August 22, 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 - NRC INSPECTION REPORT NO. 05000244/2003010

Dear Dr. Mecredy:

On July 8, 2003, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection of your application for renewal of the operating license for the R. E. Ginna Nuclear Power Plant focusing on the manner by which you determined if systems, components or structures were within the scope of license renewal. The enclosed inspection report documents the inspection findings, which were discussed with Mr. George Wrobel of your staff via telephone on July 8, 2003.

The inspection was conducted in accordance with NRC Manual Chapter 2516, "Policy and Guidance for the License Renewal Inspection Program," using NRC Inspection Procedure 71002, "License Renewal Inspections." The inspection was the first of two scheduled NRC team inspections that support your application for a renewed license for the R. E. Ginna facility. The inspection consisted of a selected examination of procedures, representative records, and interviews with personnel regarding the scoping and screening of systems, structures and components, in accordance with 10 CFR 54, in your license renewal application.

The scoping and screening portion of your license renewal activities were being implemented as described in your license renewal application. The documentation supporting your application was in an easily auditable and retrievable form. Your scoping and screening processes were successful in identifying those structures and components required to be considered for aging management.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC website at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Wayne D. Lanning, Director
Division of Reactor Safety

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

Enclosure: Inspection Report 05000244/2003010

cc w/encl:
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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No:	05000244
License No:	DPR-18
Report No:	05000244/2003010
Applicant:	Rochester Gas and Electric Corporation
Facility:	R. E. Ginna Nuclear Power Plant
Location:	1503 Lake Road Ontario, New York 14519
Dates:	June 23 - July 8, 2003
Inspector:	Michael Modes, Team Leader, Region I Suresh Chaudhary, Senior Reactor Engineer, Region I Kamalamar Naidu, Senior Reactor Engineer, NRR Alfred Lohmeier, Senior Reactor Engineer, Region I Timothy O'Hara, Reactor Engineer, Region I
Approved by:	Raymond K. Lorson, Chief Performance Evaluation Branch Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000244/2003-010; 06/23/2003-7/27/2003; R. E. Ginna Nuclear Power Plant; License Renewal Application, Scoping and Screening Inspection Report.

This inspection of License Renewal activities was performed by four regional office inspectors with assistance from a reactor engineer from the Office of Nuclear Reactor Regulation. The inspection conformed with NRC Manual Chapter 2516 and NRC Inspection Procedure 71002. This inspection did not identify any "findings" as defined in NRC Manual Chapter 0612.

The inspectors concluded that the scoping and screening portion of Rochester Gas and Electric's license renewal activities were conducted as described in the license renewal application and that documentation supporting the application was in an auditable and retrievable form. The inspectors concluded that there was reasonable assurance that the scoping and screening processes, as described in the license renewal application, identified those structures and components required to be considered for aging management.

Report Details

01 LICENSE RENEWAL SCOPING ACTIVITIES

a. Inspection Scope

This inspection was conducted to determine whether the license renewal application submitted by Rochester Gas and Electric, herein referred to as the applicant, for the R. E. Ginna Nuclear Power Plant (GNPP), was in accordance with 10 CFR 54, regarding the scoping and screening of systems, structures and components (SSC). The scoping process involved the evaluation of plant systems and structures against the criteria of 10 CFR 54 (a)(1) through (3) for inclusion into the scope of the License Renewal Application (LRA). Systems and structures within the scope (in-scope) include: (1) safety-related; (2) nonsafety-related, but whose failure could prevent the satisfactory accomplishment of the function of a safety-related system; and (3) relied on in the safety analyses or plant evaluation applicable for any of the fire protection (10 CFR 50.48), environmental qualification (EQ) (10 CFR 50.49), pressurized thermal shock (10 CFR 50.61), anticipated transient without a scram (10 CFR 50.62), and station blackout (10 CFR 50.63) requirements. The screening process involved evaluating components of the systems and structures within the scope of the rule to identify those that are passive and long-lived and as such subject to aging management review (AMR) in accordance with 10 CFR 54.21(a). Components and structures subject to AMR are those that: (1) perform their intended function without moving parts or without a change in configuration or properties (passive); and (2) are not subject to replacement based on a qualified life or specified time period (long-lived).

The NRC inspection team reviewed the results of the applicant's scoping of selected plant systems and structures and the screening of components within those systems to identify the list of components that required evaluation for aging management. The team's review included the system license renewal drawings, Updated Final Safety Analysis Report (UFSAR), classification and characterization of the components listed for screening, and comparison with the requirements of 10 CFR 54.4. The team interviewed personnel, examined applicable documentation, and performed walkdowns of selected systems, structures and electrical equipment. The team selected a sample of systems, structures and components from the LRA scoping results to verify the adequacy of the applicant's scoping and screening activities. The associated license renewal drawings, and the active/passive and short/long-lived determinations of selected in-scope components were reviewed to confirm the accuracy of the applicant's results. In addition to the in-scope systems and structures, the team also selected some systems and structures that the applicant had determined were not within the scope of license renewal (not in-scope) for review. The team reviewed supporting documentation and interviewed applicant personnel to confirm the accuracy of the LRA conclusions.

The systems and structures selected for review, from all the systems identified as within scope in the application, were fire protection, safety injection, auxiliary feedwater, containment structures, control building, auxiliary building, commodity group - masonry walls, essential yard structures, and offsite power supply credited for station black out. Systems and structures chosen for review, that were out-of-scope in the application, were electrical cathodic protection of containment structure sub-grade concrete, plant security, and non-essential buildings and yard structures.. The inspectors also reviewed the methodology used by the applicant to comply with 10 CFR 54.4 (a)(2) as a separate inspection item.

1. Fire Protection System

The applicant included the fire protection system and fire water system in the scope of the LRA. The inspection team reviewed the fire protection program and the screening and scoping criteria applied to the systems, structures and components which supported the program. This review also included the equipment necessary to support the safe shutdown analysis described in the fire protection program.

The applicant reviewed and identified all passive components and necessary commodity groups to ensure that all components requiring an AMR analysis were cataloged. Some of the components were also categorized in other ways because they performed other safety functions. The applicant had developed a database that identified and cross-referenced all of the safety and non-safety required or committed functions for all components (with the exception of the four valves and some fire barrier penetration seals).

The safe shutdown equipment list generated from the license renewal component data base did not include several components (valves) that were identified in Table 5.1 of the Fire Protection Safe Shutdown Analysis. The applicant determined that this issue had been previously identified, but not corrected, and initiated action request (AR2003-1386) to resolve this issue. The applicant planned to inspect all USFAR and Appendix R penetration seals every 18 months and all other penetration seals every three years.

With the exception noted above the applicant's scoping and screening of the systems, structures and components in the fire protection system met the requirements of 10 CFR 54.4.

2. Safety Injection (SI) System

The team reviewed the LRA to determine whether the safety injection (SI) system met the requirements for inclusion in the scope of license renewal reflected within the scoping criteria in 10 CFR 54.4 (a)(1),(2), and (3). The team's review included the system license renewal drawings, UFSAR, classification and characterization of the components listed for screening, and comparison with the requirements of 10 CFR 54.4.

The intended function of the SI system is to support reactor coolant system (RCS) inventory and reactivity control during accident and post-accident conditions. This

satisfied 10 CFR 54.4 (a)(1)(ii) as a safety-related system relied on to remain functional during and following design basis events to ensure the capability to shut down the reactor and maintain it in a safe shutdown condition by automatically delivering borated water to the reactor vessel for cooling under high and low reactor coolant pressure conditions. It provides an independent backup method for injecting boron in sufficient quantity to counteract the positive reactivity associated with a decreased moderator temperature. Additionally, the system is designed to insert negative reactivity into the reactor core during an uncontrolled plant cool-down following a steam-line break or inadvertent valve operation. The SI system can also be used for safe shutdown following some fire events and contains components that are part of the EQ Program.

The principle components of the SI system are two passive accumulators (one for each loop), three high-head SI pumps, interface piping with the low-head SI pumps (residual heat removal pumps), and essential piping and valves. The accumulators are passive devices that discharge into the cold leg of each loop. During MODES 1 and 2, the refueling water storage tank (RWST) is aligned to the suction of the high head SI pumps and residual heat removal pumps. The containment spray system shares the RWST inventory with the SI system. After the injection phase, coolant spilled from the postulated break, water injected by the SI system, and the containment spray is cooled and recirculated from the sump to the reactor coolant system (RCS) by the SI system. Adequate core cooling following a loss-of-coolant accident is provided by the SI system by injecting borated water from the passive accumulators, with the high pressure safety injection pumps drawing water from the reactor water storage tank (RWST), with injection from the residual heat removal pumps drawing borated water from the RWST, and by recirculating reactor coolant and injection water from the containment sump with residual heat removal (RHR) pumps and/or SI pumps.

The team determined that the SI system components selected by the applicant were appropriately designated for inclusion within the scope of the LRA. The team examined the results of the applicant's screening of the SI system component designations within the scope of the LRA, and whether they were passive, long-lived, and appropriately designated for AMR. The team verified that the selection of components for AMR was appropriate.

3. Auxiliary Feedwater (AFW) System

The team reviewed and evaluated the GNPP LRA to determine whether the AFW system met the requirements for inclusion in the scope of license renewal reflected in the criteria in 10 CFR 54,4 (a)(1), (2), and (3). The team reviewed system drawings, the UFSAR, and the classification and characterization of components to determine whether the requirements of 10 CFR 54.4 were met.

The AFW system is designed to maintain steam generator water inventory when the normal feedwater system is not available. During accident and post-accident conditions, the AFW system supplies feedwater to the steam generators in order to remove decay heat from the RCS using secondary heat removal capability. The AFW system is also credited for use in mitigating anticipated transients without a scram (ATWS), safe shutdown following station black-out (SBO) events, and fire events. The team evaluated the LRA to determine whether the SSCs within the AFW could be relied upon to remain functional during and following the design basis events defined in CFR 50.49(b)(1). The team reviewed the AFW system functions relative to the scoping criteria of 10 CFR 54.4(a)(1), 10 CFR 54.4(a)(2), and 10 CFR 54.4(a)(3).

The principal components of the AFW system include pumps (steam turbine and electric motor-driven), support components, and essential piping and valves. The AFW system is comprised of two independent trains. There are two motor-driven pumps powered from separate redundant 480-V safeguards emergency buses that can receive power from either onsite or offsite power sources. Each motor-driven pump can supply 100% of the preferred AFW system flow for decay heat removal and can be cross-connected to provide flow to either steam generator. The turbine driven pump can receive motive steam from each steam line and provide flow to either or both steam generators. The turbine driven pump can provide 200% of the flow required for decay heat removal. In the case of a high energy line break (HELB) rendering the AFW pumps inoperable, a standby auxiliary pump with the same functional capability can be aligned to separate service water (SW) system loops.

On the basis of the team's review, the AFW system components selected by the applicant were appropriately designated for inclusion within the scope of the LRA. The team examined the results of the applicant's screening of the AFW system component designations within the scope of the LRA, and whether they were passive, long-lived, and appropriately designated for AMR.

4. Containment Structure

The reactor containment structure is a reinforced-concrete, vertical cylinder with a flat base and a hemispheric dome. The structure houses and supports safety-related systems and equipment, provides radiation shielding and the primary barrier to mitigate the release of radioactive nuclides to the environment. A steel liner, fabricated and welded in sections, is attached to the interior face of the structural concrete wall to provide a high degree of impermeability to the structure. The structure also provides a physical barrier to protect the systems and equipment from natural events and disasters.

The major components of the reactor coolant system, including component supports, are located inside the containment structure. Also, the containment structure uses post-tensioned pre-stressing tendons in the vertical direction. Conventional mild steel reinforcing bars have been provided as a circumferential reinforcement.

Electrical panels, component supports, reactor coolant pump oil collection, and equipment supports have also been included in the scope, and are treated as separate commodity groups for the license renewal program.

The containment structure has been included in the scope of the license renewal program. The inspection team verified that the safety-related (e. g., primary containment boundary) and structural support functions have been included in the scope. The nonsafety-related equipment and components required for proper functioning of safety-related equipment were also included in the scope.

5. Control Building

The control building is a safety-related, seismic category 1 structure. The control building is a three story high structure measuring approximately 41 ft. by 54 ft. The control building is located north of the containment building and adjacent to the turbine building. The control building houses and supports the safety-related control room, vital battery rooms, the relay room, and the mechanical equipment room. These rooms provide power and control functions for engineered safety features components and equipment. Also, the control room supports the control room emergency air treatment ventilation equipment to provide habitability for plant operators during design basis events. Portions of the control room structure are credited with providing a heat sink to ensure that vital equipment can function for the required coping duration of a station blackout, and are designed to resist and protect equipment from high energy line breaks, flooding, and tornados.

The foundation of the control building is supported on lean concrete and engineered compacted backfill. The control and relay room floors are 6 inch thick reinforced-concrete slabs supported by steel girders. The battery room and the mechanical equipment room are in the basement of the structure. To preclude a possible flooding event, the original doors between the air-handling room and the battery room have been replaced by a wall, and a water-relief valve has been installed between the mechanical equipment room and the turbine building.

In addition to the structural and load bearing elements, the control building houses features and appurtenances that are credited in the licensing basis of the plant and are relied upon to ensure health and safety of the public.

The control room structure has been included in the scope of the license renewal program. The inspection team verified that the safety-related functions were included in the scope of the license renewal program.

6. Auxiliary Building

The auxiliary building is a safety-related, seismic category 1 structure measuring approximately 70 ft. by 214 ft. It is located south of the containment and intermediate buildings and adjacent to the service building. It houses the major support and engineered safety features equipment required for plant operations. Portions of the structure act as a fire barrier. Additionally, the building houses nonsafety-related systems and components whose failure can adversely affect some safety-related functions.

Above grade, the building roof is constructed of steel beams and bracing systems, and below grade it is primarily reinforced concrete. Insulated siding has been used in most of the side walls above grade. The concrete basement floor rests on a sandstone formation.

In addition to structural and load bearing elements, the auxiliary building houses features and appurtenances that are credited in the licensing basis of the plant and are relied upon to ensure health and safety of the public.

The auxiliary building structure has been included in the scope of the license renewal program. The inspection team verified that the safety-related functions of the auxiliary building were included in the scope of the license renewal program.

7. Commodity Group-Masonry Walls

There are a significant number of masonry walls in the plant that house safety-related equipment and whose failure can affect safety-related systems and components. There are also a number of masonry walls that provide a radiation shielding function. These walls have been evaluated for their impact on plant operational safety and have been included as a separate commodity group in the scope of the license renewal program. The inspection team verified that the masonry walls have been adequately evaluated for the development of an AMR.

8. Essential Yard Structures

Within the site boundary, there are structures that are necessary for the support of safety-related functions. These structures are required due to design considerations that are typically independent of the function of the plant, however, their failure will adversely affect plant operations. Consequently, these structures provide shelter and support to safety-related or essential equipment and components.

These yard structures are treated as a commodity group, included in the scope of license renewal program, and evaluated for aging management considerations.

The inspection team verified that this group included:

- Service water alternative discharge structure;
- Vital ac and dc duct banks, including their manholes and covers;
- Revetment armor stones;
- Transformer pads.

A comprehensive report and evaluation of the functions associated with these structures and components were included in the license renewal scoping summary.

9. Electrical Cathodic Protection of Containment Structure Sub-Grade Concrete

The team reviewed the applicant's containment vessel scoping and screening table and selected the electrical cathodic protection system for a detailed review of the effectiveness of the "screening-out" process.

The original station design included an electrical cathodic protection system for the containment structure. Although regular readings have been obtained of the electrical characteristics of the ground water, the system had never been activated.

The structural monitoring program includes periodic monitoring of ground/lake water to verify that water chemistry remains non-aggressive to the sub-surface concrete and steel structures/components. The applicant periodically monitors the ground water chemistry. The below grade environmental chemistry test results have consistently demonstrated that a plant specific aging management program was not required consistent with NUREG-1801 guidance.

Based on the above evaluation, the applicant did not include the electrical cathodic protection within the scope of aging program management.

10. Offsite Power Supply Credited for Station Blackout (SBO)

Section 8.1.4.5 of the UFSAR, "Station Blackout Program," describes GNPP's methodology for coping with a station blackout event. The station does not have a dedicated SBO power source, but relies on two independent 34.5 kV offsite power supply lines, and the emergency diesel generators, to power emergency equipment. Ginna included, within scope, the plant system portion of the offsite power SSCs used for SBO coping and recovery identified in the regulatory commitments made to satisfy 10 CFR 50.63 criteria. This was in accordance with the Interim Staff Guidance - 2 (ISG-2), "Scoping Of Equipment Relied on to meet the Requirements Of The Station Blackout (SBO) For License Renewal," dated April 1, 2002.

Ginna' s SBO event is assumed to occur following operation at 100% power for 100 days and met the intent of Section 2 of NUMARC 87-00. No independent failures, other than those causing the SBO event, were assumed to occur in the course of the transient. Within 4 hours of the start of the event, AC power was assumed to become available to necessary safe shutdown equipment from either the offsite supply lines or the emergency diesel generators. Ginna considered including within scope all the systems and structures that provide a function for SBO coping. Ginna also considered including within scope the systems or structures that provided a function for recovery from an SBO condition to be within the scope of the license renewal.

Two 34.5 kV offsite sources, circuits 751 and 767, provide power to Ginna. Circuit 767 is fed from the 115-kV/34.5-kV transformer 6 at substation 13A and is routed through underground cables to the 12B 34.5-kV/4.16-kV transformer. Circuit 751, the second 34.5-kV offsite source, is fed directly from station 204 and is routed to 34.5-kV/4.16-kV transformer 12A. The team walked down the switchgear for the 751 circuit 34.5 kV breaker in station 204, and the 767 line 34.5 breaker in substation 13A.

11. Plant Security

Plant security is not within the scope of the license renewal application. The plans for physical protection of the Ginna Station are described in the NRC-approved security plans and are withheld from public disclosure.

Some plant security physical barriers and features interface with station buildings and structures. Ginna evaluated those barriers and features within the system boundary of the appropriate plant structure (e.g., security doors that act as an external missile shield). The remaining equipment contained within the plant security system boundary did not perform any license renewal intended function, and therefore, was not included within the scope of license renewal.

Cables connecting the security equipment are routed in cable trays that also contain plant equipment cables within the scope of LRA. In these cases, Ginna included the security cables with the plant cables in the aging management program.

12. Non-Essential Buildings and Yard Structures

Non-essential buildings and yard structures are not within scope of license renewal because these structures do not perform safety-related functions and, therefore, do not perform a license renewal intended function. Additionally, these structures do not have any failure modes or effects that prevent an intended safety function from being performed. The team walked down the following non-essential buildings and structures to verify the scoping of these structures was appropriate:

- Office trailers at various locations around the site;
- Steam generator facilities building located northeast of plant (office space);
- Radwaste storage building located northeast of plant (used for contaminated waste storage);
- Sodium hypochlorite tank located north of plant and east of screenhouse (chemical storage for secondary water treatment);
- Hydrogen building located south of auxiliary building (contains hydrogen and nitrogen bottled gas for the volume control tank);
- Hydrogen bottle house located north of turbine building (contains hydrogen and carbon dioxide bottled gas used for the main electrical generator);
- High integrity container storage facility located west of the radwaste storage building (shielding for containerized spent resin prior to shipment);
- Old steam generator storage facility located northwest of the plant outside the security fence (houses the old steam generators and is designed for long-term storage).

13. Evaluation of Scoping and Screening Per 10 CFR 54.4 (a)(2)

The applicant, in accordance with the requirements of 10 CFR 54.4(a)(2), conducted a review of all nonsafety-related systems, structures and components whose failure could prevent satisfactory accomplishment of the functions identified in paragraphs 10CFR54.4 (a)(1)(i), (ii) or (iii).

The applicant reviewed all non-safety systems and evaluated which systems, structures and components that could cause safety systems to fail. The applicant identified all such systems, structures and components and evaluated each component for inclusion into the AMR process. The team reviewed the components examined and sampled the evaluations made for inclusion in the AMR process. The team concluded, based on the data review and applicant presentations, that the applicant had conducted a comprehensive scoping and screening, as required by 10 CFR 54.4 (a)(2).

In order to evaluate the effectiveness of the applicant's present problem identification and resolution process, the team reviewed 154 AR's from the past 2 years which were attributed to equipment aging.

Many of these AR's do not appear to actually be related to aging equipment but to other causes, indicating that some equipment aging problems may not have been accurately categorized and addressed in the recent past.

The team concurred with Ginna's evaluation that these structures do not perform an intended function and concurred with Ginna's evaluation that these structures were not required to be within the scope of license renewal.

b. Conclusion

The inspectors concluded that the scoping and screening portion of Rochester Gas and Electric's license renewal activities were conducted as described in the license renewal application and that documentation supporting the application was in an easily auditable and retrievable form. The inspectors concluded there is reasonable assurance that the scoping and screening processes, as described in the license renewal application, identified those structures and components required to be considered for aging management.

02 MANAGEMENT MEETINGS

Exit Meeting Summary

The inspector presented the inspection results to George Wrobel, Project Manager, and other members of the applicant's management, on July 8, 2003, at the conclusion of the inspection. The applicant acknowledged the findings presented.

The applicant did not indicate that any of the information was proprietary.

Attachment 1

SUPPLEMENTAL INFORMATION

Key Points of Contact

Licensee Personnel:

G. Wrobel	Project Manager
D. Wilson	License Renewal Engineer
G. Herrick	License Renewal Engineer

NRC Personnel:

K. Kolaczyk	Senior Resident Inspector

List of Items Opened, Closed, and Discussed

Opened: None

Closed: None

Discussed: None

List of Documents Reviewed

General License Renewal Documents

Application for Renewed Operating License - R.E. Ginna - Chapter 2.0 Scoping and Screening Methodology
NRC Inspection Manual - Inspection Procedure 71002, IMC 2516, License Renewal Inspection, 09/18/00
Regulatory Guide 1.188 - Standard Format and Content for Applications to Renew Nuclear Power Plant Operating Licenses
Ginna Nuclear Power Plant, License Renewal Application Scoping and Screening Methodology Mechanical Systems
10 CFR 54 Code of Federal Regulations - Energy - Requirements for Renewal of Operating Licenses for Nuclear Power Plants
NEI 95-10 Rev. 3 Industry Guideline for Implementing the Requirements of 10 CFR Part 54 - The License Rule, March 2001.
Ginna Probabilistic Assessment - Chapter 9
NUREG-1800 Standard Review Plan for Review of Licensee Renewal Applications
Regulatory Guide 1.188 Standard Format and Content
NEI 95-10 Industry Guideline for Implementing Licensee Renewal Rule

Updated Final Safety Analysis Sections

UFSAR Sections 6.3.2, Safety Injection System
UFSAR Section 10.5, Auxiliary Feed Water System

License Renewal Drawings

33013 -1262 Sheet 1 of 2 - LR and Sheet 2 of 2 - LR, Safety Injection System
33013 -1237 - LR, UFSAR Section 10.5.2, Auxiliary Feed Water

IP-QAP-1, Rev. 4; Structures, Systems and Component Safety Classification

System/Structure Scoping Report: LRSP-FIRE; Fire Protection (LR-21), Ginna Nuclear Power Plant, Rev. 0, 4/30/2002

Procedure FPS-2, Rev. 0, Ginna Station Fire Barrier Penetration Seal Program

Procedure M-103, Rev. 12, Inspection and Maintenance of Fire Dampers, May 3, 2002

Procedure FPS-2.1, Rev. 5; Control and Verification of UFSAR and/or 10CFR50 Appendix R Fire Barriers

Procedure FPS-1, Rev. 7; Fire Barrier Control Inspection

Procedure ME-302, Rev. 0; Installation Specification Ginna Station Fire Barrier Penetration Seal Program

F-RAI 2.1-1

F-RAI 2.3.3.6-1

Procedure FPS-2.1, Rev. 5; Control and Verification of UFSAR and/or 10CFR50 Appendix R Fire Barriers; September 2002

Procedure FPS-2.1, Rev. 5; Control and Verification of UFSAR and/or 10CFR50 Appendix R Fire Barriers; October 2002

Procedure FPS-2.1, Rev. 5; Control and Verification of UFSAR and/or 10CFR50 Appendix R Fire Barriers; November 2002

IP-CAP-1; Abnormal Condition Tracking Initiation or Notification (Action) Report

Ginna Station Fire Protection Program Report, Part IV Safe Shutdown Analysis

Action Reports Reviewed:

AR2001-0327; Redundant Equipment With Conflicting Safety Classifications
AR2001-0383; Plant Components Used For Flood Prevention Measures Improperly Safety Classified
AR2001-0388; Configuration Management Activities Associated With Chemical Nuclear Skid Inadequate
AR2001-1732; Mis-Classification Of Pressure Indicators
AR2001-1817; Solenoid Valve 14423S Misclassified As Safety Equipment
AR2000-0027; C Charging Pump Discharge Manifold Leak (P2J)
AR2000-0041; SW Leak on Supply Line to Charging Pump Cooler "B"(P2J)
AR2000-0061; Inability to Update Anti-virus Files
AR2000-0074; 115 KV Pipe Cable Pothead Leaking Oil (P2J)
AR2000-0086; Rod Insertion Limit Alarm (P2J)
AR2000-0134; MCB Alarm G-4 S/G A Hi Level Alert Alarmed Intermittently (P2J)
AR2000-0200; AOV-110C Outlet Block Valve has Diaphragm Leak (P2J)
AR2000-0250; Field Calibrator Source Stuck Open (P2J)
AR2000-0270; New Parts from Stock Were Defective (P2J)
AR2000-0272; Air Conditioning Unit Overflow in Central Records (P2J)
AR2000-0277; Appendix R Emergency Lite RR-2 Failed (P2J)
AR2000-0278; Appendix R Emergency Lite SB-20 Failed (P2J)
AR2000-0291; Rust Found In LT-935 Displacer Column (Not on Transmitter) (P2J)
AR2000-0295; Removed Bearing, Defective (P2J)
AR2000-0306; Flux Mapping System Intermittent Power Supply Failure (P2J)
AR2000-0325; Simulator Building - Sewer Pump Alarm (P2J)
AR2000-0329; Battery Room A Structural Steel Fire Proofing Degradation (P2J)
AR2000-0379; Simulator Problems Disrupted Evaluated Scenario Twice (P2J)
AR2000-0412; Spare MQ-483 Failed In-storage Maintenance Worksheet (P2J)
AR2000-0429; Valve Stem on V-691A, Isolation to PI-629B (B RHR Pump Discharge Press.) (P2J)
AR2000-0468; RCP A and B Seal Delta Temperature Deviation (P2J)
AR2000-0497; Resistance & Meggar Check Indicates Partial Open Circuit On Jacket Water Heater (P2J)
AR2000-0514; Bus 16 "C" Safety Injection Pump Main Control Board Switch Failed (P2J)
AR2000-0522; RR-2 Lamp Failure Light is Lit (P2J)
AR2000-0528; Simulator Aydin Display System Failures (P2J)
AR2000-0546; Circulating Water Total Residual Chlorine Data Logger Malfunctioning (P2J)
AR2000-0569; Boric Acid Heat Trace Circuit 21 Primary Has No Load Current (P2J)
AR2000-0599; Potassium Chromate Leak, Exposure Hazard (P2J)
AR2000-0629; SAS Failure - No Update (P2J)
AR2000-0636; Degraded Flange Upstream of V-9545A (P2J)
AR2000-0752; Increase in Plant Radio Gas Activity (P2J)
AR2000-0765; Control Rods Moving Within Dead Band (P2J)
AR2000-0768; Multiple Trouble Alarms On SSA and SSB (P2J)
AR2000-0807; Excessive Wear Found in HHS Pipe (P2J)
AR2000-0819; Security Radios
AR2000-0865; Low Meggar Readings On Jacket Water Heaters A D/G (P2J)
AR2000-0877; Tube Wall Degradation In A D/G Jacket Water Heat Exchanger (P2J)
AR2000-0900; Environmental Air Sampler Flow Meter Failed Calibration Check (P2J)

AR2000-0904; Deteriorated Insulation On Electrical Cable (P2J)
AR2000-0917; Radiation Monitor R-24 (AVT Mixed Bed B) Does Not Respond To Source Check (P2J)
AR2000-0937; Battery Electrolyte Level In Cell #48 Changed (P2J)
AR2000-0952; Water Hammer In Area of V-5743B (P2J)
AR2000-0962; Inline Dionex Computer Failed (P2J)
AR2000-0964; Plant Vent Radiogas Increase During Performance of PT 2.5.4 (P2J)
AR2000-1033; R-15A Failure (P2J)
AR2000-1042; Small Steam Leak Visible From The Insulation Around V-5731 In Cnmt (P2J)
AR2000-1131; Spare Source Range Detector Unable To Be Calibrated (P2J)
AR2000-1132; Leak Developed Upstream Of Steam Trap ZMS-02 (P2J)
AR2000-1133; AOV-392A Failed To Open With Less Than 257.5 PSID Per PT-2.6.4 (P2J)
AR2000-1140; A Atmospheric Relief Valve Nitrogen Supply Check Valve Failure (P2J)
AR2000-1151; Minor Oil Spill In Turbine Oil Storage Room (P2J)
AR2000-1159; Bus 11B Undervoltage Time Delay Relays Out Of Tolerance (P2J)
AR2000-1184; Relay Holding Current Found Out Of Tolerance (P2J)
AR2000-1251; Low UT Measurements At The Steam Extraction To 4B Heater Line (P2J)
AR2000-1257; Debris Found In Turbine Lube Oil Guard Pipe (P2J)
AR2000-1260; Cracks Identified In The 3516, 3517 Disc Seat Area (P2J)
AR2000-1262; Wall Thickness For Comp #63 On Dwg M46B Is Below Min Allowable Thickness (P2J)
AR2000-1263; Wall Thickness For Comp #08 On Dwg M46B Is Below Min Allowable Thickness (P2J)
AR2000-1266; A Fuel Oil Transfer Pump Discharge Pressure Low (P2J)
AR2000-1274; Work Activities Under WO 19903422 Results In Degraded HEMYC Wrap (P2J)
AR2000-1275; Wall Thickness For Comp #2690-2680 On Dwg C381-358 Sht #3 Is Below Min Allowable Tks (P2J)
AR2000-1276; Cable (Unknown Circuit Schedule) Located In SIB2 (Front) Rack Has 4 Conductors With Degraded Wire Insulation (P2J)
AR2000-1283; Insulation Broken On RTD Wires (P2J)
AR2000-1325; Unable To Transmit Emergency Response Data (ERDS) During Quarterly Test (P2J)
AR2000-1340; DC Switch DCPDPCB03A/10 Will Not Open. (Bus 13 Normal DC Power (P2J)
AR2000-1341; High Carbon Monoxide Levels Identified In Off Loading Portal (Old Receiving Bldg.) During Fork Lift Operation (Fork Lift Needs Service) (P2J)
AR2000-1349; Gas Line Fitting Leaking (P2J)
AR2000-1374; Containment Sump Level Indication Test Switch Broken (P2J)
AR2000-1376; Thermocouple Number 25 Connector Broken In Bridge Cable Tray (P2J)
AR2000-1414; 52/CRSF1B-P Breaker Failed To Close (P2J)
AR2000-1415; Lead/Lag Unit Found Out of Tolerance (P2J)
AR2000-1421; Main Steam Safety Valve Position Indication Failures (MSSV) (P2J)
AR2000-1473; Moisture Separator Reheater Level Switch Wiring Found Melted, Mechanical Failure (P2J)
AR2000-1474; Broken Wires Found At Lugs On LAH-2100 (P2J)
AR2000-1483; Emergency Light 1BN-8 Failure (P2J)
AR2000-1487; V-5088C Sprays Chlorine Into Contained Area When Opened (P2J)
AR2000-1528; Charging Pump Leakoff Rate At .5 GPM For Charging Pump C (P2J)
AR2000-1545; Main Steam Loop “B” Guide MSU-21 Has Bent I-Beam Flange (P2J)
AR2000-1560; Minimum Charging Flow Acceptance Criteria (P2J)

AR2000-1563; Wire In MCCS Contains PCBs And Wires Show Signs Of Degradation (P2J)
AR2000-1575; R-31 Reading All ES (P2J)
AR2000-1581; HEMYC Wrap Concerns On Cable Tray 111 (Appendix R) (P2J)
AR2000-1629; R-9 Spiking Hi and Low (P2J)
AR2000-1660; Coolant Leaking From Radiator On TSC Diesel Generator (P2J)
AR2000-1664; AOV-4238, Condensate Recirc Valve, Repeatedly Alarms (P2J)
AR2000-1666; RM-14A5 Shows Intermittent Spikes To 2E-6 UCI/CC (P2J)
AR2000-1669; R-22 Fails PT-17.2 (P2J)
AR2000-1693; Heat Detector S-13 DX Failed To Alarm (North Detector) (P2J)
AR2000-1694; Fire System S-13 (“b” Emer Diesel Gen) Approximately 25 Gals Of Water And 1 Cup Of Sand/Grit Drained From Sprinkler Header (P2J)
AR2000-1702; Fire Suppression System S-13 Will Not Reset (P2J)
AR2001-0011; Flowswitch Not Able To Be Calibrated (P2J)
AR2001- 0019; Battery Charger BYCA Erratic Output (P2J)
AR2001- 0022; Sirens Failed During Silent Test (P2J)
AR2001- 0025; Siren Failed During Silent Test (P2J)
AR2001- 0045; CRFC “D” Did Not Start When Switch Taken To Close (Cnmt Recirc Fan) (P2J)
AR2001- 0046; A D/G Fuel Oil Transfer Pump Discharge Check Valve 5961 Failed Its Closure Test (P2J)
AR2001- 0051; Valve Stem Found Detached From Bonnet During Maintenance, 5961 (“A” D/G Fuel Oil Transfer Check Valve) (P2J)
AR2001- 0073; Plastic Bags Are Duct Taped Over Control Room Chlorine And Ammonia Transmitters to Deflect Building Leakage (P2J)
AR2001- 0094; Heat Detectors Failed During Fire System Testing (P2J)
AR2001- 0194; Power Supplies Out of Tolerance On Channel 3 Nuclear Instruments (P2J)
AR2001- 0205; Air Ejector Offgas Monitor RM-15A Channel 6 High Failure (P2J)
AR2001- 0210; Bus 17 Undervoltage Control Cabinet Abnormal Indication (P2J)
AR2001- 0306; New Storage Reel From Stock For Incore Detector Drive Unit Was Defective (P2J)
AR2001- 0357; Aux Bldg Crane Failure (P2J)
AR2001- 0393; Category Two Digital Pressure Indicator Found Out Of Tolerance (P2J)
AR2001- 0400; Switch Malfunction (P2J)
AR2001- 0406; Work Order 20101575 Identified Degraded Diesel Fire Pump Condition (P2J)
AR2001- 0425; Valve 518 Pressurizer Mini Spray Had Packing Leak (P2J)
AR2001- 0526; SFP Pump A Found Tripped (P2J)
AR2001- 0612; Heavy Static Heard On Headset When Plugged Into Aux Benchboard Jack (P2J)
AR2001- 1030; Relief Valve 9204R Flowing Water (P2J)
AR2001- 1274; Leaking Capacitors On Siren 62 (P2J)
AR2001- 1344; Fuse Clip Loose (P2J)
AR2001- 1478; Incore Drive A Display/Logic Problem (P2J)
AR2001- 1570; Defective Neutron Meter ASP-1, NRD (P2J)
AR2001- 1690; Possible Hole In AOV Diaphragm For V413 (P2J)
AR2001- 1761; Lube Oil Leak (P2J)
AR2001- 1762; Lube Oil Leak (P2J)
AR2001- 2029; PT-944 Found Out Of Tolerance (P2J)
AR2001- 2183; Corrosion On B Battery Cell 29 And 11 Post To Link Connection (P2J)
AR2001- 2249; R-9 Letdown Indications Read Low Locally (P2J)
AR2002-0034; Low Voltage On Mux 2 Backup Power Supply (P2J)

AR2002-0208; Bus 17 Undervoltage Relay 27D/B/17 Inoperable (P2J)
AR2002-0294; BAST Pump B (P2J)
AR2002-0590; J-10 And C-3 Fittings Found Damaged On Seal Table (P2J)
AR2002-0698; Evaluate “B” RCP Boric Acid Leakage (P2J)
AR2002-0798; Bus 11A Wattmeter RH (P2J)
AR2002-0803; MCB 480V Bus Ammeters Not Working (P2J)
AR2002-0809; “B” RCP Flange Stud Stretch Below Minimum (P2J)
AR2002-0948; Aux Building Main HEPA Failed Testing (P2J)
AR2002-1324; Small Leak On SW Piping In Aux Building (P2J)
AR2002-1387; Bus 14 Transformer Cooling Fan Reverse Rotation (P2J)
AR2002-1398; Charging Pumps Exhibiting Increased Leakage (P2J)
AR2002-1542; Service Water Leakage On Piping For RHR Pump Cooling Fan Cooler “A” (P2J)
AR2002-1557; Bushing Cracked On “A” Charging Pump Plunger (P2J)
AR2002-1623; R12, CV Gas Increases (P2J)
AR2002-1627; A Hotwell Cation Conductivity Analyzer Failed Verification (P2J)
AR2002-1647; RCS Lithium Outside Desired Range (P2J)
AR2002-1767; Meteorology Tower 13A Wind Speed Not Recording (P2J)
AR2002-1949; DMIMS Inoperability (P2J)
AR2002-2035; “B” Inter Bldg Exh Fan Mounting Loose (P2J)
AR2002-2055; Water On Top Of “B” Condensate Storage Tank Diaphragm (P2J)
AR2002-2057; NIS Channel 2B Drawer Operation Selector Switch Not Working Properly (P2J)
AR2002-2158; Service Water Leak: Supply To A RHR Fan Coolers (P2J)
AR2002-2267; Rubber Mounts Are Out Of Their Retaining Rings (P2J)
AR2002-2400; Calibrate UV Relay 27/17 (P2J)
AR2002-2420; Siren #61 Quit Alerting 60 Seconds Into Its 3 Minute Run. (P2J)
AR2002-2447; RK-32, 33 Foot Wind Speed Recorder Has Broken String (P2J)
AR2002-0223; V-300A Has Slight Packing Leak (P2J)
AR2002-0229; Boric Acid Leak - V-893A Packing (P2J)
AR2002-0393; Fire Water Booster Tank Filling Unexpectedly (P2J)
AR2002-0408; Received Loss Of Communications When Testing Security Alarm Status Panels (P2J)
AR2002-0640; Control Room Ammonia Analyzer Found Low Out Of Tolerance (P2J)
AR2002-0990; High Rate On TSC Diesel Generator Battery Charger (KED03) (P2J)
AR2002-0794; Relay Room North Wall Block Needs Repair
AR2002-2076; Voids and Gaps in North Wall of Intermediate Building
AR2002-2322; Hole in Intermediate Building Wall Needs Repair
AR2003-1386; Classification Differences Between CMIS & FPPR

List of Acronyms

AC	alternating current
AFW	auxiliary feedwater
AMR	aging management review
ATWS	anticipated transient without scram
EQ	Environmental Qualification
GNPP	Ginna Nuclear Power Plant
HELB	high energy line break
ISG	interim staff guidance
LRA	license renewal application
RCS	reactor coolant system
RWST	refueling water storage tank
SBO	station blackout
SI	safety injector
SSC	safety system, structure or component
SW	service water
UFSAR	Updated Final Analysis Report