personnel adhered to procedures, corrective action was promptly initiated if test results and equipment operating parameters did not meet acceptance criteria, and redundant equipment was available for emergency operation.

3.0 ENGINEERING (71707, 37551)

3.1 A-Steam Generator Secondary Side Manway Leak

On September 12, 1994, the secondary side manway for the A-steam generator was observed to be leaking. The leak was identified using the containment video monitoring system. Based on containment sump automatic pumpdown frequency, the leakage rate was estimated to be approximately 80 gallons per day. The source of the leak was the gasket area between the manway cover and the steam generator.

Following the completion of an engineering evaluation to determine the acceptability of hot torquing bolts on the steam generator manway, the A-steam generator manway bolts were tightened, as necessary, to a uniform value of 450 foot-pounds. This action had no significant effect on the leakage rate. A leak repair contractor was contacted to evaluate the possibility of performing an on-line sealant repair. The contractor proposed a technique that replaces the bolts with studs and special injector nuts, which allow sealant material to be injected into the gasket area. Following extensive review, engineering concluded that the potential problems associated with this repair strategy were unacceptable.

At the conclusion of this inspection period, temporary repair of the A-steam generator manway leak using a circumferential clamp was under evaluation. The leak rate had not changed significantly since the leak was discovered. The leak was being closely monitored using the containment video monitoring system. Management had provided instructions to the operations department regarding actions to be taken if the leak rate increased.

The inspector concluded that engineering has provided excellent support in addressing the A-steam generator manway leak. The inspector will continue to monitor development and implementation of corrective action for this problem.

3.2 Auxiliary Feedwater System Pressure Detectors Found With Dust Plugs Installed in Atmospheric Pressure Sensing Ports

The inspector noted that the atmospheric pressure sensing ports for the motor driven AFW pump pressure transmitters, PT-2029 and PT-2030, had plastic cleanliness plugs installed; these ports are to be open to the atmosphere. Although these plugs do not form an air-tight seal, the inspector was concerned that they could affect the instrument calibration, particularly in conditions of rapid local temperature change (where the resultant differential pressure might not have time to equalize). The affected instruments do not serve a safety function; however, given that the plugs had apparently been in place since the transmitters were originally installed, the inspector was concerned that similar transmitters, serving in safety applications, may also have plugs installed.

In response, the licensee performed calibration checks of the two instruments, once with the plugs still installed, and again after the plugs had been removed. No change in calibration was observed. The licensee intends to inspect safety-related pressure transmitters in containment during the 1995 refueling outage.

4.0 PLANT SUPPORT (71750)

4.1 Radiological Controls

4.1.1 Routine Observations

The inspectors periodically confirmed that radiation work permits were effectively implemented, dosimetry was correctly worn in controlled areas and dosimeter readings were accurately recorded, access to high radiation areas was adequately controlled, survey information was kept current, and postings and labeling were in compliance with regulatory requirements. Through observations of ongoing activities and discussions with plant personnel, the inspectors concluded that the licensee's radiological controls were effective.

4.1.2 Transition to Electronic Dosimetry Completed

During this inspection period, the licensee completed transition to exclusive use of electronic self-reading dosimetry in controlled areas of the intermediate and auxiliary buildings, and in containment. The dosimeters are issued and returned, by the requesting individuals, through terminals at the control point that are linked to a servicing computer. The computer contains information on all active radiation and special work permits (RWPs/SWPs), as well as exposure records for authorized users. As a dosimeter is issued, it is programmed to alarm at the dose and dose rate specified in the requested RWP/SWP. When it is returned, the accumulated dose is automatically added to the individual's exposure history and to the running total for the RWP/SWP. The inspector considered that this system will enhance real-time dose awareness and maintain accurate, up-to-date exposure records.

4.1.3 Site Open House

During the Ginna Open House on September 17-18, 1994, appropriate measures were implemented so that the potential for personnel contamination and exposure was minimized. Clear radiological boundaries were established to direct visitors to unrestricted areas in the Auxiliary and Intermediate Buildings. Radiological surveys were performed to confirm existing conditions prior to the open house and operations that could potentially alter those conditions were rescheduled to a later date. Alarming electronic dosimeters were placed at strategic locations to monitor dose and dose rate. As a final precaution, escorts were surveyed for contamination upon exiting the unrestricted areas. The inspector concluded that the planning and preparations to receive visitors were effective.

4.2 Security

4.2.1 Routine Observations

During this inspection period, the inspectors verified that x-ray machines and metal and explosive detectors were operable, protected area and vital area barriers were well maintained, personnel were properly badged for unescorted or escorted access, and compensatory measures were implemented when necessary. No unacceptable conditions were identified.

4.3 Fire Protection

4.3.1 Routine Observations

The inspectors periodically verified the adequacy of combustible material controls and storage in safety-related areas of the plant, monitored transient fire loads, verified the operability of fire detection and suppression systems, assessed the condition of fire barriers, and verified the adequacy of required compensatory measures. No discrepancies were noted.

4.3.2 Inadvertent Isolation of a Yard Loop Fire Hydrant

On September 25, 1994, a leak developed from the onsite underground water main. The leak was isolated and, based on review of the system configuration, it was determined that no fire hydrants were within the isolation boundary. In preparing to commence repairs the following day, it was discovered that hydrant 12 was actually within the isolation boundary and was therefore inoperable. The hydrant was returned to service by connecting it to another hydrant using fire hoses. The cause of the inadvertent isolation was that the yard loop water system valves on either side of hydrant 12 (8571 and 8573) had their labels reversed. Hydrant 12 was isolated for approximately 17 hours.

The inspector considered that proper action was taken to restore the hydrant after it was determined that hydrant 12 had been inadvertently isolated.

5.0 SAFETY ASSESSMENT/QUALITY VERIFICATION (71707)

5.1 Corporate Reorganization

RG&E is reorganizing its corporate structure. The most significant effect on Ginna Station has been consolidation of quality assurance, operating experience, corrective action, and emergency planning, into the newly formed Nuclear Assessment organization. RG&E is also downsizing its work force. Work force reduction is being accomplished through early retirement.

5.2 Periodic Reports

Periodic reports submitted by the licensee pursuant to Technical Specification 6.9.1 were reviewed. Inspectors verified that the reports contained information required by the NRC, that test results and/or supporting information were consistent with design predictions and performance specifications, and that reported information was accurate. The following reports were reviewed:

- Monthly Operating Report for August 1994

No unacceptable conditions were identified.

5.3 Licensee Event Reports

A Licensee Event Report (LER) submitted to the NRC was reviewed to determine whether details were clearly reported, causes were properly identified, and corrective actions were appropriate. The inspectors also assessed whether potential safety consequences were properly evaluated, generic implications were indicated, events warranted additional onsite follow-up, and applicable requirements of 10 CFR 50.73 were met.

The following LER was reviewed (Note: date indicated is event date):

- 94-009, Safety Injection Pumps Declared Inoperable Due To Leak, Causes Condition Prohibited by Technical Specifications and Completion of Plant Shutdown Required by Technical Specifications (August 9, 1994)

The inspector concluded that the LER was accurate, met regulatory requirements, and appropriately identified the root cause.

6.0 ADMINISTRATIVE

6.1 Senior NRC Management Site Visits

During this inspection period, two senior NRC managers visited Ginna Station. On September 15-16, 1994, Mr. William J. Lazarus, Chief of Reactor Projects Section 3B, toured the site and met with senior licensee management. On September 22, 1994, Mr. Thomas T. Martin, Regional Administrator for NRC Region I, toured the site and met with senior licensee management.

6.2 Meeting to Discuss Corporate Reorganization and Quality Assurance Program Revision

On September 28, 1994, RG&E management met with the NRC staff in the Regional office to discuss the recent corporate reorganization and proposed revision of the licensee's Quality Assurance Plan. Attendees at this meeting are identified in Attachment 1. Handouts provided by the licensee are included as Attachment 2 to this report.

6.3 Backshift and Deep Backshift Inspection

During this inspection period, deep backshift inspections were conducted on September 4, 5, 10, and 25, 1994.

6.4 Exit Meetings

At periodic intervals and at the conclusion of the inspection, meetings were held with senior station management to discuss the scope and findings of inspections. The exit meeting for the current resident inspection report 50-244/94-22 was held on October 5, 1994.

ATTACHMENT 1

RG&E MEETING

LIST OF ATTENDEES

SEPTEMBER 18, 1994

ROCHESTER GAS AND ELECTRIC CORPORATION

C. Anderson	Quality Assurance Manager
M. Lilley	Director, Steam Generator Quality Assurance
R. Marchionda	Superintendent, Ginna Maintenance
R. Mecredy	Vice President, Nuclear Operations
R. Watts	Manager, Nuclear Assessment

U.S. NUCLEAR REGULATORY COMMISSION

B. Bordenick	Acting Regional Counsel
S. Chaudhary	Senior Reactor Engineer, Division of Reactor Safety (DRS)
A. Johnson	Project Manager, Office of Nuclear Reactor Regulation (NRR)
W. Lanning	Deputy Director, Division of Reactor Projects (DRP)
W. Lazarus	Chief, Reactor Projects Section 3B, DRP
J. Linville	Chief, Projects Branch No. 3, DRP
M. Paynz	Performance and Quality Evaluation Branch, NRR
T. Moslak	Senior Resident Inspector (via telephone)
E. Knutson	Resident Inspector (via telephone)

ATTACHMENT 2

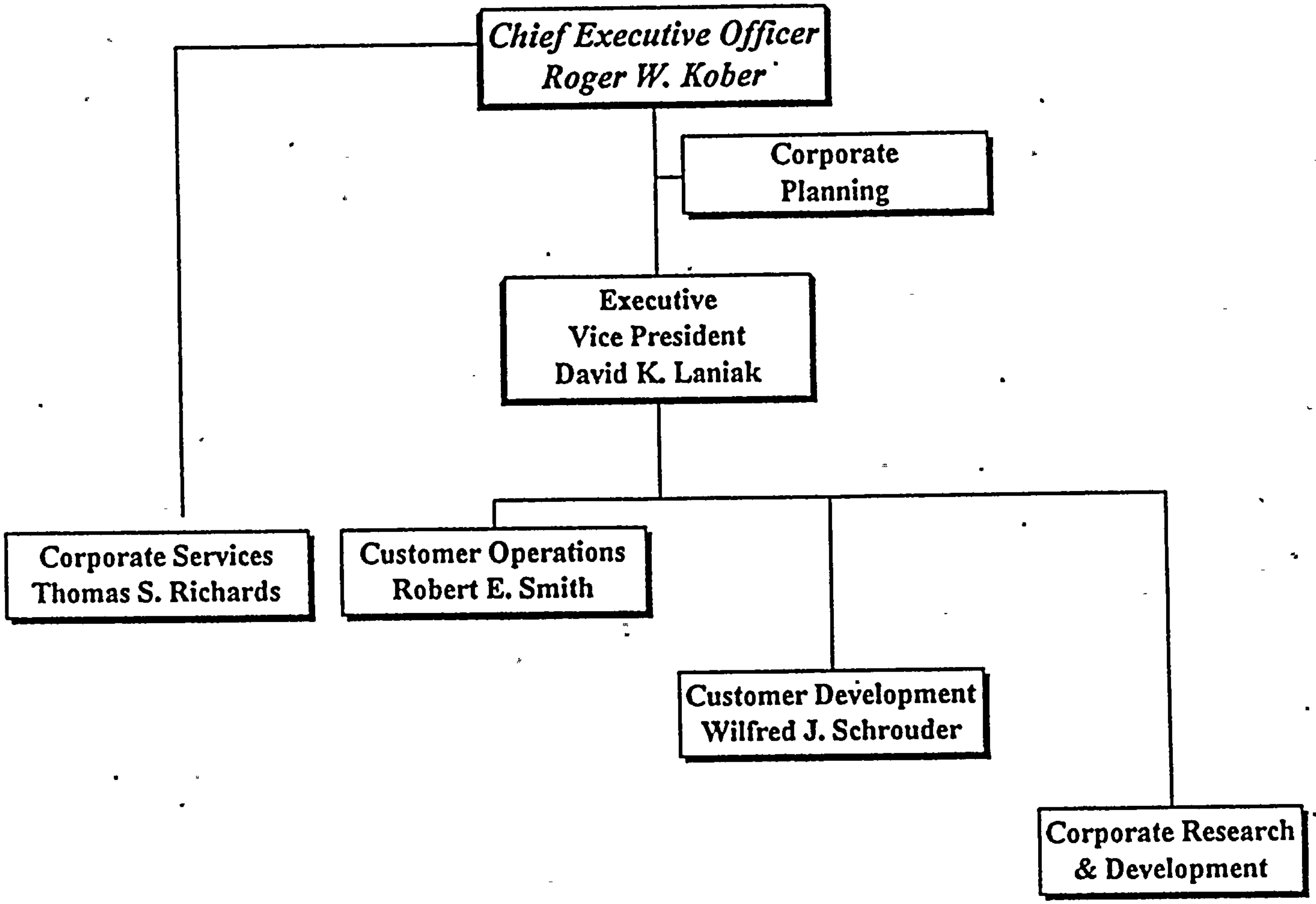
RG&E MEETING HANDOUTS

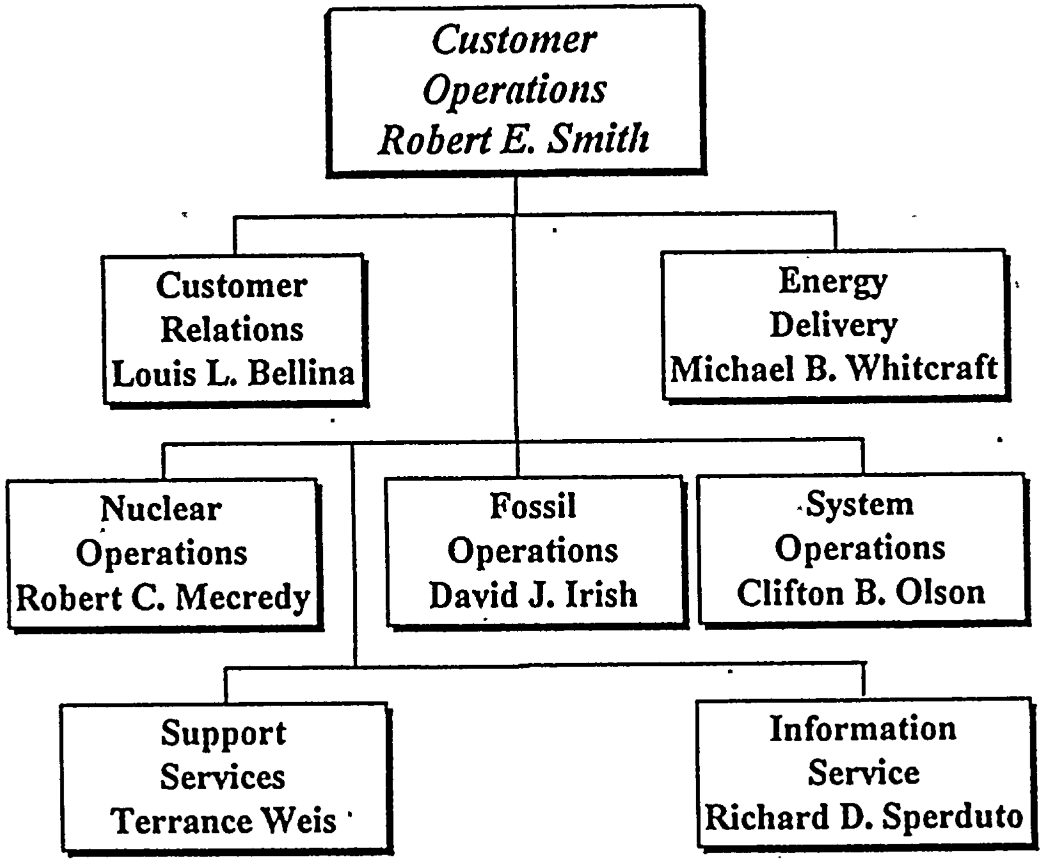
SEPTEMBER 18, 1994

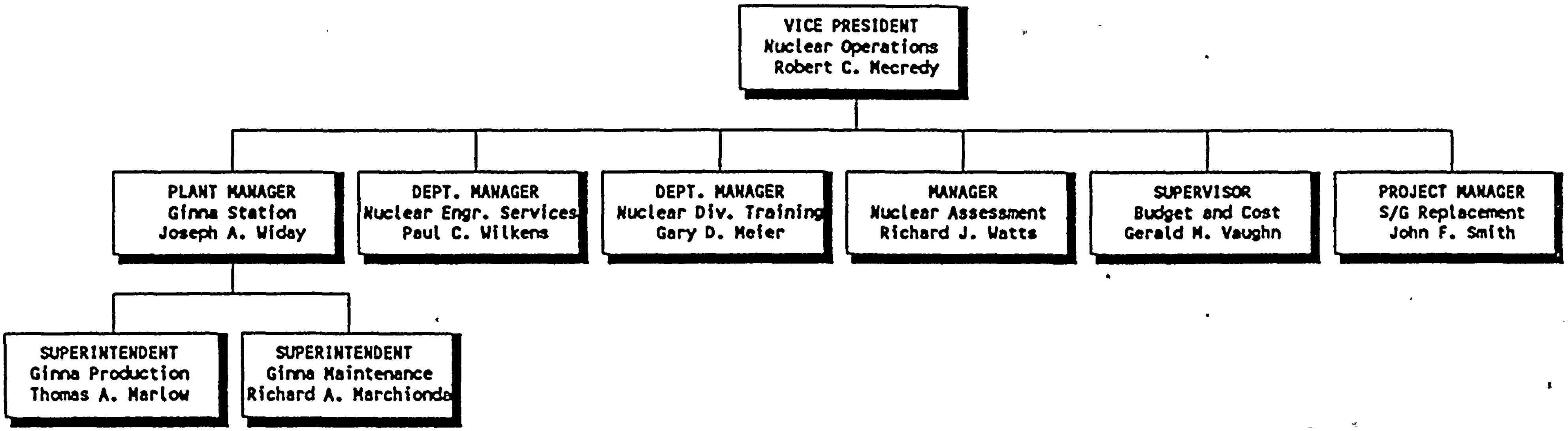
RG&E/NRC MEETING

September 28, 1994

• Introduction and Purpose of Meeting	R. C. Mecredy
• Organization Change - Corporate - Division - Impact of RG&E Early Retirement	R. C. Mecredy
• Nuclear Assessment-Vision	R. J. Watts
• QA Program Changes	C. R. Anderson
• Open Discussion	


Chief Executive Officer
Roger W. Kober
Corporate Planning
Executive Vice President
David K. Laniak
Corporate Services
Thomas S. Richards
Customer Operations
Robert E. Smith
Customer Development
Wilfred J. Schrouder
Corporate Research & Development


Customer Operations Robert E. Smith
Customer Relations Louis L. Bellina
Energy Delivery Michael B. Whitcraft
Nuclear Operations Robert C. Mecredy
Fossil Operations David J. Irish
System Operations Clifton B. Olson
Support Services Terrance Weis
Information Service Richard D. Sperduto


VICE PRESIDENT
Nuclear Operations
Robert C. Mecredy
PLANT MANAGER
Ginna Station
Joseph A. Widay
DEPT. MANAGER
Nuclear Engr. Services
Paul C. Wilkens
DEPT. MANAGER
Nuclear Div. Training
Gary D. Meier
MANAGER
Nuclear Assessment
Richard J. Watts
SUPERVISOR
Budget and Cost
Gerald M. Vaughn
PROJECT MANAGER
S/G Replacement
John F. Smith
SUPERINTENDENT
Ginna Production
Thomas A. Marlow
SUPERINTENDENT
Ginna Maintenance
Richard A. Marchionda

NUCLEAR DIVISION FUNCTIONAL STRUCTURE

GINNA STATION

Installation/Maintenance
- NPS Maintenance Agreement
- Contract Labor
- Maintenance Planning
- Maintenance History Documentation
- Maintenance Analysts (NPRDS)
- Maintenance Procedures
- Site Service
- Firewatch
- I&C Shop
- I&C Special Projects
- Information Systems Cable (Ginna Site)
- Weld Shop
- Fitter Shop
- Mechanics Shop
- Insulator Shop
- Maintenance Shop
- Electrical Shop
- S/G Maintenance

Materials/Procurement/Inventory Control
- Warehouse Inventory Control
- Procurement Engineering
- Chemical Control Program

Chemistry
- Chem. Nuclear
- Chem. Rad. Environmental
- Chem. Secondary

Scheduling
- Online/Outage Scheduling
- PM Scheduling
- M&TE Calibration Schedule
- Surveillance Test Schedule

Note: This represents functional alignments, not necessarily detailed organization structure.

Revision Date: 9/22/94

GINNA STATION (continued)

Security

Safety
- Occupational Safety & Health
- Personnel Protection
- Hazardous Material Communication

Operations
- Operations
- Diesels, Pumps, & Valve Testing
- Fire System Testing (Pump/Valve)
- Ventilation System Testing
- MOV Differential Pressure Testing
- Hydro-Static Testing

Radiation Protection
- ALARA
- Dosimetry (Ext/Int)
- RP Instrument Calibration
- Respirator Protection (Radiation & Non-Radiation)
- Operational Radiation Protection
- Decontamination Support
- Radwaste Operations
- Radiation Protection Programs

System & Component Engineering
- Component Engineering
- Diagnostic Testing
- Therm. Perf. Monitoring of Heat Exchangers
- IST Program Implementation
- Systems Engineering
- Fire Protection System Engineering
- PM Analysts
- Reactor Engineering
- STA Coordination

Note: This represents functional alignments, not necessarily detailed organization structure.

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NUCLEAR ENGINEERING SERVICES

Technical Support

- Structural Engineering Design
- Structural Engineering Ops Support
- Mechanical Engineering Design
- Mechanical Engineering Ops Support
- IST Program Development/Maintenance
- Electrical Engineering Design
- Electrical Engineering Ops Support
- Nuclear Fuel Management
- Nuclear Fuel Procurement
- Safety Analysis
- Licensing
- Configuration Management
- Plant Support Engineering (TSR & Temporary Modifications)

Computer Operations/Maintenance

- SAS/PPCS Hardware/Software
- Simulator Hardware/Software
- Plant Computer Systems
- Voice Communications
- Security Computer
- PC/LAN Support
- Standardization, Design & Development (PC/LAN)

Note: This represents functional alignments, not necessarily detailed organization structure.

Revision Date: 9/22/94

NUCLEAR DIVISION TRAINING
- Technical Training
- Operator Training
- Maintenance Training
- Radiation Protection/Chem. Training
- Training Analysis Design & Development
- Training Support Services
- Configuration Management

STEAM GENERATOR REPLACEMENT

BUDGET & COST
- Business Planning
- Forecasts & Budgets

NUCLEAR ASSESSMENT
- Quality Assurance Audits/Surveillances
- Procurement Quality Assurance
- Design Quality Assurance
- Quality Assurance Programs
- Receipt Inspection
- Quality Control Inspections
- Steam Generator Replacement Quality Assurance
- Operating Experience
- Corrective Action
- Emergency Planning
- Records Management
- Process Improvement
- Public Safety Acceptance Support

Note: This represents functional alignments, not necessarily detailed organization structure.

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NUCLEAR ASSESSMENT

- MANAGER NUCLEAR ASSESSMENT
  - MANAGER QUALITY ASSURANCE
    - QUALITY ASSURANCE PROCUREMENT
    - QUALITY ASSURANCE DESIGN
    - STEAM GENERATOR REPLACEMENT
    - PROGRAMS
    - INDEPENDENT ASSESSMENT SERVICES
  - MANAGER NUCLEAR ASSURANCE
    - QUALITY CONTROL INPECTION
    - PROCUREMENT QUALITY CONTROL,
    - RECORDS MANAGEMENT
  - OPERATING EXPERIENCE
    - OPERATIONS ASSESSMENT
    - CORRECTIVE ACTION
    - TRENDING/ ANALYSIS
  - PROCESS IMPROVEMENT
    - BENCHMARKING
    - CPI / REENGINEERING
  - PUBLIC SAFETY AND ACCEPTANCE SUPPORT
    - WASTE MANAGEMENT SUPPORT (NON TECHNICAL)
    - EMERGENCY PLANNING PUBLIC INFORMATION
    - RADIOLOGICAL COMMUNICATIONS
  - NUCLEAR EMERGENCY PREPAREDNESS
    - CORPORATE AND OFFSITE COORDINATION
    - ONSITE SUPPORT

NUCLEAR ASSESSMENT - VISION

- COMMITMENT TO QUALITY
- INTEGRATION OF ASSESSMENT FUNCTONS
- PROMOTION OF SELF ASSESSMENT WITHIN THE ORGANIZATION
- PROCESS ORIENTED
- EXTERNAL FOCUS
- MODEL AND RESOURCE FOR NUCLEAR DIVISION

QA PROGRAM REVISION - MAJOR CHANGE

1. BACKGROUND
2. SRP 17.3 FORMAT FEATURES
3. APPROACH
4. KEY CHANGES
5. QUALITY PROGRAM INITIATIVES
6. SCHEDULE
7. POTENTIAL FUTURE ISSUES
8. DISCUSSION

1. BACKGROUND

A proactive opportunity exists to update the QA Program submittal to reflect changes from a Compliance based (18 criteria) approach to a Performance based approach provided by the NRC Standard Review Plan 17.3

Current program is known to be wordy, confusing and not reader-friendly after 20 revisions.

Use of SRP 17.3 will facilitate incorporation of the proposed QP Initiative changes. These changes will increase worker accountability for quality along with shifting QA/QC role from routine planning review to a more distant role of assessment.

Use of SRP 17.3 will facilitate NRC consideration of our various changes since current criteria will be used for endorsement instead of the more time consuming 50.54a process.

2. SRP 17.3 FORMAT FEATURES

a. Comparison

Existing Format	SRP 17.3	
18 Section (one per criterion)	Management	Crit.1 &2
	Performance/ Verification	Crit. 3-17
	Assessment	Crit. 18

b. Inclusion of:

- QA Program beyond safety related
- **Expanded** list of **commitment documents** (10 CFR Part 21, Commercial Grade procurement, Process Control Program QA Reg. guides, etc.)
- **QP Initiatives** incorporated
- Operational Philosophy for assuring quality concepts beginning with **worker** role and including **self- assessment.**
- **Fewer organization charts** - only augment UFSAR Chapter 13.
- A supplemental **glossary** of terms

c. Formatted for inclusion as **Chapter 17** of UFSAR.

3. APPROACH

a. Establish Steering Committee (Reps from Ginna, NES, NS&L) to guide:

- commitment status consistencies
- expanded scope (applicability) description
- overlap reduction with UFSAR Chapter 13
- revised program description accuracy and depth

b. Deletions and additions guided by QA

c. Final draft reviewed by NSARB and Management when released by Steering Committee.

d. Discuss status and plans with NRC.

4. LICENSING BASIS - KEY CHANGES

- Performance based approach emphasized more than compliance based.

- Emphasis on resource allocation contingent upon status and safety significance of the activity.

- Need for specifying acceptance criteria in design, procurement and audit planning documents emphasized.

- Recognition of other assessment functions than audit. (Self assessment, operational assessment and QA Surveillance now recognized.)

- Elements of the N45.2 daughter standards not previously addressed by SRP 17.2 are now more clearly addressed (e.g. Design verification requirements).

- Controls for commercial grade items included.

- Assessment focus shift to quality of the end of product from process controls.

5. QUALITY PROGRAM INITIATIVES

- QA Reporting from Sr. VP to VP Nuclear Operations

- QA Manual being replaced by Nuclear Policy Manual (Nuclear Directives)

- Reduction of in-line reviews by QA/QC

    - Purchase Requisitions

    - Procedures

    - Design Documents

- Function shift from QA/QC to Ginna Station

    - Receipt Inspection to Materials Management

    - Nonconformance Report Processing to Technical Group

- Audit frequency reduced to biennial (2 years) - Resources and schedule adjustments based on assessed group's performance

6. SCHEDULE

September 29	Final Draft to Steering Committee
October	Broader Management Review
November	Submittal to NRC

7. POTENTIAL FUTURE ISSUES

- Peer Inspection

- Graded QA